PROJECT REPORT
on the title

"E- KUNHIMANGALAM"

Report submitted in partial fulfilment of the Requirements for the Award of the Degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

By

JEEVA NARAYANAN (SNC19CS016)

ABHIJITH RAM RAJ P K (LSNC19CS044)

ADARSH K (LSNC19CS045)

JIJO JAISON (LSNC19CS046)

Under the guidance of

Prof. SUNDER V

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

AFFILIATED TO A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA

2022-2023

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report entitled **"E- KUNHIMANGALAM"** submitted by **JEEVA NARAYANAN (SNC19CS016), ABHIJITH RAM RAJ P K (LSNC19CS044), ADARSH K (LSNC19CS045), JIJO JAISON (LSNC19CS046)** in the partial fulfilment for the award of the Degree of Bachelor of Technology in Computer Science and Engineering to **A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA**, is a record of bonafied work carried out under my guidance and supervision.

Guide: 12/6/2023
Prof. SUNDER V

Head of department: 12/6/2023
Prof. SUNDER V

Dr. LEENA. A. V.
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY, PAYYANUR
KANNUR

ACKNOWLEDGEMENT

I would like to extend my gratitude to everyone who helped me in the completion of this project. I express my sincere gratitude to our Management **SREE BHAKTHI SAMVARDHINI YOGAM, TALAP, KANNUR** for having me provided with all the facilities required for the success of this presentation. I would like to express my sincere gratitude to our Principal **DR. LEENA A V** for providing the necessary tools. I am greatly obliged to **Prof. SUNDER V**, Head of the Department of CSE for giving me this opportunity and encouragement throughout the presentation and thank for his great support and guidance, for the simulating discussions, in analysing problems associated with our project work and for guiding us throughout the project. Project meeting were highly informative. We express our sincere thanks for the encouragement, untiring guidance and the confidence he had shown in us. I would like to express the sincere gratitude and thank you **NELLIKKA complete solution PVT.** For giving us the opportunity to work for the company. I, on this occasion, remember the valuable suggestions and constructive criticism from my teachers which were inevitable for the successful completion of my project. We would like to thank our parents, friends, and classmates for their encouragement throughout our project period. At last but not the least, we thank everyone for supporting us in this project.

Thanking You

JEEVA NARAYANAN

ABHIJITH RAM RAJ P K

ADARSH K

JIJO JAISON

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OBJECTIVES

The main objectives of this project are:

- Develop an advance customer management system to bring together all relevant customers information by April 2023.
- Create a chat boat that sounds like human.
- Simple user- friendly and aesthetic front end for the app.
- Communication effectively with a range of audience.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OUTCOMES

The main outcome of this project is a mobile application for Nellikka Pvt and our application will unite the customers of Nellikka Pvt. By using this application So they can easily communicate with them, Easily pass message and other kind of information to all users, Government authorities can easily communicate with people, People can easily deal with the waste management.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

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ABSTRACT

Now we are living in 21st century one of the main issues now we are facing is how we will manage the waste. NELLIKKA complete solution private limited is a company is giving the best way to manage the waste effectively. They are mainly concentrated in North Kerala .The company have an App for the workers .They are now communicating the users off company Through WhatsApp broadcasting . It is not an effective way for the company to easily communicate with the customers so here we built an Android app for the company which include chat boat, Notification ,government authority access portal and ecommerce platform.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

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Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF ABBREVIATIONS

SYMBOL	DESCRIPTION
IDE	INTEGRATED DEVELOPMENT ENVIRONMENT
SDK	SOFTWARE DEVELOPMENT KIT
AIML	ARTIFICIAL INTELLIGENCE MARKUP LANGUAGE
SWM	SOLID WASTE MANAGEMENT
UI	USER INTERFACE
UX	USER EXPERIANCE
XML	EXTENSIBLE MARKUP LANGUAGE

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT REPORT

"FISHERMEN SAFETY USING IoT AND RF SIGNAL"

Work done by,

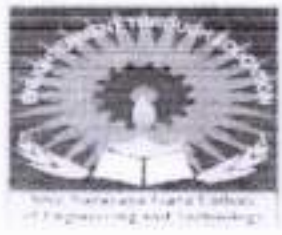
AVANTIKA K (SNC19CS011)

KAVYA DEVI M K (SNC19CS017)

SREEHARI V (SNC19CS033)

Under the guidance of

Prof. NIMISHA M K



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

AFFILIATED TO A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA

2021-2022

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report entitled **"Fisherman Safety Using IoT and RF Signal"** submitted by **AVANTIKA K(SNC19CS011), KAVYA DEVI M K(SNC19CS017), SREEHARI V(SNC19CS033)** in the partial fulfillment for the award of the Degree of Bachelor of Technology in Computer Science and Engineering to **A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA,** is a record of bonafide work carried out under my guidance and supervision.

GUIDE:

Prof. NIMISHA M K

HEAD OF DEPARTMENT:

Prof. SUNDER V

Dr. LEENA A. V.
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY, PAYYANUR
KANNUR

ACKNOWLEDGEMENT

I would like to extend my gratitude to everyone who helped me in the completion of this mini project. I express my sincere gratitude to our Management **SREE BHAKTHI SAMVARDHINI YOGAM, TALAP, KANNUR** for having me provided with all the facilities required for the success of this presentation. I would like to express my sincere gratitude to our Principal **Dr. LEENA A V** for providing the necessary tools. I am greatly obliged to **Prof. SUNDER V**, Head of the Department of CSE for giving me this opportunity and encouragement throughout the presentation. I would like to thank my guide, **Ms. NIMISHA M K**, Assistant Professor, Department of CSE, Sree Narayana Guru College of Engineering and Technology, Payyanur for her great support and guidance, for the simulating discussions, in analyzing problems associated with our project work and for guiding us throughout the project. Project meeting were highly informative. We express our sincere thanks for the encouragement, untiring guidance and the confidence she had shown in us. I, on this occasion, remember the valuable suggestions and constructive criticism from my teachers which were inevitable for the successful completion of my project. We would like to thank our parents, friends, and classmates for their encouragement throughout our project period. At last but not the least, we thank everyone for supporting us in this project.

