College Website

A project report submitted to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY, LUCKNOW (U.P)

For partial Fulfilment of the Requirement for the award of the Degree of

MASTER OF COMPUTER APPLICATION

by

Amarendra Nath Ojha **(2200270140004)**

Anjali Sharma **(2200270140006)**

Prachi Shukla **(2200270140037)**

Under the guidance of

Dr. Saroj Bala

DEPARTMENT OF MASTER OF COMPUTER APPLICATION

AJAY KUMAR GARG ENGINEERING COLLEGE,GHAZIABAD

2023-24

Director
Ajay Kumar Garg Engg. College
Ghaziabad

COLLEGE CERTIFICATE

This is to certify that project report entitled "**COLLEGE WEBSITE**" which is submitted **by Amarendra Nath Ojha (2200270140004) , Anjali Sharma (2200270140004) , Prachi Shukla (2200270140037) ,** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J..Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date : 15/6/24

Dr. Saroj Bala

Supervisor

Director
Ajay Kumar Garg Engg. College
Ghaziabad

Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled **COLLEGE WEBSITE** , submitted by **Amarendra Nath Ojha (2200270140004) , Anjali Sharma (2200270140006) , Prachi Shukla (2200270140037)** , final year students of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter [Chapter No. IX (Conclusion)]. All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

SDG No.	SDG Name	Relevance	SDG No.	SDG Name	Relevance
1	No Poverty	☐	10	Reduced Inequalities	☐
2	Zero Hunger	☐	11	Sustainable Cities and Communities	☐
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8	Decent Work and Economic Growth	☐	17	Partnerships for the Goals	☐
9	Industry, Innovation, and Infrastructure	☐			

Signature of the Students

Amarendra Nath Ojha Amarendranath ojha
Anjali Sharma Anjali Sh
Prachi Shukla Prachi

Signature of the Supervisor

Dr.Saroj Bala Saroj 15/6/24

Director
Ajay Kumar Garg Engg. College
Ghaziabad

9. CONCLUSION

The educational website offers a revolutionary approach to online learning, tailored to meet the diverse needs of global learners through personalized and adaptive learning experiences. It prioritizes accessibility, ensuring engagement across various devices and abilities. High engagement is achieved with interactive multimedia, gamification, and collaborative activities, enhancing comprehension and retention. Community building is emphasized, creating a supportive environment for students, instructors, and experts to connect and collaborate. Robust assessment tools provide continuous feedback for learners to track progress and improve. Committed to career advancement and lifelong learning, the platform offers diverse courses to enhance professional qualifications and personal growth. By making education more accessible, engaging, and impactful, the website aims to unlock each learner's potential and foster a brighter future.The educational website supports the SDG of Quality Education by making online learning inclusive, personalized, and effective. It uses adaptive learning algorithms to tailor experiences to individual needs, ensuring equitable access. The platform is accessible across various devices, promoting inclusivity. Interactive multimedia, gamified elements, and collaborative activities enhance engagement and comprehension. Community building fosters connections among learners, instructors, and experts. Continuous feedback through robust assessment tools helps learners track progress and master concepts. Offering courses for professional qualifications and lifelong learning, the platform supports personal and professional growth, contributing to societal progress.

Director
Ajay Kumar Garg Engg. College
Ghaziabad

American Alphabet Sign Language Recognition

A project report submitted

to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY LUCKNOW

For partial Fulfillment of the Requirement for the

Award of the Degree

of

MASTER OF COMPUTER APPLICATION

by

SALONI TIWARI - 2200270140049

RIYA GARG - 2200270140044

SHRIYA - 2200270140056

LESTER SHARMA - 2200270140024

Under the Guidance of

Ms. Deepti Arora

AJAY KUMAR GARG ENGINEERING COLLEGE-MCA

GHAZIABAD

2023-24

Director
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Ghaziabad

COLLEGE CERTIFICATE

This is to certify that project report entitled "**American Alphabet Sign Language Recognition**" which is submitted by **Saloni Tiwari (2200270140024) , Riya Garg (2200270140044) , Shriya (2200270140056) , Lester Sharma (2200270140024)** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date : 15/6/24

Ms. Deepti Arora
Supervisor

Director
Ajay Kumar Garg Engg. College
Ghaziabad

Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled **American Alphabet Sign Language Recognition**, submitted by Saloni Tiwari, Riya Garg, Shriya, Lester Sharma final year students of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter 5 . All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

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13	Climate Action	☐
14	Life Below Water	☐
15	Life on Land	☐
16	Peace, Justice, and Strong Institutions	☐
17	Partnerships for the Goals	☐

Signature of the Students

Saloni Tiwari:

Riya Garg:

Shriya:

Lester:

Signature of the Supervisor

Ms. Deepti Arora

Director
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Ghaziabad

CHAPTER 5

CONCLUSION AND FUTURE WORK

5.1 Conclusion

The ability to properly communicate one's views with others is a big challenge for someone with a hearing and speaking problem. Because most individuals are uninterested in learning sign languages, there is a pressing need to develop a method for communicating with those who are deaf or hard of hearing. Several ways have been presented and several technologies have been invented for this goal in today's world. We've looked at a handful of them in this study. Every potential method is intended to convert sign language gestures into text and voice. The proposed solutions divide the gesture recognition process into three steps. Input, processing, and output are the three components.

These stages can be achieved using two alternative techniques that have been proposed in separate research articles. Image processing and machine learning are used in the first, while sensors and micro - controllers are used in the second. Both strategies have their own set of benefits and drawbacks, but they are quite effective in the communication process. The main issues are with image processing in varying light intensities and backgrounds. This system is less expensive, but it is less efficient than the glove-based system.

Advancements in American Sign Language (ASL) recognition technology significantly impact Quality Education, Reduced Inequalities, and Sustainable Cities and Communities. By converting sign language gestures into text and voice, these technologies enhance learning opportunities for deaf and hard-of-hearing students, fostering inclusive educational environments. They also bridge communication gaps, promoting inclusivity and accessibility in various aspects of daily life, thus reducing societal inequalities. Furthermore, in public spaces and community services, ASL recognition systems enhance social integration and cohesion, contributing to the development of more inclusive, resilient, and sustainable urban environments.

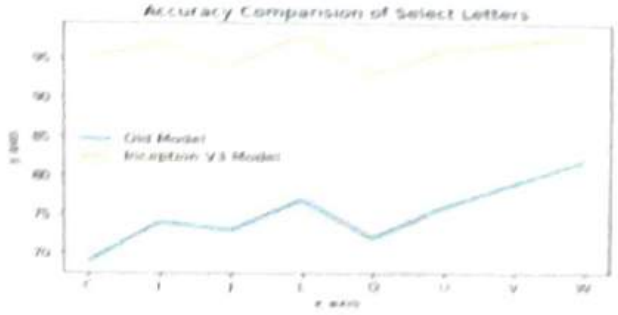

Figure 15: Select Alphabet Accuracy comparison

American Alphabet Sign Language Recognition

A project report submitted

to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY LUCKNOW

For partial Fulfillment of the Requirement for the

Award of the Degree

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MASTER OF COMPUTER APPLICATION

by

SALONI TIWARI - 2200270140049

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AJAY KUMAR GARG ENGINEERING COLLEGE-MCA

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2023-24

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Ghaziabad

COLLEGE CERTIFICATE

This is to certify that project report entitled "**American Alphabet Sign Language Recognition**" which is submitted by **Saloni Tiwari (2200270140024) , Riya Garg (2200270140044) , Shriya (2200270140056) , Lester Sharma (2200270140024)** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date : 15/6/24

Ms. Deepti Arora
Supervisor

Director
Ajay Kumar Garg Engg. College
Ghaziabad

Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled **American Alphabet Sign Language Recognition**, submitted by Saloni Tiwari, Riya Garg, Shriya, Lester Sharma final year students of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter 5 . All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

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7	Affordable and Clean Energy	☐
8	Decent Work and Economic Growth	☐
9	Industry, Innovation, and Infrastructure	☐
10	Reduced Inequalities	☑
11	Sustainable Cities and Communities	☑
12	Responsible Consumption and Production	☐
13	Climate Action	☐
14	Life Below Water	☐
15	Life on Land	☐
16	Peace, Justice, and Strong Institutions	☐
17	Partnerships for the Goals	☐

Signature of the Students

Saloni Tiwari:

Riya Garg:

Shriya:

Lester:

Signature of the Supervisor

Ms. Deepti Arora

Director
Ajay Kumar Garg Engg. College
Ghaziabad

CHAPTER 5

CONCLUSION AND FUTURE WORK

5.1 Conclusion

The ability to properly communicate one's views with others is a big challenge for someone with a hearing and speaking problem. Because most individuals are uninterested in learning sign languages, there is a pressing need to develop a method for communicating with those who are deaf or hard of hearing. Several ways have been presented and several technologies have been invented for this goal in today's world. We've looked at a handful of them in this study. Every potential method is intended to convert sign language gestures into text and voice. The proposed solutions divide the gesture recognition process into three steps. Input, processing, and output are the three components.

These stages can be achieved using two alternative techniques that have been proposed in separate research articles. Image processing and machine learning are used in the first, while sensors and micro - controllers are used in the second. Both strategies have their own set of benefits and drawbacks, but they are quite effective in the communication process. The main issues are with image processing in varying light intensities and backgrounds. This system is less expensive, but it is less efficient than the glove-based system.

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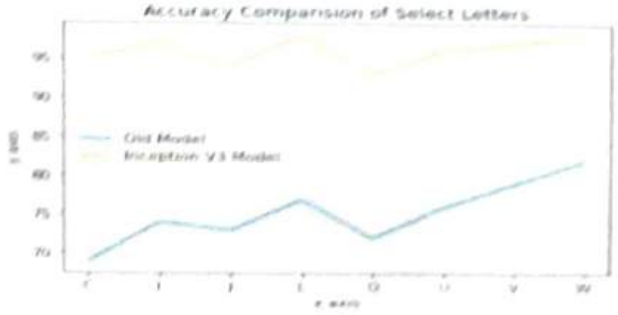

Figure 15: Select Alphabet Accuracy comparison

ATTENDANCE MONITORING SYSTEM USING FACE RECOGINATION

A project report submitted
to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY LUCKNOW

For partial Fulfillment of the Requirement for the Award of the Degree

of

MASTER OF COMPUTER APPLICATION

By

PRAJJWAL TIWARI	2200270140038
RACHIT SHUKLA	2200270140041
ADITYA JAISWAL	2200270140002
NISHANT CHATURVEDI	2200270140031

Under the guidance of
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DEPARTMENT OF MASTER OF COMPUTER APPLICATION
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GHAZIABAD

2023-24

COLLEGE CERTIFICATE

This is to certify that project report entitled "Attendance Monitoring System Using Face Recognition" which is submitted by **PRAJJWAL TIWARI 2200270140038, RACHIT SHUKLA 2200270140041, ADITYA JAISWAL 2200270140002, NISHANT CHATURVEDI 2200270140031** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date : 15/06/24

(Ms. Deepti Arora)
Supervisor

Director
Ajay Kumar Garg Engg. College
Ghaziabad

Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled ATTENDANCE MONITORING SYSTEM USING FACE RECOGNTION, submitted by PRAJJWAL TIWARI, RACHIT SHUKLA, ADITYA JAISWAL, NISHANT CHATURVEDI, final year students of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter [Chapter No. 5] (Conclusion and Future Scope). All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

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8	Decent Work and Economic Growth	■	17	Partnerships for the Goals	☐
9	Industry, Innovation, and Infrastructure	■			

Signature of the Students

Prajjwal Tiwari

Rachit Shukla

Aditya Jaiswal

Nishant Chaturvedi

Signature of the Supervisor

Ms. Deepti Arora

Director
Ajay Kumar Garg Engg. College
Ghaziabad

CHAPTER 5

CONCLUSION & FUTURE SCOPE

Our project is a platform that is created for purpose of study, kept a track on the student & presence in the class. Since it is based on automation, so it is easy to help to teachers, to get the remark. It's is not limited to class studies only, but also it can help in taking the online test without the presence of teacher & can be given an update in future.

In future, it is possible to keep track on the employee for the employers, since work from home is now becoming a trend now a days. Anywhere, where monitoring is required, our app can help an organization to keep their eye, without the human presence.

We have designed a real time automated attendance system which reduces the time and resources that is required while taking attendance manually. This system uses the technology of face detection and recognition. The system also tells us whether the studentis concentrating in class or not by calculating the concentration of the person. Various efficient algorithms are used in order to get the desired results. This system works well inthe ideal conditions and further improvement can be made when the conditions are not ideal like proper illumination or lightning.

ADVANTAGES:

- **Reduced errors**

  Time and Attendance software reduces the risk of human error and ensures and easy,- impartial, and orderly approach in addressing specific needs without any confusion.In fact, Time and Attendance software has been shown to have an accuracy rate of more than 99% versus manual systems by eliminating errors in data entry and calculations.

- **Increased productivity**

  Productivity increases because the process is seamless and makes day-to-day operations more efficient and convenient.

Reduced manual work

- As the system is automated it doesn't require more resources like screenshot of student's attendance. but the record is maintained in the database.
- As the system uses fewer resources therefore the cost of the system is less.
- The system also reduces the human effort.
- The system does not only perform the attendance of the system but also checks the concentration of a person in the class.
- This system uses the facial recognition technology and can be further used in various applications like for surveillance, checking the concentration of person while driving.
- This system is efficient and works perfectly in the ideal conditions.
- The system also works in real time.

FUTURE SCOPE:

- To automatically recognize the presence of student in the class.
- To analyze the focus of students in the class.
- To determine concentration of drivers while driving.
- To detect whether a student is cheating in an examination by attaching the systemwith a camera.
- In segregation of corpses and alive people who faced a Natural Disaster with thehelp of the drones operating on this system.

Brain Tumor And Alzheimer's Detection

A project report submitted

to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY LUCKNOW

For partial Fulfillment of the Requirement for the Award of the Degree

of

MASTER OF COMPUTER APPLICATION

by

PIYUSH GUPTA (2200270140035)
SATYAM SINGH (2200270140052)
SWAPNIL MISHRA (2200270140063)
SATYAM MANI TRIPATHI (2200270140051)

Under the guidance of

MS. AMAN GUPTA

DEPARTMENT OF MASTER OF COMPUTER APPLICATION
AJAY KUMAR GARG ENGINEERING COLLEGE
GHAZIABAD
2023-24

Director
Ajay Kumar Garg Engg. College
Ghaziabad

COLLEGE CERTIFICATE

This is to certify that project report entitled "**Brain Tumor And Alzheimer's Detection**" which is submitted by **PIYUSH GUPTA (2200270140035), SATYAM SINGH (2200270140052), SWAPNIL MISHRA (2200270140063) and SATYAM MANI TRIPATHI (2200270140051).** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date : 15/6/24

(Ms. Aman Gupta)
Supervisor

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Ghaziabad

Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled "**Brain Tumor And Alzheimer's Detection**", submitted by **Piyush Gupta, Satyam Singh, Swapnil Mishra** and **Satyam Mani Tripathi** final year students of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter 9 (Conclusion and Future Scope). All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

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9	Industry, Innovation, and Infrastructure	☐			

Signature of the Students

Piyush Gupta Piyush Gupta

Satyam Singh सत्यम सिंह

Swapnil Mishra Swapnil Mishra

Satyam Mani Tripathi Satyam

Signature of the Supervisor

Ms. Aman Gupta

Director
Ajay Kumar Garg Engg. College
Ghaziabad

CHAPTER: 9

CONCLUSION

This was our project of System Design about Brain Tumor and Alzheimer's detection developed in Python programming language. The Development of this system takes a lot of efforts from us. We think this system gave a lot of satisfaction to all of us. Though every task is never said to be perfect in this development field even more improvement may be possible in this application. We learned so many things and gained a lot of knowledge about development field. We hope this will prove fruitful to us.

The system's ability to analyze medical images such as MRI and CT scans for signs of brain tumors, as well as to assess patient data for indicators of Alzheimer's disease, holds significant potential for early detection and intervention. Early detection of these conditions can lead to improved treatment outcomes and better patient prognosis.

Overall, the brain tumor and Alzheimer's detection system developed in this project represent a significant advancement in medical technology, with the potential to make a meaningful impact on patient care and public health. Continued research and development in this field will further refine and enhance the capabilities of such systems, ultimately leading to improved diagnostic accuracy and patient outcomes.

Compliance with Sustainable Development Goals

Compliance with Sustainable Development Goal (SDG) 3, which aims to ensure healthy lives and promote well-being for all at all ages, can be demonstrated in a brain tumor detection project in several ways:

Early Diagnosis and Treatment: Enhances early detection of brain tumors, leading to timely and effective treatment, reducing mortality rates and improving patient outcomes.

Innovation in Healthcare: Utilizes advanced technologies such as AI and machine learning to improve diagnostic accuracy, contributing to innovative health solutions.

Access to Quality Health Services: Potentially increases accessibility to high-quality diagnostic tools, especially in underserved or remote areas, thus promoting equity in healthcare.

Research and Development: Supports research in medical technology and contributes to the development of new methodologies for disease detection and management.

Healthcare Workforce Training: Provides training opportunities for healthcare professionals in the use of new technologies, enhancing their skills and knowledge.

Chat Summarization and Analysis

A project report submitted to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY, LUCKNOW

For partial Fulfilment of the Requirement for the

Award of the Degree of

MASTER OF COMPUTER APPLICATION

by

Sudeep kumar	**(2200270140062)**
Shubham Kr. Yadav	**(2200270140058)**
Saksham	**(2200270140048)**
Shubham kr. Rai	**(2200270140057)**

Under the guidance of

Ms. Aman Gupta

DEPARTMENT OF MASTER OF COMPUTER APPLICATION

AJAY KUMAR GARG ENGINEERING COLLEGE,GHAZIABAD

(2023-24)

Director
Ajay Kumar Garg Engg. College
Ghaziabad

COLLEGE CERTIFICATE

This is to certify that project report entitled "**CHAT SUMMERIZATION AND ANALYSIS**" which is submitted **by Sudeep kumar (2200270140062),Shubham Kr. Yadav (2200270140058),Saksham (2200270140048),Shubham kr. Rai (2200270140057)** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J..Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date : 15-June-2024

Ms. Aman Gupta

Supervisior

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Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled **CHAT SUMMERIZER AND ANALYSIS**, submitted by **Sudeep Kumar (2200270140062), Shubham Kr. Yadav (2200270140058),Saksham (2200270140048),Shubham kr. Rai (2200270140057)** , final year students of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter [Chapter No.] (Conclusion and Future Scope). All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

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9	Industry, Innovation, and Infrastructure	☐			

Signature of the Students

Sudeep Kumar

Shubham Kumar Yadav

Saksham

Shubham Kumar Rai

Signature of the Supervisor

Ms. Aman Gupta

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Ajay Kumar Garg Engg. College
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CONCLUSION

The Chat Summarization and Analysis System represents a significant advancement in the ability to process, summarize, and analyze large volumes of conversational data. This system addresses the growing need for efficient data management and insight extraction in a world where digital communication generates vast amounts of information daily. The comprehensive design incorporates sophisticated natural language processing (NLP) techniques and machine learning algorithms to deliver real-time summarization, sentiment analysis, topic modeling, and user behavior tracking.