Thanking you,

AVANTIKA K

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OBJECTIVE

- The main objective of this project is to save the lives of the fishermen who unintentionally or unknowingly cross our country's border.
- We have implemented a system in our project where the border is indicated clearly to the fishermen in the boat and it also warns them when they are about to cross their border limit.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OUTCOMES

- Introduces new ideas for identifying the border.
- An automatic alarming system is provided along with this device which alerts in case any sort of issues.
- Devised in such a way that the application can be easily utilized by all the people in the surroundings. So
- Therefore, the project makes sure that the people are secure in fishing in the border areas.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

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ABSTRACT

The main objective of the work is to locate the live coordinates of the sailor during their journey using Global Positioning System (GPS). The work results in a quality product that ensures the safety of the sailor from crossing the borders or nearing the border of the contiguous countries or illegal borders. So, the system alerts the sailors from being captured by the naval of other countries. This is a serious issue that happens day to day. GPS gives information about the current latitude and longitude values, which is then sent to the micro- controller unit. The micro-controller unit compares the current location with the predefined value. If the current latitude and longitudinal values exceeds predefined values, the system alerts the fishermen that they are about to reach the nautical border. If the boat enters the zone nearer to the restricted zone, then the buzzer will turn on. The system provides precise location details, such as where the point they have started their journey and the point they are right now. The application user can bookmark location at the sea where there is high yield of fish breeds for fishing and pearl cultivation. The system can provide prior information whether the journey is safe to travel. If in case of any bad weather the storm trails can be indicated on map.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF FIGURES

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF ABBREVIATIONS

SYMBOL	DESCRIPTION
AIS	AUTOMATIC IDENTIFICATION SYSTEM
IMBL	INTERNATIONAL MARITIME BORDER LINE
GPS	GLOBAL POSITIONING SYSTEM
GSM	GLOBAL SYSTEM FOR MOBILE COMMUNICATION
NODE MCU	NODE MICRO CONTROLLER UNIT

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT REPORT

on the title

"EARLY DETECTION OF ALZHEIMER'S DISEASE USING MACHINE LEARNING AND DEEP LEARNING"

Report submitted in partial fulfillment of the Requirements for the Award of the Degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

By

MISHAB C.P. – SNC19CS020

PALLAVI SWAROOP KUMAR – SNC19CS025

SIDHARTH K. – SNC19CS030

U. V. VAISHNAV – SNC19CS039

Under the guidance of

Prof. SUNDER V

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

AFFILIATED TO A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY,

KERALA

2022-2023

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report entitled **"EARLY DETECTION OF ALZHEIMER'S DISEASE USING MACHINE LEARNING AND DEEP LEARNING"** submitted by **MISHAB C P(SNC19CS020), PALLAVI SWAROOP KUMAR(SNC19CS025), SIDHARTH K (SNC19CS030), U V VAISHNAV(SNC19CS039)** in the partial fulfillment for the award of the Degree of Bachelor of Technology in Computer Science and Engineering to **A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA,** is a record of bonafide work carried out under my guidance and supervision.

GUIDE:
Prof. SUNDER V

HEAD OF DEPARTMENT:
Prof. SUNDER V

Dr. LEENA A. V.
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY, PAYYANUR
KANNUR

ACKNOWLEDGEMENT

First of all, I would like to thank God for giving strength, courage and blessings to complete this work. I would like to extend my gratitude to everyone who helped me in the completion of this project phase I. I express my sincere gratitude to our Management **SREE BHAKTHI SAMVARDHINI YOGAM, TALAP, KANNUR** for having me provided with all the facilities required for the success of this presentation.

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THANKING YOU,

Pallavi Swaroop Kumar

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OBJECTIVE

The primary objective of this project is to develop a comprehensive system for the detection and prediction of Alzheimer's disease (AD) using a combination of deep learning and machine learning techniques. The specific objectives of the project are as follows:

Design and implement a deep learning-based algorithm for feature extraction from magnetic resonance imaging (MRI) scans: The project aims to utilize convolutional neural networks (CNNs) for the extraction of meaningful features from MRI scans. By leveraging the power of deep learning, the system can automatically learn relevant patterns and structures in the images, improving the accuracy of AD detection.

Develop a machine learning-based classification model using Random Forest: In addition to CNN-based feature extraction, the project incorporates Random Forest classifiers for the classification stage. Random Forest is known for its ability to handle high-dimensional data and feature interactions, making it suitable for the classification of AD cases based on the extracted features.

Build an intuitive web-based admin module: The project involves the development of an admin module as a web application using the Flask framework. The admin module provides healthcare professionals with a user-friendly interface to upload MRI scans, process them using the deep learning and machine learning models, and obtain accurate AD detection results. The module should facilitate easy data management, model training, and result visualization.

Develop a user module as an Android application: The project includes the development of a user module as an Android application. The user module aims to provide individuals with access to relevant information about AD, educational resources, and updates on AD research. It should serve as a platform for raising awareness about the disease and promoting early detection.

Utilize a comprehensive and diverse dataset for training and evaluation: The project requires the compilation of a representative dataset of MRI scans from individuals with and without AD. The dataset should encompass a wide range of demographics, ensuring the reliability and generalizability of the developed system. The dataset will be used for training the deep learning and machine learning models, as well as evaluating their performance.

Evaluate the performance of the developed system: The project involves thorough performance evaluation of the system, including the accuracy, precision, recall, and F1-score of AD detection.

Comparative analysis between the CNN-based deep learning model and the Random Forest classifier will be conducted to determine the effectiveness of each approach. The evaluation will also consider the system's computational efficiency and user-friendliness.

Provide a robust and scalable system architecture: The project aims to design and implement a system architecture that is scalable, allowing for future enhancements and expansion. The architecture should be capable of handling large volumes of data, accommodating potential updates to the deep learning and machine learning models, and integrating with other healthcare systems or databases.