Key Achievements

1. Enhanced Data Processing Capabilities: The system effectively handles diverse chat data from various sources, transforming raw chat logs into structured and meaningful insights. By automating the data processing pipeline, the system reduces the time and effort required for manual data analysis, making it feasible to handle extensive datasets.

2. Real-Time Summarization and Analysis: One of the standout features of the system is its ability to provide real-time summarization. Users can quickly get an overview of ongoing conversations, enabling them to respond promptly and appropriately. This capability is particularly beneficial in customer service environments where timely responses are critical.

3. Sentiment Analysis: The integration of sentiment analysis allows the system to gauge the emotional tone of conversations. This feature helps in understanding customer satisfaction, identifying potential issues, and making informed decisions to improve user experience. It also enables organizations to monitor public sentiment towards their brand on social media.

4. Topic Modeling: By identifying key topics within chat logs, the system helps users to understand the main themes and subjects of discussion. This functionality is crucial for market research, trend analysis, and strategic planning, providing valuable insights into customer interests and concerns.

5. User Behavior Tracking: The system tracks user interactions and behavior patterns within chat data. This information can be used to enhance user experience, optimize workflows, and develop personalized services. In collaborative work environments, it aids in understanding team dynamics and improving communication efficiency.

CHRONIC KIDNEY DISEASE PREDICTION SYSTEM

A project report submitted to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY

LUCKNOW

For partial Fulfillment of the Requirement for the Award of the Degree Of

MASTER OF COMPUTER APPLICATION

by

RAGHAV GAUTAM (2200270140042)

SAHIL SINGH (2200270140047)

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PRERNA AGARWAL (2200270140039)

Under the guidance of

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2023-24

COLLEGE CERTIFICATE

This is to certify that project report entitled "**Chronic Kidney Disease Prediction System**" which is submitted by **Raghav Gautam (2200270140042), Prerna Agarwal (2200270140039), Sahil Singh (2200270140047), Somesh Sharma (2200270140036)** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of candidate's work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of my other degree.

Date: 15-06-2024

Ms. Deepti Arora
Supervisor

Director
Ajay Kumar Garg Engg. College
Ghaziabad

Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled **"Chronic Kidney Disease Prediction System"**, submitted by **Raghav Gautam (2200270140042), Sahil Singh (2200270140047), Somesh Sharma (2200270140060), Prerna Agarwal (2200270140039)**, final year students of the Bachelor of Technology in Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter 10. (Conclusion and Future Scope).

1	No Poverty	☐	10	Reduced Inequalities	☐
2	Zero Hunger	☐	11	Sustainable Cities andCommunities	☐
3	Good Health and Well-being	☑	12	Responsible Consumption and Production	☐
4	Quality Education	☐	13	Climate Action	☐
5	Gender Equality	☐	14	Life Below Water	☐
6	Clean Water and Sanitation	☐	15	Life on Land	☐
7	Affordable and Clean Energy	☐	16	Peace, Justice, and Strong Institutions	☐
8	Decent Work and Economic Growth	☐	17	Partnerships for the Goals	☐
9	Industry, Innovation, and Infrastructure	☑			

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CHAPTER 9
CONCLUSION

Chronic Kidney Disease (CKD) or chronic renal disease has become a major issue with a steady growth rate. A person can only survive without kidneys for an average time of 18 days, which makes a huge demand for a kidney transplant and Dialysis. It is important to have effective methods for early prediction of CKD. Machine learning methods are effective in CKD prediction. This work proposes a workflow to predict CKD status based on clinical data, incorporating data prepossessing, a missing value handling method with collaborative filtering and attributes selection. Out of the 11 machine learning methods considered, the extra tree classifier and random forest classifier are shown to result in the highest accuracy and minimal bias to the attributes. The research also considers the practical aspects of data collection.

SDG Parameters

1. Good Health and Well-being:

- **Timely Intervention**: Early identification of individuals at risk allows for timely interventions, which can prevent or delay the onset of CKD. This reduces the likelihood of severe complications and improves long-term health outcomes.
- **Lifestyle Modifications**: Predictive insights encourage patients to adopt healthier lifestyles, such as improved diet, increased physical activity, and smoking cessation, which are crucial for kidney health.
- **Reduced Healthcare Costs**: Early detection and management of CKD can prevent the need for expensive treatments like dialysis and kidney transplantation, resulting in significant cost savings for both patients and healthcare systems.
- **Efficient Resource Allocation**: By identifying high-risk patients, healthcare providers can allocate resources more effectively, ensuring that those who need the most care receive it promptly.

2. Industry,Innovation and Infrastructure:

- **AI and Machine Learning**: Developing CKD prediction systems requires sophisticated algorithms and models, driving advancements in artificial intelligence (AI) and machine learning (ML). These technologies can then be applied to other areas of healthcare and beyond.
- **Biomarker Discovery**: The development and validation of CKD prediction systems encourage research into new biomarkers for early detection and monitoring of CKD. This research can lead to breakthroughs in understanding disease mechanisms and discovering new therapeutic targets.
- **Health Apps and Wearables**: Integration with mobile health apps and wearable devices allows patients to monitor their health continuously, promoting innovation in consumer health technology and engagement tools.
- **Patient Education**: Predictive systems can provide personalized health information and education to patients, encouraging the development of innovative pa... ms.

CHAPTER 10
FUTURE SCOPE

Internet of Things (IoT): Wearable devices and IoT-enabled sensors can provide continuous monitoring of vital signs and other health indicators, feeding real-time data into CKD prediction systems for more dynamic and responsive predictions.

Artificial Intelligence (AI) and Machine Learning (ML): Continued improvements in AI and ML algorithms will enhance the accuracy and reliability of CKD prediction systems. These technologies can handle vast amounts of data, uncover hidden patterns, and provide more precise predictions.

Electronic Health Records (EHR): Better integration with EHR systems will facilitate seamless access to patient histories, lab results, and other critical data, enhancing the predictive capabilities of CKD systems.

Multimodal Data Fusion: Combining data from various sources such as clinical records, imaging, genomics, and wearable devices will provide a more comprehensive view of patient health, improving prediction accuracy.

Collaborative Research: Increased collaboration between nephrologists, data scientists, and bioinformaticians will drive innovation and the development of more sophisticated CKD prediction models.

Accessibility in Low-Resource Settings: Adapting CKD prediction systems to be accessible and effective in low-resource settings, potentially through cost-effective mobile solutions and simplified data inputs.

Global Data Sharing: International collaborations and data sharing initiatives can help build more comprehensive models that consider diverse populations, improving global CKD management strategies

CREDIT CARD FRAUD DETECTION

A project report submitted

to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY LUCKNOW

For partial Fulfillment of the Requirement for the Award of the Degree

of

MASTER OF COMPUTER APPLICATION

by

ISHIKA SHARMA (2200270140019)
MONIKA JAISWAL (2200270140027)
PRIYA TOMAR (2200270140040)
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Under the guidance of

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AJAY KUMAR GARG ENGINEERING COLLEGE GHAZIABAD 2023-24

COLLEGE CERTIFICATE

This is to certify that project report entitled "Credit Card Fraud Detection" which is submitted by **ISHIKA SHARMA 2200270140019, MONIKA JAISWAL 2200270140027, PRIYA TOMAR 2200270140040, SANCHITA SHUKLA 2200270140050** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J..Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date : 15/6/24

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Director
Ajay Kumar Garg Engg. College
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Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled [Project Title], submitted by [Student Names], final year students of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter [Chapter No.] (Conclusion and Future Scope). All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised

SDG No.	SDG Name	Relevance	SDG No.	SDG Name	Relevance
1	No Poverty	☐	10	Reduced Inequalities	☐
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Sanchita Shukla Sanchita Shukla

Ishika Sharma Ishika Sharma

Monika Jaiswal Monika Jaiswal

Priya Tomar Priya Tomar

Ms. Deepti Arora

Signature of the Supervisor

Director
Ajay Kumar Garg Engg. College
Ghaziabad

CHAPTER:10
CONCLUSION

The prevention of credit card fraud is essential for increased credit card use. The financial losses suffered by financial institutions are significant and ongoing, and the detection of credit card fraud is becoming more challenging, thus it is crucial to create more efficient methods for doing so. Gradient Boosting Classifier is used in this project to suggest an intelligent method for identifying fraud in credit card transactions. We performed a number of experiments utilising actual data. Performance analysis metrics were used to assess the performance of the suggested approach. According to the experimental findings, the suggested method outperformed other machine learning algorithms and attained the maximum accuracy performance. The outcomes demonstrate that the suggested method outperforms alternative classifiers. The outcomes further emphasise the significance and benefit of implementing an effective parameter optimization strategy for boosting the suggested approach's predictive capabilities.

DEVELOPING AN EFFECTIVE MODEL FOR SKIN DISEASE DETECTION: TECHNIQUES AND APPROACHES

A project report submitted to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY LUCKNOW

For partial Fulfilment of the Requirement for the

Award of the Degree

of

MASTER OF COMPUTER APPLICATION

by

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HARSH KUMAR VERMA	**(2200270140015)**
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2023-24

COLLEGE CERTIFICATE

This is to certify that project report entitled **"DEVELOPING AN EFFECTIVE MODEL FOR SKIN DISEASE DETECTION: TECHNIQUES AND APPROACHES "** which is submitted by **Amit Tiwari (2200270140005), Gaurav (2200270140014), Harsh Kr. Verma (2200270140015), Nikhil Kr. Yadav (2200270140030)** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidate's work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

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(Assistant Professor)
Supervisor

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Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled **"DEVELOPING AN EFFECTIVE MODEL FOR SKIN DISEASE DETECTION: TECHNIQUES AND APPROACHES "**, submitted by **Amit Tiwari, Gaurav, Harsh Kr. Verma, Nikhil Kr. Yadav** final year student of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter 9 (Conclusion and Future Scope). All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

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9	Industry, Innovation, and Infrastructure	☐			

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Gaurav

Harsh Kumar Verma

Nikhil Kumar Yadav

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Supervisor Name: Ms. Aruna Saxena

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CHAPTER-9

The "Skin Condition Detection" project represents a significant advancement in the field of medical diagnostics, leveraging the power of deep learning and artificial intelligence to improve the detection and classification of skin diseases. The project aimed to develop a comprehensive system capable of predicting various skin diseases from images, thus providing an accessible and reliable diagnostic tool for both medical professionals and the general public.

Project Achievements:

Throughout the course of this project, several key milestones were achieved, leading to the successful development of a robust skin disease prediction system:

Data Collection and Preprocessing:

- A diverse and extensive dataset comprising thousands of skin disease images was curated from multiple sources, including public medical image repositories and collaborations with dermatology experts. Each image was meticulously annotated to ensure accurate labeling.
- Advanced data preprocessing techniques, such as image resizing, normalization, and augmentation, were employed to enhance the quality and variability of the training data, thereby improving the model's ability to generalize across different conditions.

Model Development and Training:

- A Convolutional Neural Network (CNN) was designed and optimized for high accuracy in skin disease prediction. The architecture was carefully selected to balance computational efficiency and predictive performance.
- Hyperparameter tuning and cross-validation were used to refine the model, ensuring optimal performance. The final model demonstrated high accuracy, precision, recall, and F1-score across multiple skin disease categories.

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User Interface Design:

- A user-friendly interface was developed to facilitate easy interaction with the system. The interface allows users to upload images, receive diagnostic predictions, view their history, and access educational resources about various skin diseases.
- The design prioritized accessibility and usability, incorporating feedback from potential users to create an intuitive and seamless experience

Compliance With Sustainable Development Goals

Our Python-based Skin Disease Detection system aligns with the United Nations Sustainable Development Goal of Health and Well-being (SDG 3) in several ways:

Universal Health Coverage: By providing an affordable and accessible automated skin disease screening system, we contribute to universal health coverage, ensuring that more people have access to essential health services.

Early Diagnosis and Treatment: The system enhances early diagnosis and treatment outcomes for skin diseases, which can prevent more severe health issues and improve patient quality of life.

Healthcare Accessibility: The use of image processing and a user-friendly interface lowers the barrier to high-quality healthcare, making it accessible to underserved and remote populations.

Innovative Health Solutions: Utilizing advanced technologies like Convolutional Neural Networks and the Django framework promotes innovation in healthcare, aligning with the goal of improving health technologies.

Reduction of Healthcare Costs: By automating the screening process, the system reduces the overall cost of diagnosing skin diseases, making healthcare more affordable.

Strengthening Health Systems: The feedback mechanism and management capabilities for doctors and users enhance healthcare systems' efficiency and responsiveness.

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Ghaziabad

E-Challan

A project report submitted to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY LUCKNOW

For partial Fulfilment of the Requirement for the

Award of the Degree

of

MASTER OF COMPUTER APPLICATION

by

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Himanshu Sharma : (2200270140017)

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DEPARTMENT OF MASTER OF COMPUTER APPLICATION

AJAY KUMAR GARG ENGINEERING COLLEGE

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This is to certify that project report entitled **"E-Challan"** which is submitted by **Shams Tavrez (2200270140053), Kushan Kumar (2200270140022), Himanshu Sharma (2200270140017)** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidate's work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date : 15/06/2024

(Ms. Arpna Saxena)

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Supervisor

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Ghaziabad

Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled **"E-Challan"**, submitted by **SHAMS TAVREZ, KUSHAN KUMAR and HIMANSHU SHARMA** final year students of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter 9 (Conclusion and Future Scope). All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

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9	Industry, Innovation, and Infrastructure	☐			

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Ms. Arpna Saxena Arpna

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CHAPTER-9

CONCLUSION

Our study, we assessed the effectiveness of Automatic Number Plate Recognition (ANPR) and speed detection systems by measuring precision, recall, F1 score, and accuracy. ANPR achieved an F1 score of 92% alongside 89% precision and 94% recall, while the speed detection system reported 90% F1 score, 93% precision, and 88% recall. The accuracy rate of both systems was 85%. Some limitations were identified in the study despite its favourable results, suggesting potential avenues for enhancement in subsequent investigations.

ANPR systems are affected by environmental factors such as poor lighting, adverse weather, nighttime, extreme glare from sunlight, rain, fog, and snow can obscure number plates, making accurate recognition difficult. Variations in plate designs, fonts, colour, and sizes across different regions. ANPR algorithms struggle with complex backgrounds or variations in plate appearance, and real-time processing requirements, especially in high-traffic areas, can lead to delays or missed plates.

Technical challenges include low-resolution images, improper camera angles, and algorithm limitations in handling complex backgrounds.

Speed detection systems face issues with calibration issues can lead to inaccurate speed readings, environmental obstructions including obstructions like trees, buildings, or other vehicles, can interfere with the detection beam, and accuracy in high-traffic areas. Legal and privacy concerns also pose significant challenges for both systems.

In order to improve the accuracy of future research findings, the focus should be placed on various areas like improving hardware, such as cameras with higher resolution and improved low-light capabilities, can help address environmental obstacles. Improving recognition accuracy can be achieved by enhancing algorithms to handle a variety of plate designs and complex backgrounds. Consistent calibration and maintenance of speed detection tools, combined with improvements in detection technology, will improve accuracy and dependability. By focusing on these areas, future research can develop more robust and accurate ANPR and speed detection systems.

CHAPTER-10

FUTURE SCOPE

The future scope of automatic speed detection and number plate detection systems is promising, with advancements in technology driving innovative applications and improvements in existing functionalities. Here are some potential future directions and advancements for these systems:

Integration with Smart City Initiatives:

Automatic speed detection and number plate detection systems can be integrated into broader smart city frameworks. This integration could enable real-time traffic monitoring, congestion management, and enhanced safety measures across urban areas.

Advanced Algorithms and AI/ML Techniques:

Continued advancements in artificial intelligence (AI) and machine learning (ML) can enhance the accuracy and efficiency of detection algorithms. Future systems may leverage deep learning techniques for better object detection, including complex scenarios like low-light conditions or adverse weather.

Enhanced Recognition Capabilities:

Future systems may improve number plate recognition capabilities by integrating with databases for real-time vehicle identification and verification. This could aid in tracking stolen vehicles, identifying unauthorized vehicles, and improving overall law enforcement efficiency.

Cloud Computing and Edge Computing Integration:

Integration with cloud computing and edge computing technologies can enhance the scalability and responsiveness of these systems. Cloud-based solutions can facilitate centralized data management and analytics, while edge computing can enable real-time processing and decision-making at the device level.

IoT and Connectivity:

The Internet of Things (IoT) can play a crucial role in the future of these systems by enabling interconnected devices and sensors. IoT-enabled vehicles and infrastructure can communicate data in real-time, facilitating dynamic speed enforcement and traffic management.

Privacy and Data Security:

As these systems gather and process sensitive information, future advancements will focus on ensuring robust data security measures and compliance with privacy regulations. Techniques like encryption, anonymization, and secure data transmission will be crucial for maintaining user trust and regulatory compliance.

EMOSURVEY

A project report submitted

to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY LUCKNOW

For partial Fulfillment of the Requirement for the Award of the Degree

of

MASTER OF COMPUTER APPLICATION

by

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COLLEGE CERTIFICATE

This is to certify that project report entitled **"EmoSurvey"** which is submitted by **Kajal Teetwal (2200270140020), Riya Singh (2200270140045), Rohan Kumar (2200270140046)** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J..Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date : 15-06-2024

Ms. Arpita Saxena
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Ghaziabad

Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled Fetching User Information in Healthcare System Using Face Recognition System submitted by [Kajal Teetwal, Riya Singh, Rohan Kumar], final year students of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter 8 (Conclusion). All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

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Signature of the Students

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Riya Singh -2200270140045 Riya Singh
Rohan Kumar -2200270140046 Rohan Kumar

Name of the Supervisor
Ms. Arpna Saxena

Director
Ajay Kumar Garg Engg. College
Ghaziabad

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Would like to express your sincerest gratitude to all the people who have contributed towards the successful completion of our project. We would like to extend our heartfelt thanks to the Head of Master of Computer Application Department, Prof B.K. Sharma, for nurturing a congenital yet competitive environment in the department, which motivates all the users to pursue higher goals. We want to express our special gratitude to our guide "Ms. Arpna Saxena", Assistant Prof. "Deepti Arora", Department of MCA, Ajay Kumar Garg Engineering College, Ghaziabad for her constant support, guidance, encouragement, and much needed motivation. Her sincerity, thoroughness and perseverance has been a constant source of inspiration for us. Last but not the least, we would like to extend our thanks to the teaching and non-teaching staff members of our department and to our colleagues who helped us in the completion of the project.

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Rohan Kumar - 2200270140046 Rohan Kumar

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Chapter-7
CONCLUSION

The main aim of this project is to offer opportunities for understanding human emotions in diverse contexts, such as psychology, neuroscience, and human-computer interaction. Researchers can utilize it to study emotional responses to stimuli, social interactions, and environmental factors, providing valuable insights into human behavior and well- being. Moreover, in fields like mental health and therapy, facial emotion detection holds promise for aiding in emotion regulation, mood tracking, and early intervention for conditions like depression and anxiety. Additionally, within the realm of artificial intelligence and robotics, integrating facial emotion detection enables machines to better understand and respond to human emotions, facilitating more empathetic and intuitive interactions between humans and technology.