By achieving these objectives, the project aims to contribute to the early detection and prediction of AD, ultimately improving patient care and management of the disease. The developed system has the potential to assist healthcare professionals in accurate AD diagnosis, provide individuals with valuable information and resources, and promote awareness about the disease in the wider community.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OUTCOME

The project outcome demonstrates the effectiveness of the deep learning-based feature extraction using CNNs and the machine learning-based classification using Random Forest for AD detection and prediction. The accuracy comparison of different algorithms provides valuable insights into their performance for AD detection. The results contribute to the field's knowledge and have practical implications in assisting medical professionals in early AD diagnosis.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

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Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

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Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF ABBREAVATION

SYMBOL	DESCRIPTION
ML	MACHINE LEARNING
SVM	SUPPORT VECTOR MACHINE
ANN	ARTIFICIAL NEURAL NETWORK
AD	ALZHEIMER'S DISEASE
MRI	MAGNETIC RESONANCE IMAGING
CNN	CONVULATION NEURAL NETWORK

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

ABSTRACT

Alzheimer disease (AD) is a neurological disorder. For the AD, there is no specific treatment. Early detection of Alzheimer's disease can help patients receive the correct care. Many studies employ statistical and machine learning techniques to diagnose AD. The human-level performance of Deep Learning algorithms has been effectively shown in different disciplines. In the proposed methodology, the MRI data is used to identify the AD and Deep Learning technique is used to classify the present disease. The classification of Alzheimer's disease using deep learning methods has shown promising results, and successful application in clinical settings requires a combination of high accuracy, short processing time, and generalizability to various populations. In this study, we developed a system of Alzheimer's disease detection using Convolutional Neural Network (CNN) architecture using magnetic resonance imaging (MRI) scans images which are trained using Kaggle dataset. The models in this study are trained on the same dataset in order to analyse their performances. The Convolutional Neural Network (CNN) architecture gives the highest accuracy where training accuracy is 86.34% and validation accuracy is 86.45% on the test data that detects AD accurately.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT REPORT
On the title

"LoRA"

Report submitted in partial fulfillment of the Requirements for the Award of the Degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

By

AATHISH P JAGADEESH (SNC19CS001)

PARVATHI K (SNC19CS026)

SMIJITH M (SNC19CS031)

VARUN (SNC19CS040)

Under the guidance of

Prof. VIJINA VIJAYAN

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

AFFILIATED TO A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA

2022-2023

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report entitled **LoRA** submitted by **AATHISH P JAGADEESH (SNC19CS001), PARVATHI K (SNC19CS026), SMIJITH M (SNC19CS031) VARUN (SNC19CS040)** in the partial fulfillment for the award of the Degree of Bachelor of Technology in Computer Science and Engineering to **A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY**, KERALA, is a record of bonafide work carried out under my guidance and supervision.

Guide:

Prof. VIJINA VIJAYAN

Head of department:

Prof. SUNDER V

Dr. LEENA. A. V.
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY, PAYANUR
KANNUR

DECLARATION

We, **AATHISH P JAGADEESH, PARVATHI K, SMIJITH M, VARUN** hereby declare that the dissertation entitled **"LORA: Locus Result Analyser"**, Submitted for the B.Tech Degree is my original work and the dissertation has not formed the basis for the award of any degree, associate ship, fellowship or any other similar titles.

AATHISH P JAGADEESH (SNC19CS001)
PARVATHI K (SNC19CS026)
SMIJITH M (SNC19CS031)
VARUN (SNC19CS040)

DATED SIGNATURE:

Place: PAYYANUR

Date:

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

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AATHISH P JAGADEESH

PARVATHI K

SMIJITH M

VARUN

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OBJECTIVE

The main aim of the project is to reduce the workload of the teachers and at the same time increase the efficiency of the work being done. This is done by automating repetitive tasks like analyzing and sorting data of students. These tasks are mainly done by the teaching staff which waste valuable time that the teaching staff can use instead for teaching. With this project, we are also aiming to increase the quality of education that is being provided by the schools, colleges and universities. This is achieved by reducing the workload of the teaching staff and also by sorting the data in useful ways by which we can understand the capabilities and the potential of the students. The teacher can then make use of this data and teach accordingly to improve the standard of education that is being provided by their respective educational institution. The reduction of this workload can directly impact the teachers as they now have more time available to improve their teaching methods.

This project also has the greater aim of providing a better grading infrastructure to the educational institution. Most educational institutions grade each result manually which is a really long and tedious task which takes up most of the working time of the teachers. This can be completely eliminated with this project as the result can be sorted and graded within minutes of being provided. The improvement provided by this app is not a marginal one either as it does the work which previously needed countless hours of manual labour in just minutes, which is a substantial improvement.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OUTCOME

The outcome of this project is to reduce the workload of the teaching staff while also providing them with data that can help them in improving the quality of the education that is being provided to the students. This project also gives the educational institution a better grading and result analyzing infrastructure which improves the efficiency of sorting of the data into usable format. This method is substantially faster than any manual method that is being used today. This also eliminates the problem that educational institutes have to deal with, which is having to hire specialized staff just to use software like excel efficiently. The teachers also don't have to master complex software like excel because of the automation that is provided by the app.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

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Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

ABSTRACT

Spreadsheets have been used for computation, organization, analysis and storage of data in tabular form. They were developed as computer analogs of paper accounting worksheets. In recent years, the use of spreadsheets by educational institutions have skyrocketed as more and more educational institutions have adopted a fully-digital model for the storage of data, especially for storing the data concerning the students. There is however a problem that is making it harder for institutions to adopt spreadsheet software. The faculty of the educational institutions have to manually insert data into the spreadsheet which is a really tedious and time-consuming process. Most institutions use the spreadsheet software to sort and store student data like results. So, we propose a web app that has the ability to automate the whole process. The web app aims to reduce the workload of the teaching faculty by automating the result collection and analysis process that previously had to be done manually. The processed data from this can also be used to analyze the performance of individual students. The web app provides a clean and intuitive user interface that are easy to use for both young and old users alike. On top of automating the result analysis process, this web app also provides useful data about individual students which enables the institution to provide the necessary improvements required for the student. This app can be scaled up to be used for massive universities and it can also be scaled down to be implemented in small schools which makes it highly versatile.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

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Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF TABLES

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF ABBREVIATIONS

SYMBOL	DESCRIPTION
HTML	HYPERTEXT MARKUP LANGUAGE
JS	JAVASCRIPT
APP	APPLICATION
ECMA	EUROPEAN COMPUTER MANUFACTURERS ASSOCIATION
ISO	INTERNATIONAL STANDARDS ORGANIZATION

PROJECT REPORT
on the title

"WOODEN ENVISIONS"

Project report submitted in partial fulfillment of the Requirements for the Award of the Degree of
BACHELOR OF TECHNOLOGY
in
COMPUTER SCIENCE AND ENGINEERING

By

ARCHANA CHITHRAN K(SNC19CS010)

SREENANDANA T V(SNC19CS034)

SREENISHA K P(SNC19CS035)

THANYA MOHAN(SNC19CS037)

Under the guidance of

Prof. THULASIBAI A

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

AFFILIATED TO A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA

2022-2023

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report entitled **"WOODEN ENVISIONS"** submitted by **ARCHANA CHAITHRAN K(SNC19CS010), SREENANDANA T V(SNC19CS034), SREENISHA K P(SNC19CS035), THANIYA MOHAN(SNC19CS037)** in the partial fulfillment for the award of the Degree of Bachelor of Technology in Computer Science and Engineering to **A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA**, is a record of bonafide work carried out under my guidance and supervision.

GUIDE:

Prof. THULASIBAI A

HEAD OF DEPARTMENT:

Prof. SUNDER V

Dr. LEENA A. V.
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY, PAYYANUR
KANNUR

DECLARATION

I, **THANYA MOHAN(SNC19CS037)** hereby declare that the dissertation entitled **"WOODEN ENVISIONS"**, submitted for the B.Tech Degree is my original work and the dissertation has not formed the basis for the award of any degree, associate ship, fellowship or any other similar titles.

NAME OF THE STUDENT : THANYA MOHAN

REGISTER NUMBER : SNC19CS037 Place: PAYYANUR

DATED SIGNATURE : Date:

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

ACKNOWLEDGEMENT

I would like to thank God for giving strength, courage and blessings to complete this work. I would like to extend my gratitude to everyone who helped me in the completion of this project phase I.I express my sincere gratitude to our Management **SREE BHAKTHI SAMVARDHINI YOGAM, TALAP, KANNUR** for having me provided with all the facilities required for the success of this presentation.

I would like to express my sincere gratitude to our Principal **DR. LEENA A V** for providing the necessary tools. I am greatly obliged to **Prof. SUNDER V**, Head of the Department of CSE for giving me this opportunity and encouragement throughout the presentation.

I would like to thanks to project coordinator, **Prof. SUNDER V,** and **Ms.VIJINA VIJAYAN** ,Assistant Professor, Department of CSE, Sree Narayana Guru College of Engineering and Technology, Payyanur for providing the guidelines for the project.

I would like to thank my guide, **Mrs. THULASIBAI A** , Assistant Professor, Department of CSE, Sree Narayana Guru College of Engineering and Technology, Payyanur for her great support and guidance. I, on this occasion, remember the valuable suggestions and constructive criticism from my teachers which were inevitable for the successful completion of my project. I express my thanks to all staff members and friends for all the help and co-ordination extended in bringing out this project phase I successfully in time. Last but not the least; I am very much thankful to my parents who guided me in every step which I took.

Thanking You,

THANYA MOHAN

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OBJECTIVE

The main objective of this project is to develop a comprehensive software and mobile app for an interior design company to streamline their work and report management process. The software will enable the company to allocate work to employees based on their previous work history and keep track of project expenses. The app will provide real time updates to internal stakeholders, allowing them to stay informed about project activities. The goal is to improve the efficiency of the company's operations, enhance communication among team members and provide accurate and up-to-date project reports for evaluation and decision making purposes.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OUTCOME

The development of the software using Python and Flask framework has resulted in an efficient and robust system for the interior design company. The front-end interface of the software has been designed using HTML, Java script,Bootstrap and other web technologies to ensure a user friendly experience. The use of these technologies has enabled the software to be highly responsive and adaptive to different screen size and devices. The outcome of this project is a highly functional software system that meets the specific needs of interior design company,providing efficient work and report management. Additionally, the use of open-source technologies has reduced development costs and improved the scalability of the system for future growth. The software system has been thoroughly tested and refined to ensure optimal performance, reliability and security. The successful outcome of this project has enabled the interior design company to streamline their work process improved communication and collaboration among team members and ultimately increase productivity and profitability.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

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ABSTRACT

This project involves the development of a software system and an Android application for an interior design company to manage their work, work allocation to employees, and budget calculations. The software system is developed using Python and Flask framework, and the front-end interface is designed using HTML, JavaScript, Bootstrap, and other web technologies to ensure a user-friendly experience. The system is highly responsive and adaptive to different screen sizes and devices. The Android application is designed to enable instant and time-efficient updating of project reports, with user-friendliness and the ability to restrict app usage by authorized administrators. The feasibility of the system is evaluated based on economic, technical, and operational criteria. The successful outcome of this project has enabled the interior design company to streamline their work process, improve communication and collaboration among team members, and ultimately increase productivity and profitability.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