Sustainable Development Goals:

This project covers 2 main sustainable development goals which are as follows:
Industry, Innovation, and infrastructure: The main focus of this project is to use face emotion for surveys. So that the survey can be less time consuming, safe, reliable and accurate. That's why this project comes under Industry, Innovation and infrastructure.

Good Health and Well-Being: This project use the concept of face emotion recognition can also be used by psychiatrics, to detect their patients' emotions and check how patients are responding on their medicure that is why this project comes under good health and well-being sustainable development goals.

Chapter-9
BIBLOGRAPHY

I. Wang. P., Barrett, F., Martin, E., Milonova, M., Gur, R. E., Gur. R. C., et al., Automated video based facial expression analysis of neuropsychiatric disorders in 2008.

II. Guo. W., Yang. H. and Liu. Z., Deep neural network for Depression recognition based on Facial Expression caused by stimulus tasks in 2019.

III. Article by Vivek Kumar, Machine Learning Area, Designation- IIT Roorkee.

IV. Liu. M., Shan. S., Wang. R., and Chen. X. in 2014, learning expressionlets on spatio-temporal manifold for dynamic facial expression recognition in IEEE Conference on Computer vision and pattern recognition (CVPR).

V. Mercy Rani, R. Durgadevi, Image Processing Techniqus to Recognize Facial Emotion, International Research journal of Engineering and Technology in 2017.

VI. Nicu Sebe, Michael S, Lew, Ira Cohen, Ashutosh Garg, Thomas S Huang, "Emotion Recognition using Cauchy Naïve Bayes Classifier", IEEE in 2002.

VII. Very deep convolution networks for large-scale image recognition, Visual Geometry Group Department of Engineering Science, University of Oxford.

VIII. S. Kim, Am Gwon Hwan, K. Suk-JuFacial Expression Recognition system using Machine Learning, Department of Electronic Engineering, Sogang University Seoul, IEEE.

IX. MB Patel, DL Agrawal, A survey paper on facial expression recognition system, Journal of emerging technologies and innovative research in 2016.

X. A. Savadi, C.V. Patil Based Automatic Human Emotion Detection, IJCSNS in 2014.

XI. A. Jaiswal, A.K. Raju, S. DebFacial Emotion Detection using Deep learning in Department of Electronics Engineering, IEEE in June 2020.

Director
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Ghaziabad

Fetching User Information in Healthcare System Using Face Recognition System

A project report submitted

to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY LUCKNOW

For partial Fulfillment of the Requirement for the Award of the Degree

of

MASTER OF COMPUTER APPLICATION

by

ABHISHEK MALIK
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AKANSHA ARORA
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ASHISH RAI
2200270140009

Under the guidance of
Dr. Saroj Bala

DEPARTMENT OF MASTER OF COMPUTER APPLICATION
AJAY KUMAR GARG ENGINEERING COLLEGE
GHAZIABAD
2023-24

Director
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Ghaziabad

COLLEGE CERTIFICATE

This is to certify that project report entitled **"Fetching User Information from Healthcare System Using Face Recognition System"** which is submitted by **Abhishek Malik (2200270140001), Akansha Arora (2200270140003), Ashish Rai (2200270140009)** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J..Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date : 15- 06 - 2024

Dr. Saroj Bala
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This is to certify that the project titled Fetching User Information in Healthcare System Using Face Recognition System submitted by [Abhishek Malik, Akansha Arora, Ashish Rai], final year students of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter 8 (Conclusion). All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

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3	Good Health and Well-being	☑	12	Responsible Consumption and Production	☐
4	Quality Education	☐	13	Climate Action	☐
5	Gender Equality	☐	14	Life Below Water	☐
6	Clean Water and Sanitation	☐	15	Life on Land	☐
7	Affordable and Clean Energy	☐	16	Peace, Justice, and Strong Institutions	☐
8	Decent Work and Economic Growth	☐	17	Partnerships for the Goals	☐
9	Industry, Innovation, and Infrastructure	☑			

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Name of the supervisor
Dr. Saroj Bala 5/6/25

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Chapter-7
CONCLUSION

The main aim of this project is to address the issue of patient identification during a medical emergency when a patient's medical information may become inaccessible as a result of the patient's inability to communicate effectively in order to provide the needed medical information.
The implementation of a face recognition system in healthcare settings represents a significant step forward in leveraging technology to enhance operational efficiency, security, and patient satisfaction. By addressing technical and security challenges and adhering to regulatory requirements, healthcare providers can deploy a robust solution that meets the needs of both the organization and its patients. With careful planning, thorough testing, and continuous improvement, this technology has the potential to transform the way healthcare information is accessed and managed, paving the way for a more secure and efficient future in healthcare delivery.

Sustainable Development Goals:

This project covers 3 main sustainable development goals which are as follows:
Good Health and Well-Being: The main focus of this project is to fetch the patients medical history at the time of emergency which make sure that all the patients will treated as fast as they can, that is why this project comes under good health and well-being sustainable development goals.
Industry, Innovation, and infrastructure: This project use the concept of face recognition for fetching the patient's medical information which comes under the category of innovation parts of the sustainable development goals.
Sustainable Cities and Communities: This project based on the patient medical information and their treatment which belong to the hospital communities that is why this project comes under the category of sustainable development goals.

Director
Ajay Kumar Garg Engg. College
Ghaziabad

GENESYS

A project report submitted

to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY

LUCKNOW

For partial Fulfilment of the Requirement for the

Award of the Degree

of

MASTER OF COMPUTER APPLICATION

by

SHIVAM JAIN (2200270140054)

PAWAN GUPTA (220070140033)

Under the guidance of

Ms. Arpna Saxena

DEPARTMENT OF MASTER OF COMPUTER APPLICATION

AJAY KUMAR GARG ENGINEERING COLLEGE GHAZIABAD

2023-24

Director
Ajay Kumar Garg Engg. College
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COLLEGE CERTIFICATE

This is to certify that the project report entitled **"GENESYS"** which is submitted **by Shivam Jain (2200270140054) and Pawan Gupta (2200270140033)** in partial fulfillment of the requirement for the award of the degree Master of Computer Application of Dr. A.P.J.Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates' work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date: 15-06-2024

Ms. Arpna Saxena
Supervisor

Director
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Ghaziabad

Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled **GENESYS**, submitted by **Shivam Jain (2200270140054) and Pawan Gupta (2200270140033)**, a final year student of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, has been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter 12 . All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

SDG No.	SDG Name	Relevance	SDG No.	SDG Name	Relevance
1	No Poverty	☐	10	Reduced Inequalities	☐
2	Zero Hunger	☐	11	Sustainable Cities and Communities	☐
3	Good Health and Well-being	☐	12	Responsible Consumption and Production	☐
4	Quality Education	■	13	Climate Action	☐
5	Gender Equality	☐	14	Life Below Water	☐
6	Clean Water and Sanitation	☐	15	Life on Land	☐
7	Affordable and Clean Energy	☐	16	Peace, Justice, and Strong Institutions	☐
8	Decent Work and Economic Growth	■	17	Partnerships for the Goals	☐
9	Industry, Innovation, and Infrastructure	☐			

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Director
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Ghaziabad

CHAPTER: 9

CONCLUSION

The Genesys SaaS-Based Generative AI Tool represents a significant advancement in leveraging artificial intelligence to enhance user productivity and creativity. By integrating cutting-edge technologies such as HTML, Tailwind CSS, ReactJS, Next.js, Prisma, and Shadcn UI, the tool provides a robust, scalable, and user-friendly platform capable of generating text, code, images, and videos.

Enhanced Content Generation:

- The tool excels in generating high-quality conversational text, efficient code snippets, and visually appealing images and videos, thereby catering to a wide range of user needs from different domains.

User-Centric Design:

- The intuitive and customizable interface ensures that users can easily navigate and utilize the tool's features, leading to a better user experience and higher satisfaction.

Seamless Integration:

- The robust API access and compatibility with various third-party tools facilitate seamless integration into existing workflows, enhancing overall efficiency and productivity.

Advanced Security Measures:

- With stringent checks, controls, and encryption protocols, the tool ensures the safety and privacy of user data, addressing one of the most critical aspects of modern digital solutions.

Challenges and Future Directions:

Director
Ajay Kumar Garg Engg. College
Ghaziabad

While the Genesys tool boasts numerous strengths, it also faces certain limitations, such as performance constraints during peak times, complexity in model customization, and high computational demands. Addressing these challenges will be crucial for future enhancements. Future development efforts could focus on optimizing performance, expanding multilingual support, and refining the customization capabilities of the AI models.