ABBREVIATIONS

ADS	-	Advanced Design System
AHP	-	Analytical Hierarchy Process
A-Kano	-	Analytical Kano
ASN	-	Autonomous System Number
BYOD	-	Bring Your Own Device
CMMI	-	Capability Maturity Model Integration
CN	-	Customer Needs
CRM	-	Customer Relationship Management
CSS	-	Cascading Style Sheet
CSV	-	Computer Systems Validation
EI	-	Emotional Intelligence
EMD	-	Engineering and Manufacturing Development
GPL	-	General Public Licence
GPS	-	Global Positioning System
HD	-	High Density
HR	-	Human Resource
HTML	-	Hyper Text Markup Language
ICT	-	Information and Communication Technology
IDE	-	Integrated Development Environment
IoT	-	Internet of Things
LAMP	-	Linux, Apache, MySQL and PHP
LED	-	Light Emitting Diode
ML	-	Machine Learning
NP	-	Nondeterministic Polynomial
OCEAN	-	Openness,Conscientiousness,Extra version,Agreeableness,Neuroticism
OCR	-	Optical Character Recognition
OD	-	Outer Diameter
OS	-	Operating System
PC	-	Personal computer
PHP	-	Hypertext Preprocessor

RAM	-	Random Access Memory
RH	-	Relative Humidity
SDK	-	Software Development Kit
SDLC	-	Software Delivery Life Cycle
SQL	-	Structured Query Language
SRS	-	Software Requirements
UMTS	-	Universal Mobile Telecommunication System

PROJECT REPORT
On the title

"MEDLIST THE TOKEN BOOKING APPLICATION"

Report submitted in partial fulfillment of the Requirements for the Award of the Degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

By

FATHIMATHU SAHALA BEEVI (SNC19CS013)

NIPUN S ANAND (SNC19CS024)

SAFA FATHIMA (SNC19CS028)

SAFA SAYEED V (SNC19CS029)

Under the guidance of

Prof. VEENA K K

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

AFFILIATED TO A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA

2022-2023

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report **MEDLIST THE TOKEN BOOKING APPLICATION** entitled submitted by **FATHIMATHU SAHALA BEEVI (SNC19CS013), NIPUN S ANAND (SNC19CS024), SAFA FATHIMA (SNC19CS028), SAFA SAYEED V(SNC19CS029)** in the partial fulfillment for the award of the Degree of Bachelor of Technology in Computer Science and Engineering **to A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY,** KERALA, is a record of bonafied work carriedout under my guidance and supervision.

Guide:

Prof. VEENA K K

Head of department:

Prof. SUNDER V

Dr. LEENA. A. V.
PRINCIPAL

ACKNOWLEDGEMENT

First of all, I would like to thank God for giving strength, courage and blessings to complete this work. I would like to extend my gratitude to everyone who helped me in the completion of this project. I express my sincere gratitude to our **Management SREE BHAKTHI SAMVARDHINI YOGAM, TALAP, KANNUR** for having me provided with all the facilities required for the success of this presentation. I would like to express my sincere gratitude to our Principal **DR. LEENA A V** for providing the necessary tools. I am greatly obliged to **Prof. SUNDER V**, Head of the Department of CSE for giving me this opportunity and encouragement throughout the presentation. I would like to thank my guide, **Ms. VEENA K**, Assistant Professor, Department of CSE, Sree Narayana Guru College of Engineering and Technology, Payyanur for her great support and guidance, for the simulating discussions, in analyzing problems associated with our project work and for guiding us throughout the project. Project meeting were highly informative. We express our sincere thanks for the encouragement, untiring guidance and the confidence she had shown in us. I, on this occasion, remember the valuable suggestions and constructive criticism from my teachers which were inevitable for the successful completion of my project. We would like to thank our parents, friends, and classmates for their encouragement throughout our project period. At last but not the least, we thank everyone for supporting us in this project

Thanking you

FATHIMATHU SAHALA BEEVI

NIPUN S ANAND

SAFA FATHIMA

SAFA SAYEED V

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OBJECTIVES

The main project objectives are:

- To manage the details of doctors, patients, appointments, and booking in a more efficient and organized manner. This could involve the development of a database or software system to store and manage this information.
- To reduce the complexity of the token booking process. This may involve developing an application or system that simplifies the process of booking appointments, such as by allowing patients to book appointments online or through a mobile app.
- To reduce the manual work involved in managing doctors and patients. This may involve automating certain administrative tasks, such as scheduling appointments, sending appointment reminders, or generating reports.

Overall, the objectives suggest that the project aims to improve the efficiency and effectiveness of healthcare delivery by leveraging technology to simplify administrative tasks and improve the patient experience.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OUTCOME

Based on the stated objectives, some potential project outcomes could include:

- A user-friendly application or system that allows patients to search for doctors based on various criteria such as specialty, location, and availability.
- A token booking system that simplifies the process of booking appointments, allowing patients to easily book appointments with their preferred doctor or at a convenient time.
- A fee information display feature that allows patients to view the fee details of selected doctors and make informed decisions about their healthcare options.
- A doctor availability feature that allows patients to see the availability of doctors on preferred dates and times, making it easier for them to schedule appointments.
- A comprehensive appointment management system that stores and manages all appointment-related information, such as patient details, doctor details, appointment dates and times, and any relevant notes or comments.

Overall, the project outcomes would aim to streamline and improve the patient experience by leveraging technology to simplify the appointment booking process and provide patients with more information and control over their healthcare options.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

INDEX

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

ABSTRACT

Taking an appointment means go to the medical center, asking about the suitable doctor for your case, spend a lot of time, or make a phone call, or take an appointment with general doctor, after that let he/she decide to which specialists you have to go; it is very long, and boring process. The main aim of this research is supporting Smart Cities Approach in UAE by designing and implementing system and mobile application "MedList" to add new concepts for the process of taking appointments with doctors in hospitals and medical clinics by transferring this process into the online world technology. This system will be able to connect a huge number of hospitals and clinics with users; and enable people to look for doctors in different locations and take appointments that suite them. MedList an appointment booking and scheduling web-based application which is used for booking appointments in the streams of parlor, hospitals and architects within a defined geographic area. This application is streamlined in an ionic basis. It uses technologies like CSS, HTML, and JavaScript. Firebase plays a vital role in fetching data for appointment scheduling that helps to enhance application development effectively. A scheduler periodically updates the routes e.g. by means of a simulated annealing process, to generate a new set of appointments and prevents duplication