OBJECT DETECTION

A project report submitted

to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY

LUCKNOW

For partial Fulfilment of the Requirement for the

Award of the Degree

of

MASTER OF COMPUTER APPLICATION

by

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TARANGINI RAI (2200270140064)

Under the guidance of

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DEPARTMENT OF MASTER OF COMPUTER APPLICATION

AJAY KUMAR GARG ENGINEERING COLLEGE

GHAZIABAD

2023-24

Director
Ajay Kumar Garg Engg. College
Ghaziabad

COLLEGE CERTIFICATE

This is to certify that project report entitled "OBJECT DETECTION" which is submitted by **PEUSH KUMAR(2200270140034), TARANGINI RAI(2200270140064)** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date: 12th June 2024

Dr. Saroj Bala

Associate Professor

MCA Department

Supervisor

Director
Ajay Kumar Garg Engg. College
Ghaziabad

Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled **OBJECT DETECTION** submitted by **PEUSH KUMAR(2200270140034), TARANGINI RAI(2200270140064)** final year students of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter No.9 (Conclusion). All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

SDG No.	SDG Name	Relevance	SDG No.	SDG Name	Relevance
1	No Poverty	☐	10	Reduced Inequalities	☐
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5	Gender Equality	☐	14	Life Below Water	☐
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7	Affordable and Clean Energy	☐	16	Peace, Justice, and Strong Institutions	☐
8	Decent Work and Economic Growth	☐	17	Partnerships for the Goals	☐
9	Industry, Innovation, and Infrastructure	✓			

Signature of the Students

PEUSH KUMAR (2200270140034)

TARNGINI RAI (2200270140034)

Signature of the Supervisor

Dr. Saroj Bala

15/6/24

Director
Ajay Kumar Garg Engg. College
Ghaziabad

CHAPTER: - 9
CONCLUSION

Object detection, a pivotal technology in the realm of Industry, Innovation, and Infrastructure, revolutionizes various sectors by enhancing automation, improving safety, and driving efficiency. In industrial settings, it facilitates real-time monitoring 50and quality control, ensuring product consistency and reducing defects. Innovations in object detection, such as advanced algorithms and integration with AI, propel the development of intelligent systems capable of performing complex tasks autonomously. This technology significantly contributes to the infrastructure sector by optimizing traffic management, enabling smart surveillance, and supporting the development of smart cities. Thus, object detection stands as a cornerstone of modern advancements, fostering sustainable growth and transforming operational paradigms across industries.

Director
Ajay Kumar Garg Engg. College
Ghaziabad

ONLINE TRADING APPLICATION

A project report submitted

to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY LUCKNOW

For partial Fulfillment of the Requirement for the Award of the Degree

of

MASTER OF COMPUTER APPLICATION

by

DEVESH SRIVASTAVA	(2200270140013)
MUDIT SINGH	(2200270140028)
HARSHITA PANDEY	(2200270140016)
HRITIK KAUSHIK	(2200270140018)

Under the guidance of

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DEPARTMENT OF MASTER OF COMPUTER APPLICATION

AJAY KUMAR GARG ENGINEERING COLLEGE

GHAZIABAD

2023-24

Director
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COLLEGE CERTIFICATE

This is to certify that project report entitled "**ONLINE TRADING APPLICATION**" which is submitted by **DEVESH SRIVASTAVA (2200270140013), MUDIT SINGH (2200270140028), HARSHITA PANDEY (2200270140016), HRITIK KAUSHIK (2200270140018)** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J..Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date : 12th June 2024

Supervisor

Prof. Arpana Saxena
Assistant Professor

MCA Department

Director
Ajay Kumar Garg Engg. College
Ghaziabad

Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled **ONLINE TRADING APPLICATION**, submitted by **Devesh Srivastava, Mudit Singh, Harshita Pandey, Hritik Kaushik** final year students of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter [8](Limitation and Special Features). All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

SDG No.	SDG Name	Relevance	SDG No.	SDG Name	Relevance
1	No Poverty	☐	10	Reduced Inequalities	☐
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8	Decent Work and Economic Growth	☑	17	Partnerships for the Goals	☐
9	Industry, Innovation, and Infrastructure	☐			

Signature of the Students

Devesh Srivastava

Mudit Singh

Harshita Pandey

Hritik Kaushik

Signature of the Supervisor

Prof. Aprana Saxena

Director
Ajay Kumar Garg Engg. College
Ghaziabad

9. CONCLUSION

The development and implementation of the online trading application represent a significant advancement in the realm of financial technology, offering a comprehensive platform for individual and institutional investors to engage in stock trading and portfolio management. Throughout this project, we have meticulously designed, developed, and tested various components of the application to ensure it meets the highest standards of functionality, security, and user experience.

Key Achievements

1. **Robust Architecture**: The application is built on a scalable and resilient architecture, capable of handling high volumes of transactions and real-time data updates, ensuring reliable performance even during peak trading hours.
2. **Advanced Security Measures**: With the integration of sophisticated encryption protocols, multi-factor authentication, and regular security audits, the application provides a secure environment for users to conduct their trading activities, safeguarding sensitive financial and personal information.
3. **User-Friendly Interface**: The intuitive user interface, coupled with advanced charting tools, real-time data feeds, and customizable dashboards, enhances the user experience, making it easier for traders to make informed decisions and execute trades efficiently.

Challenges and Limitations

Despite the numerous strengths, the project encountered challenges, particularly in maintaining system security against evolving cyber threats, ensuring regulatory compliance, and managing the inherent risks associated with market volatility and technical issues. Addressing these challenges required a proactive approach, incorporating continuous monitoring, regular updates, and user education.

Plant Leaf Disease Detection Using Image

A project report submitted

to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY LUCKNOW

For partial Fulfillment of the Requirement for the Award of the Degree

of

MASTER OF COMPUTER APPLICATION

by

SHUBHAM SINGHAL
Roll No: 2200270140059
SHIVAM SHARMA
Roll No: 2200270140055

Under the guidance of
Mr.s. Aman Gupta

DEPARTMENT OF MASTER OF COMPUTER APPLICATION
AJAY KUMAR GARG ENGINEERING COLLEGE
GHAZIABAD
2023-24

Director
Ajay Kumar Garg Engg. College
Ghaziabad

COLLEGE CERTIFICATE

This is to certify that project report entitled "**Plant Leaf Disease Detection Using Image**" which is submitted by **Shivam Sharma (2200270140055), Shubham Singhal (2200270140059)** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J..Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date : 15- JUNE - 2024

Mrs. Aman Gupta
Supervisor

Director
Ajay Kumar Garg Engg. College
Ghaziabad

Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled [**Plant Leaf Disease Detection Using Image**], submitted by [Shivam Sharma(200270140055), Shubham Singhal(2200270140059)], final year students of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter [Chapter No.] (Conclusion and Future Scope). All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

SDG No.	SDG Name	Relevance	SDG No.	SDG Name	Relevance
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7	Affordable and Clean Energy	☐	16	Peace, Justice, and Strong Institutions	☐
8	Decent Work and Economic Growth	☐	17	Partnerships for the Goals	☐
9	Industry, Innovation, and Infrastructure	☐			

Signature of the Students

Shivam Sharma-2200270140055 शिवम शर्मा

Shubham Singhal-2200270140059 Shubham Singhal

Signature of the Supervisor
Mrs Aman Gupta

Director
Ajay Kumar Garg Engg. College
Ghaziabad

Chapter-7
CONCLUSION

In conclusion, the plant leaf disease detection system represents a valuable tool in agricultural management, offering advanced capabilities to diagnose and manage plant diseases effectively. By leveraging image analysis, machine learning algorithms, and robust data processing techniques, the system can accurately identify and classify plant diseases from leaf images, enabling timely intervention and disease control measures.

Throughout this feasibility study, we have explored various aspects of the system, including technical feasibility, economic viability, and user requirements. We have outlined the system's purpose, scope, features, and security considerations, emphasizing the importance of data security, authentication, and access control in safeguarding sensitive information and ensuring user privacy.

Moreover, we have discussed training and support strategies to facilitate user adoption and provide ongoing assistance, ensuring that users can maximize the system's potential and derive value from its capabilities. Through comprehensive training materials, technical support channels, and community engagement initiatives, users can build the necessary skills and confidence to utilize the system effectively in their agricultural practices.

Overall, the plant leaf disease detection system holds immense potential to revolutionize plant health management, improve crop yields, and mitigate the impact of plant diseases on agricultural productivity. By investing in its development, deployment, and user training, stakeholders can harness the power of technology to address pressing challenges in agriculture and contribute to sustainable food production worldwide.

WOMEN SAFETY APP

A project report submitted

to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY

LUCKNOW

For partial Fulfillment of the Requirement for the

Award of the Degree

Of

MASTER OF COMPUTER APPLICATION

by

DEEPANSHU (2200270140012)

MEDHAVI AGARWAL (2200270140026)

NEHA TYAGI (2200270140029)

PRABHAV SHUKLA (2200270140036)

Under the guidance of

Ms. Shruti Jain (Assistant Professor)
AKGEC, Ghaziabad

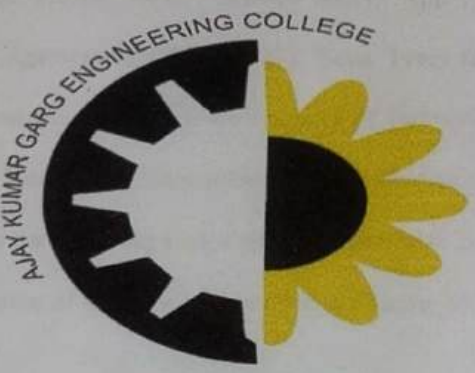
DEPARTMENT OF MASTER OF COMPUTER APPLICATION

AJAY KUMAR GARG ENGINEERING COLLEGE
GHAZIABAD

2023-24

Director
Ajay Kumar Garg Engg. College
Ghaziabad

COLLEGE CERTIFICATE



This is to certify that project report entitled **"Women Safety App"** which is submitted by **Deepanshu (2200270140012), Medhavi Agarwal (2200270140026), Neha Tyagi (2200270140029), Prabhav Shukla (2200270140036)** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of candidate's work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of my other degree.

Date: .....

(Ms. Shruti Jain)

Director
Ajay Kumar Garg Engg. College
Ghaziabad

Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled **"Women Safety App"**, submitted by **Deepanshu (2200270140012), Medhavi Agarwal (2200270140026), Neha Tyagi (2200270140029), Prabhav Shukla (2200270140036)**, final year students of the Bachelor of Technology in Master of Computer Application program at Ajay KumarGarg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter 10. (Conclusion and Future Scope).