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF FIGURES

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF ABBREVIATIONS

SYMBOL	DESCRIPTION
HTML	HYPER TEXT MARKUP LANGUAGE
TBA	TOKEN BOOKING APPLICATION
CSS	CASCADING STYLE SHEETS
JS	JAVA SCRIPT
DFD	DATA FLOW DIAGRAM
RAM	RANDOM ACCESS MEMORY
OS	OPERATING SYSTEM
SQL	STRUCTURED QUERY LANGUAGE
IDE	INTEGRATED DEVELOPMENT ENVIRONMENT
SDK	SOFTWARE DEVELOPMENT KIT
UI	USER INTERFACE

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT REPORT
on the title

"BUILDING COLLAPSE ALERT USING IOT"

Report submitted in partial fulfillment of the Requirements for the Award of the Degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

By

AHMED ADIL (SNC19CS003)

HRYSHIKA PRADEEP (SNC19CS015)

MUHAMMED RISHAL IKBAL (SNC19CS022)

V K AYSHA (SNC19CS043)

Under the guidance of

Prof. VIJINA VIJAYAN

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

AFFILIATED TO A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA

2022-2023

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report entitled **"BUILDING COLLAPSE ALERT USING IoT"** submitted by **AHAMED ADIL(SNC19CS003), HRYSHIKA PRADEEP(SNC19CS015), MUHAMMED RISHAL IKBAL(SNC19CS022), V K AYSHA(SNC19CS043)** in the partial fulfillment for the award of the Degree of Bachelor of Technology in Computer Science and Engineering to **A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA,** is a record of bonafide work carried out under my guidance and supervision.

GUIDE:

Prof. VIJINA VIJAYAN

HEAD OF DEPARTMENT:

Prof. SUNDER V

Dr. LEENA A. V.
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY, PAYYANUR
KANNUR

ACKNOWLEDGEMENT

First of all, I would like to thank God for giving strength, courage and blessings to complete this work. I would like to extend my gratitude to everyone who helped me in the completion of this project. I express my sincere gratitude to our Management **SREE BHAKTHI SAMVARDHINI YOGAM, TALAP, KANNUR** for having me provided with all the facilities required for the success of this presentation.

I would like to thank our Principal **DR. LEENA A V** for providing the necessary tools. I am greatly obliged to **Prof. SUNDER V**, Head of the Department of CSE for giving me this opportunity and encouragement throughout the presentation.

I express my deep sense of thankfulness to **Prof. VIJINA VIJAYAN** and **Prof. NIMISHA M. K**, Assistant Professor, Department of CSE, for providing the guidelines and correcting me whenever I go wrong while carrying out the work of this project.

My special thanks and sincere gratitude to my guide, **Prof. VIJINA VIJAYAN** , Assistant Professor, Department of CSE, her great support and guidance throughout my project. Without her constant support this work would not have become true. I, on this occasion, remember the valuable suggestions and constructive criticism from my teachers which were inevitable for the successful completion of my project. I express my thanks to all staff members and friends for the help and co-ordination extended to me in bringing out this Project successfully in time. Last but not the least I am very much thankful to my parents who guided me in every step which I took.

Thanking you

AHMED ADIL

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OBJECTIVE

Building collapse alert using IOT is the process of establishing a damage detection for engineering structures such as buildings, bridges etc. It enables us to know the current condition of the structure. Since any structure deteriorates with the passage of time. Therefore it is necessary to have a Buildings monitoring system in order to prevent the collapse early.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OUTCOME

Building collapse alert using IOT sing this project module we expect the outcome as to monitor the building structural health monitoring, if any of the sensors will update the threshold value we can monitor the output in android app. Using this feature we can connect the project as wirelessly using IOT technique.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

INDEX

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

ABSTRACT

In order to scale back the life cycle costs of an establishment from construction to maintenance, it's very effective to monitor the structural health of a structure. At present, the maintenance and integrity checks on a structure require personnel entry into normally inaccessible areas to perform necessary non-destructive inspections. This paper discusses the implementation of a budgeted, battery-powered based collision avoidance system for use in the building. The proposed method is of Early detection of building collision is where detecting the bend, or any gap in the building. If any bend in the building the sensor detects and gives the emergency alert. The sensor used for detection of collision is flex sensor. The emergency alert is turning ON the led light with alert alarm in the building s witching off the electricity and also sending the emergency message with the address to the rescue team. The alert message is sent through the GSM board.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF FIGURES

LIST OF ABBREVIATIONS

SYMBOL	DESCRIPTION
SSID	SERVICE SET IDENTIFIER
SHM	STRUCTURAL HEALTH MONITORING
DSS	DECISION SUPPORT SYSTEM
QDP	QUALITY DETECTION PLATFORM
BLE	BLUETOOTH LOW ENERGY
FBG	FIBER BRAGG GRATING

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT REPORT
on the title

"DOMESTIC GAS LEVEL DETECTION AND AUTOMATIC BOOKING USING IoT"

Report submitted in partial fulfilment of the Requirements for the Award of the Degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

By

ABHINAV A P (SNC19CS002)

VISHNU PRABHAKARAN (SNC19CS041)

VISHNU R (SNC19CS042)

Under the guidance of

Prof. VARSHA M

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

AFFILIATED TO A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA

2022-2023

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report entitled **"DOMESTIC GAS LEVEL DETECTION AND AUTOMATIC BOOKING USING IoT"** submitted by **ABHINAV A P (SNC19CS002),VISHNU PRABHAKARAN (SNC19CS041),VISHNU R (SNC19CS042)** in the partial fulfilment for the award of the Degree of Bachelor of Technology in Computer Science and Engineering to **A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA**, is a record of bonafied work carried out under my guidance and supervision.