SDG No.	SDG Name	Relevance	SDG No.	SDG Name	Relevance
1	No Poverty	☐	10	Reduced Inequalities	☐
2	Zero Hunger	☐	11	Sustainable Cities andCommunities	☑
3	Good Health and Well-being	☑	12	Responsible Consumption and Production	☐
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8	Decent Work and Economic Growth	☐	17	Partnerships for the Goals	☑
9	Industry, Innovation, and Infrastructure	☐			

Signature of the Students

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Medhavi Agarwal (2200270140026)

Neha Tyagi (2200270140029)

Prabhav Shukla (2200270140036

Signature of the Supervisor

Ms. Shruti Jain

Director
Ajay Kumar Garg Engg. College
Ghaziabad

Chapter: 9
Conclusion

SMS-alert based women safety app represents a significant advancement in leveraging technology ddress the pressing issue of personal safety for women. By integrating features such as an rgency button, real-time location sharing, and voice activation, the app provides users with ssible and immediate assistance in times of distress. Its robust infrastructure ensures reliability scalability, enabling quick and efficient alert dissemination to designated contacts.

app fills a crucial gap in safety solutions by offering a user-friendly platform that empowers ıen to take control of their security. Through simple actions like tapping an emergency button or ⁄ating voice commands, users can swiftly access help and notify their trusted contacts of their ıtion. The app's ability to share real-time location data further enhances its effectiveness, enabling onders to locate and assist users promptly.

ummary, the SMS-alert based women safety app stands as a beacon of innovation and owerment, offering women a reliable ally in their quest for personal security and peace of mind.

G Parameters

1. **Good health and well-being**
   - Reducing Anxiety: Knowing that help is a button away can reduce anxiety and stress for women, contributing to better mental health. The sense of security and support can alleviate constant fear and worry.
   - Immediate Assistance: The app can send instant alerts to emergency contacts and authorities, reducing response times during incidents of violence or health emergencies.
2. **Gender Equality**
   - Immediate Response: The app can help prevent and reduce incidents of gender-based violence by providing a quick way to alert authorities and contacts, increasing the likelihood of intervention and support.
   - Awareness and Reporting: By facilitating easier reporting of incidents, the app can help increase awareness and documentation of gender-based violence, contributing to societal recognition and policy changes aimed at reducing such violence.
3. **Sustainable Cities and Communities**
   - Reducing Crime Rates: The app can help deter potential perpetrators by increasing the likelihood of immediate intervention, thus contributing to lower crime rates.
   - Safer Public Areas: By addressing safety concerns, the app can make public spaces more accessible and welcoming for everyone, especially women, thereby promoting their use and enjoyment of parks, streets, and public transport.
4. **Peace, Justice and Strong Institutions**
   - Community Trust: The app can help build trust between the community and institutions by demonstrating a commitment to protecting vulnerable groups and addressing their concerns.

Improving Police Response: By integrating with law enforcement and emergency services, the app can enhance the responsiveness and effectiveness of these institutions. Faster response times and better coordination can improve trust in these institutions.

artnerships for the Goals

Support Services: Partnering with NGOs that provide support services for women, such as shelters, counselling, and legal aid, can ensure comprehensive support for users of the app.

Advocacy and Education: Working with civil society organizations can help raise awareness about the app and educate the public on women's safety and rights.

ROUTE ROAM

A project report submitted to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY,

LUCKNOW(U.P)

For partial Fulfilment of the Requirement for the

Award of the Degree of

MASTER OF COMPUTER APPLICATION

by

ANURAG SINGH **(2200270140007)**

MAHIMA MISHRA **(2200270140025)**

PALAK RAI **(2200270140032)**

Under the guidance of

Ms. Shruti Jain

DEPARTMENT OF MASTER OF COMPUTER APPLICATION

AJAY KUMAR GARG ENGINEERING COLLEGE,GHAZIABAD

2023-24

Director
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Ghaziabad

COLLEGE CERTIFICATE

This is to certify that project report entitled **"ROUTE ROAM"** which is submitted by **Anurag Singh (2200270140007), Mahima Mishra (2200270140025), Palak Rai (2200270140032)** partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J..Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date : 15-06-24

Ms. Shruti Jain

Supervisor

Director
Ajay Kumar Garg Engg. College
Ghaziabad

ACKNOWLEDGEMENT

First of all, we would like to thank our Head of Department of MCA **Prof. B.K. Sharma** for all facilities provided to us in carrying out this project. With profound sense of gratitude and regard, I express my sincere thanks to my guide and mentor **Ms. Shruti Jain** for valuable guidance and the confidence she instilled in me, that helped me in the successful completion of this project report. Without their help, this project would have been a distant affair. It is a thorough understanding of the subject and professional guidance was indeed of immense help to me. Also, I am also greatly thankful to the faculty members of our institute who cooperated with me and gave me their valuable time. Then I would like to thank my teacher and friends who have helped me with their valuable suggestions and guidance have been very helpful in various phases of the completion of the project.

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PALAK RAI **(2200270140032)**

ABSTRACT

"Route Roam" is an innovative Android-based application designed to revolutionize commuting within metro systems. Developed using cutting-edge technologies such as Kotlin, Jetpack Compose, and XML in Android Studio, the app functions entirely offline, ensuring seamless reliability even without internet connectivity. By leveraging a sophisticated graph data structure and Dijkstra's algorithm, Route Roam provides users with optimal route planning and precise fare calculations.

The application boasts a suite of advanced features including a fare calculator, high-definition interactive map, comprehensive route planner, parking rate information, upcoming metro development maps, first and last metro timings, platform details, online recharge facilities, gate information, live navigation, and an AI assistant powered by Gemini AI. These features collectively deliver accurate, effective, and user-friendly data essential for metro travel, fostering an improved commuting experience.

Route Roam actively encourages user feedback and suggestions, facilitating continuous enhancement and refinement of its features. By offering a dependable, feature-rich, and user-centric solution, Route Roam aims to make metro travel more convenient, efficient, and enjoyable for all commuters.

CHAPTER 8 : CONCLUSION

The Route Roam app represents a significant advancement in enhancing the commuter experience through its innovative features and user-centric design. By integrating GPS navigation, offline functionality, a fare calculator, an AI assistant, and an interactive metro map, the app addresses key challenges faced by urban commuters navigating metro systems. These features collectively contribute to making daily commutes more efficient, predictable, and user-friendly.

Throughout its development and testing phases, Route Roam has demonstrated its commitment to usability, functionality, and performance across various Android devices and operating system versions. User feedback and testing sessions have played a crucial role in refining the app's capabilities, ensuring it meets the diverse needs of commuters of different age groups, technological backgrounds, and commuting patterns.Looking forward, Route Roam aims to continue evolving by incorporating updates to metro schedules, enhancing the accuracy of fare calculations, and expanding its coverage to include metro systems in other states or regions. By focusing on continuous improvement and user satisfaction, Route Roam is poised to become an indispensable tool for urban commuters seeking reliable and intuitive metro navigation solutions.

In conclusion, Route Roam not only exemplifies the benefits of leveraging modern technology like Kotlin and Jetpack Compose in Android development but also underscores the potential of mobile applications to transform urban mobility. Its integration of advanced features sets a benchmark for future developments in metro navigation apps, promising a more seamless and enjoyable commuting experience for users worldwide.

Sustainable Development Goals

Good Health and Well-being: Route Roam promotes good health and well-being by reducing commuter stress and anxiety associated with navigating unfamiliar metro systems. By providing accurate real-time navigation, the app helps commuters reach their destinations efficiently, thereby reducing potential health risks such as stress-related ailments and fatigue.

Decent Work and Economic Growth: The app supports decent work and economic growth by improving commuter efficiency and reducing travel time. By helping workers arrive punctually at their workplaces, Route Roam supports productivity and contributes to economic growth. Additionally, the development and maintenance of the app itself create job opportunities in the tech industry, fostering economic growth.

Industry, Innovation, and Infrastructure: Route Roam embodies the principles of industry, innovation, and infrastructure by leveraging advanced technologies like GPS navigation, AI assistance, and interactive mapping to enhance urban mobility. The app represents innovation in urban transportation solutions, contributing to the development of robust infrastructure and technological advancements in the field of mobile applications.

Sustainable Cities and Communities: By facilitating efficient metro navigation, Route Roam contributes to building sustainable cities and communities. The app encourages the use of public transportation, which helps reduce traffic congestion, air pollution, and greenhouse gas emissions associated with individual car use. This promotes cleaner and more sustainable urban environments for residents.

Responsible Consumption and Production: While not directly related to production, Route Roam promotes responsible consumption by optimizing metro travel routes and encouraging the use of public transportation. By minimizing unnecessary travel and promoting efficient routes, the app helps reduce fuel consumption and environmental impact, aligning with principles of sustainable consumption and production.

TOUR AND TRAVELS MANAGEMENT SYSTEM

A project report submitted

to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY LUCKNOW

For partial Fulfillment of the Requirement for the Award of the Degree

of

MASTER OF COMPUTER APPLICATION

by

ARPAN KATIYAR (2200270140008)
RITIK RANJAN (2200270140043)
PREETAM KUMAR (2100270140040)

Under the guidance of

Dr. SAROJ BALA

DEPARTMENT OF MASTER OF COMPUTER APPLICATION
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GHAZIABAD

2023-24

Director
Ajay Kumar Garg Engg. College
Ghaziabad

COLLEGE CERTIFICATE

This is to certify that project report entitled "**TOUR AND TRAVELS MANAGEMENT SYSTEM**" which is submitted by **ARPAN KATIYAR (2200270140008), RITIK RANJAN (2200270140043), PREETAM KUMAR (2100270140040)** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J..Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidates work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date: 13th June 2024

Supervisor

Dr. Saroj Bala 4/6/24
Associate Professor
MCA Department

Director
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Certificate of Compliance with United Nations Sustainable Development Goals

This is to certify that the project titled **TOUR AND TRAVELS MANAGEMENT SYSTEM**, submitted by **Arpan Katiyar (2200270140008), Ritik Ranjan (2200270140043), Preetam Kumar (2100270140040)** final year students of the Master of Computer Application program at Ajay Kumar Garg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter [9.] (Conclusion). All efforts have been made to the best of our ability and knowledge that no other SDGs are compromised or negatively impacted.