Guide: 21/06/23

Prof. VARSHA M

Head of department: 26/6/2023

Prof. SUNDER V

Dr. LEENA. A. V.
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY, PAYYANUR

ACKNOWLEDGEMENT

I would like to extend my gratitude to everyone who helped me in the completion of this project. I express my sincere gratitude to our Management **SREE BHAKTHI SAMVARDHINI YOGAM, TALAP, KANNUR** for having me provided with all the facilities required for the success of this presentation. I would like to express my sincere gratitude to our Principal **DR. LEENA A V** for providing the necessary tools. I am greatly obliged to **Prof. SUNDER V**, Head of the Department of CSE for giving me this opportunity and encouragement throughout the presentation and thank for his great support and guidance, for the simulating discussions, in analysing problems associated with our project work and for guiding us throughout the project. Project meeting were highly informative. I would like to thank my guide, Prof. **VARSHA M** , Assistant Professor, Department of CSE, Sree Narayana Guru College of Engineering and Technology, Payyanur for her great support and guidance. I, on this occasion, remember the valuable suggestions and constructive criticism from my teachers which were inevitable for the successful completion of my project. I express my thanks to all staff members and friends for all the help and co-ordination extended in bringing out this project phase I successfully in time. Last but not the least; I am very much thankful to my parents who guided me in every step which I took

Thanking You

ABHINAV A P

VISHNU PRABHAKARAN

VISHNU R

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OBJECTIVES

The main objectives of this project are:

- To monitor gas level and notify the user thus provide user with valuable information.
- To provide automatic gas booking facility.
- To ensure safety by detecting gas leakage and notifying user about it.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OUTCOMES

The main outcome of this project is to detect the amount of gas remaining in the cylinder and notifying user about it. This also provides automatic gas booking facility considering the gas level in the cylinder. This project helps to upgrade the safety norms and aids to prevent gas leakage as it notify in case of any distress.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

INDEX

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

ABSTRACT

Gas spillages causes a significant issue in family unit, in this way the proposed gas spillage identification and checking framework is created. There are numerous strategies accessible for booking a gas refill, techniques incorporate web-based booking, telephonic booking and so on. It will be difficult situation for the individual who uses LPG gas for cooking reliably. The aim of this paper is to introduce another framework which consequently books a cylinder at the point when the gas is going to discharge is by sending a notice to the gas office using Wi-Fi using Internet of Things approach in addition to that sensor is utilized to identify gas spillage at home. On the off chance that the gas spillage is sensed, the gadget continues with ringer caution and showing ready message in LCD show at the same time switch on the fumes fan and turn over the DC engine, is made to kill the gas regulator , PIR sensor additionally put in the home to inform about the human nearness. In the event that no individual, naturally power off simultaneously the notice will be sent to client through versatile by notice calls and SMS. Wi-Fi is one of the most utilized system over the world henceforth, load cell has been utilized to screen the heaviness of the LPG gas consistently. The values are next taken care of to the Arduino microcontroller. By utilization of GSM module, the data is sent to client by SMS and furthermore programmed booking is finished by dialling the enlisted gas booking number. Consequently, answer warning will be sent to the client about the booking status. This, work causes the general public to explicitly demonstrate gas spillage and furthermore helps the two clients and the office to get the gas booking made consequently utilizing IoT procedure.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF FIGURES

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF ABBREVIATIONS

SYMBOL	DESCRIPTION
IDE	INTEGRATED DEVELOPMENT ENVIRONMENT
GSM	GLOBAL SYSTEM FOR MOBILE COMMUNICATION
LPG	LIQUIFIED PETROLEOUM GAS
LCD	LIQUID CRYSTAL DISPLAY
IoT	INTERNET of THINGS
GPRS	GENERAL PACKET RADIO SERVICE
PIR	PASSIVE INFRARED

PROJECT REPORT

on the title

"AUTOMATIC PLANT WATERING SYSTEM USING ARDUINO UNO AND NODEMCU"

Report submitted in partial fulfillment of the Requirements for the Award of the Degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

By

ALTHAF ASHRAF (SNC19CS005)

MANILA MAHESH (SNC19CS018)

MEGHA PK (SNC19CS019)

Under the guidance of

Prof. NIMISHA M K

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

AFFILIATED TO A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA

2022-2023

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report entitled **"AUTOMATIC PLANT WATERING SYSTEM USING ARDUINO UNO AND NODEMCU"** submitted by **ALTHAF(SNC19CS005), MANILA MAHESH(SNC19CS018), MEGHA P K(SNC19CS019)** in the partial fulfillment for the award of the Degree of Bachelor of Technology in Computer Science and Engineering to **A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA,** is a record of bonafide work carried out under my guidance and supervision.

GUIDE:

Prof. NIMISHA M K

HEAD OF DEPARTMENT:

Prof. SUNDER V

Dr. LEENA A. V.
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY, PAYYANUR
KANNUR

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I would like to extend my gratitude to everyone who helped me in the completion of this mini project. I express my sincere gratitude to our Management **SREE BHAKTHI SAMVARDHINI YOGAM, TALAP, KANNUR** for having me provided with all the facilities required for thesuccess of this presentation. I would like to express my sincere gratitude to our Principal **DR. LEENA A V** for providing the necessary tools. I am greatly obliged to **Prof. SUNDER V**, Head of the Department of CSE for giving me this opportunity and encouragement throughout the presentation. I would like to thank my guide, **Ms. NIMISHA M K**, Assistant Professor, Department of CSE, Sree Narayana Guru College of Engineering and Technology, Payyanur for her great support and guidance, for the simulating discussions, in analyzingproblems associated with our project work and for guiding us throughout the project. Project meeting were highly informative. We express our sincere thanks for the encouragement, untiring guidance and the confidence she had shown in us. I, on this occasion, remember the valuable suggestions and constructive criticism from my teachers which were inevitable for the successful completion of my project. We would like to thank our parents, friends, and classmates for their encouragement throughout our project period. At last but not the least, we thank everyone for supporting us in this project.

Thanking you,

ALTHAF ASHRAF
MANILA MAHESH
MEGHA PK

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OBJECTIVE

The main objectives of this project are:

1) To ease the burden of irrigating the crops.

2) To introduce an efficient method for monitoring and watering the plants.