SDG No.	SDG Name	Relevance	SDG No.	SDG Name	Relevance
1	No Poverty	☐	10	Reduced Inequalities	☐
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8	Decent Work and Economic Growth	☑	17	Partnerships for the Goals	☐
9	Industry, Innovation, and Infrastructure	☑			

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9. CONCLUSION

The Tour and Travel Management System project successfully demonstrates the effective integration of various modern web technologies to create a robust, user-friendly, and secure platform for managing travel bookings. Developed using Java, Java Servlets, JavaServer Pages (JSP), JavaScript, HTML, Bootstrap, MySQL, and deployed on a GlassFish server, the system addresses the key requirements of travel agencies, offering a comprehensive solution for managing user registrations, login sessions, bookings, and viewing booking history.

The system's user-friendly interface, built with Bootstrap, ensures compatibility across different devices, providing a seamless experience for users. The implementation of secure authentication mechanisms and role-based access control enhances data security, ensuring that sensitive information is protected.

Key features of the system, including real-time booking management, automated email notifications, and integration with third-party services such as payment gateways, contribute to the efficiency and effectiveness of travel agency operations. The project's use of session management and input validation further bolsters security, mitigating common web vulnerabilities.

While the current system has certain limitations, such as basic user interface elements and limited scalability, it establishes a solid foundation for future enhancements. Potential improvements could include advanced reporting and analytics, additional payment options, offline capabilities, and native mobile applications. These enhancements would further extend the system's capabilities and improve the overall user experience.

In conclusion, the Tour and Travel Management System project highlights the successful application of web development technologies to solve real-world problems in the travel industry. It enhances operational efficiency, improves customer satisfaction, and sets the stage for future growth and scalability. This project serves as a valuable reference for developing similar applications and provides a framework for continuous improvement and innovation in the travel management domain.

Justification for SDG 8: Decent Work and Economic Growth

The Tour and Travel Management System enhances operational efficiency and reduces costs for travel agencies, fostering economic growth and job creation. By leveraging modern technologies, the system supports small and medium-sized enterprises, promotes market accessibility, and improves customer satisfaction, contributing to sustained economic development.

Justification for SDG 9: Industry, Innovation, and Infrastructure

Developed with Java, Java Servlets, JSP, JavaScript, HTML, Bootstrap, MySQL, and GlassFish, the system exemplifies technological innovation in travel management. It promotes digital transformation, enhances data management, and establishes robust, scalable IT infrastructure, driving industry standards and improving connectivity and access to travel services.

DISEASE PROGNOSIS

A project report was submitted

to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY

LUCKNOW

For partial Fulfillment of the Requirement for the

Award of the Degree

of

MASTER OF COMPUTER APPLICATION

by

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Under the guidance of

Mrs Aman Gupta

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This is to certify that the project report entitled **"Disease Prognosis"** which is submitted by **Sonam (2200270140061) & Vidhi Sharma (2200270140065)** in partial fulfilment of the requirement for the award of the degree Master of Computer Application of Dr. A.P.J..Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of the candidate's work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of any other degree.

Date : 15th June- 2024

Mrs. Aman Gupta

Supervisor

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SDG No.	SDG Name	Relevance	SDG No.	SDG Name	Relevance
1	No Poverty	☐	10	Reduced Inequalities	☐
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8	Decent Work and Economic Growth	☐	17	Partnerships for the Goals	☐
9	Industry, Innovation, and Infrastructure	☑			

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Chapter : 9

Conclusion

In conclusion, the disease prediction system represents a groundbreaking leap forward in the realm of healthcare technology. Its profound impact is evident in its ability to revolutionize early detection methods, personalize treatment approaches, and optimize the allocation of healthcare resources. By seamlessly integrating cutting-edge machine learning algorithms and sophisticated data analytics, this system equips healthcare professionals with invaluable insights, empowering them to intervene proactively and tailor treatment strategies with unparalleled precision and efficacy.

Revolutionizing Early Detection Methods

Early detection of diseases is crucial for effective treatment and improved patient outcomes. The disease prediction system leverages advanced algorithms to analyze vast amounts of patient data, identifying patterns and risk factors that may not be apparent through traditional diagnostic methods. This capability allows for the identification of diseases at their earliest stages, often before symptoms become clinically evident. By detecting conditions such as cancer, cardiovascular diseases, and diabetes early, healthcare providers can initiate timely interventions, potentially saving lives and reducing the burden of treatment.

Personalizing Treatment Approaches

One of the most significant advancements brought by the disease prediction system is its ability to personalize treatment plans. Traditional treatment approaches often follow a one-size-fits-all model, which may not account for the unique genetic, environmental, and lifestyle factors affecting each patient. In contrast, the disease prediction system uses data from a variety of sources, including electronic health records (EHRs), genetic profiles, and real-time monitoring devices, to create highly individualized treatment plans. By considering these diverse factors, healthcare professionals can offer targeted therapies that are more effective and have fewer side effects, ultimately improving patient outcomes and satisfaction.

Optimizing Allocation of Healthcare Resources

The efficient allocation of healthcare resources is a critical challenge for healthcare systems worldwide. The disease prediction system addresses this issue by providing accurate predictions of disease outbreaks and patient needs. By analyzing data trends and predicting future healthcare demands, the system helps in optimizing resource distribution, ensuring that medical facilities are adequately prepared for patient influxes and that critical supplies and personnel are available

where they are most needed. This proactive approach reduces waste, lowers costs, and enhances the overall efficiency of healthcare delivery.

Empowering Healthcare Professionals

Healthcare professionals benefit significantly from the insights provided by the disease prediction system. The system's advanced analytics offer a deeper understanding of patient conditions, enabling clinicians to make informed decisions quickly. This empowerment leads to more accurate diagnoses, better treatment plans, and improved patient monitoring. Additionally, the system can identify potential complications early, allowing for swift interventions that prevent adverse outcomes. By augmenting the capabilities of healthcare providers, the disease prediction system ensures higher standards of care and more successful patient outcomes.

Contributing to Population Health Management

Beyond individual patient care, the disease prediction system plays a vital role in population health management. By aggregating and analyzing data from large groups, the system can identify public health trends and potential epidemics. This information is invaluable for public health officials and policymakers, who can use it to implement preventive measures, allocate resources effectively, and design health programs that address the specific needs of populations. The system's ability to provide real-time data and predictive analytics supports ongoing public health initiatives, driving innovation and fostering continuous improvement in medical research and practice.

Driving Innovation in Medical Research

The disease prediction system is not only a tool for current healthcare practice but also a catalyst for future medical research. The vast amounts of data collected and analyzed by the system provide a rich resource for researchers seeking to understand the underlying causes of diseases, discover new treatment methods, and develop innovative medical technologies. By offering insights into disease mechanisms and patient responses to treatments, the system accelerates the pace of medical discoveries and contributes to the advancement of medical science.

Transforming the Future of Medicine

With its potential to enhance both the quality and efficiency of healthcare delivery, the disease prediction system represents a transformative force poised to shape the future of medicine. As technology continues to evolve, the integration of artificial intelligence, machine learning, and data analytics in healthcare will become even more sophisticated, leading to more accurate predictions, personalized treatments, and efficient resource management. The disease prediction system stands at the forefront of this revolution, heralding a new era in which healthcare is not

WOMEN SAFETY APP

A project report submitted

to

Dr. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY

LUCKNOW

For partial Fulfillment of the Requirement for the

Award of the Degree

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This is to certify that project report entitled "**Women Safety App"** which is submitted by **Deepanshu (2200270140012), Medhavi Agarwal (2200270140026), Neha Tyagi (2200270140029), Prabhav Shukla (2200270140036)** in partial fulfilment of the requirement for the award of degree Master of Computer Application of Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh (AKTU), is a record of candidate's work carried out by them under my supervision. The matter embodied in this report is original and has not been submitted for the award of my other degree.

Date: ……

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This is to certify that the project titled **"Women Safety App"**, submitted by **Deepanshu (2200270140012), Medhavi Agarwal (2200270140026), Neha Tyagi (2200270140029), Prabhav Shukla (2200270140036)**, final year students of the Bachelor of Technology in Master of Computer Application program at Ajay KumarGarg Engineering College, Ghaziabad, have been reviewed and found to be in alignment with the following United Nations Sustainable Development Goals (SDGs). Details regarding the justification of the same are provided in Chapter 10. (Conclusion and Future Scope).

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LIST OF SYMBOLS, ABBREVIATIONS AND NOMENCLATURE

Abbreviations

- GPS: Global Positioning System
- SMS: Short Message Service
- SOS: Save Our Souls (Emergency signal)
- API: Application Programming Interface
- UI: User Interface
- OTP: One-Time Password

Nomenclature

- **Emergency Alert**: Notification sent to predefined contacts in case of emergency
- **Geolocation**: The process of identifying the physical location of a device using GPS
- **Backend**: Server-side operations and database management
- **Frontend**: User interface and client-side operations
- **Middleware**: Software that connects different components or applications
- **Authentication**: Verifying the identity of a user or device

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