3) To provide a method with which continuous monitoring of the soil can be made and thus irrigation can be done accordingly

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OUTCOME

The main outcomes of this project are that, a system with which irrigating the crops can be made very easily and effectively is developed. With this system, continuous monitoring of the soil can also be made with help of the soil moisture sensor and the temperature and humidity sensor and thus irrigation of the crops can be made accordingly. The design is very simple so that it can be used by everybody with ease and without much training. Overall, the system provides a very efficient way with which the crops can be irrigated effectively.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

INDEX

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

ABSTRACT

Watering is the most important cultural practice and most labor-intensive task in daily greenhouse operation. Watering systems ease the burden of getting water to plants when they need it. Knowing when and how much to water is two important aspects of watering process. To make the gardener works easily, the automatic plant watering system is created. There have a various type using automatic watering system that are by using sprinkler system, tube, nozzles and other. This paper aims at achieving automation for the purpose of plant monitoring and irrigation system, using Nodemcu. Sensors are used for monitoring the environmental conditions surrounding the crop, whose outputs are obtained on an Android based mobile application as well as uploaded on the cloud. The updates of the atmospheric conditions such as temperature, humidity and soil moisture can be fetched from anywhere in the world as the data is shared on the cloud platform (A record of this data can be maintained which could be used for the future reference, i.e., in the next cropping season, thereby, enhancing the planning and development of crop production.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

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Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF ABBREVIATIONS

SYMBOL	DESCRIPTION
NODE MCU	NODE MICRO CONTROLLER UNIT
DHT11	DIGITAL TEMPERATURE AND HUMIDITY SENSOR
WiFi	WIRELESS FIDELITY
DC	DIRECT CURRENT
LED	LIGHT EMITTING DIODE

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT REPORT
on the title

"DREAM HOME"

Report submitted in partial fulfillment of the Requirements for the Award of the Degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

By

AJMAL (SNC19CS004)

AMRITHA RAJEEVAN M (SNC19CS007)

THANMAYA SANJEEV (SNC19CS036)

THEJA RAJESH (SNC19CS038)

Under the guidance of

Prof. VIJINA VIJAYAN

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

AFFILIATED TO A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA

2022-2023

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report entitled **"DREAM HOME"** submitted by **AJMAL(SNC19CS004), AMRITHA RAJEEVAN M(SNC19CS007), THANMAYA SANJEEV(SNC19CS036), THEJA RAJESH(SNC19CS038)** in the partial fulfillment for the award of the Degree of Bachelor of Technology in Computer Science and Engineering to **A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA,** is a record of bonafide work carried out under my guidance and supervision.

GUIDE:

Prof. VIJINA VIJAYAN

HEAD OF DEPARTMENT:

Prof. SUNDER V

Dr. LEENA A. V.
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY, PAYYANUR
KANNUR

ACKNOWLEDGEMENT

First of all, I would like to thank God for giving strength, courage and blessings to complete this work. I would like to extend my gratitude to everyone who helped me in the completion of this project. I express my sincere gratitude to our Management **SREE BHAKTHI SAMVARDHINI YOGAM, TALAP, KANNUR** for having me provided with all the facilities required for the success of this presentation.

I would like to thank our Principal **DR. LEENA A V** for providing the necessary tools. I am greatly obliged to **Prof. SUNDER V**, Head of the Department of CSE for giving me this opportunity and encouragement throughout the presentation.

I express my deep sense of thankfulness to **Prof. VIJINA VIJAYAN** and **Prof. NIMISHA M K**, Assistant Professor, Department of CSE, for providing the guidelines and correcting me whenever I go wrong while carrying out the work of this project.

My special thanks and sincere gratitude to my guide, **Prof. VIJINA VIJAYAN** , Assistant Professor, Department of CSE, her great support and guidance throughout my project. Without her constant support this work would not have become true. I, on this occasion, remember the valuable suggestions and constructive criticism from my teachers which were inevitable for the successful completion of my project. I express my thanks to all staff members and friends for the help and co-ordination extended to me in bringing out this Project successfully in time. Last but not the least I am very much thankful to my parents who guided me in every step which I took.

Thanking you

AMRITHA RAJEEVAN M

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OBJECTIVES

The main objective of this project are:

- To develop an android application for home construction.
- To Provide an AR view for interior designs.
- Chatting option is introduced for communication purpose.
- Customers can send complaints to the admin.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OUTCOME

The main outcome of this project is a web based system and application for home design. The system helpful for both customer and constructors, the customer get the low cost home with all his needs and constructors get more projects. It helps to estimate low cost home construction with more effectively without direct visit of architect, contractor and interior designer. And also it helps to pre-investigation of home construction cost using this application.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

INDEX

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

ABSTRACT

This project ***Dream Home*** is an online platform that connects property owners to investors. The application provided to the customer which allowing them to select plans suited for the property they have. Here we do not need to go to meet an architect with our plan to get a suited interior design or furniture design and a contractor. The application allows user to choose from a set of pre-defined designs uploaded by experienced architects or engineers and get their dream home done in their favorable locations . This application also allow the contractor to upload his previous work . The customers can send their customized plan to all contractor and get budget from all contractors that registered in this application and shows budget intheir increasing order contractor. The customers can easily select the minimal amount. The same function is also available for selecting an architect and interior designer.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF ABBREVIATIONS

SYMBOL	DESCRIPTION
HTML	HYPER TEXT MARKUP LANGUAGE
AR	AUGMENTED REALITY
SQL	STRUCTURED QUERYLANGUAGE
CSS	CASCADING STYLE SHEETS
JSV	JAVA SCRIPT

PROJECT REPORT
on the title

"MACHINE LEARNING BASED MECHANISM FOR OFFTYPE PLANT IDENTIFICATION IN CROP"

Report submitted in partial fulfillment of the Requirements for the Award of the Degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

By

AMAR RAJENDRAN (SNC19CS006)

MUHAMMED JISHAN P T K (SNC19CS21)

MUHAMMED ZAHID A P (SNC19CS023)

SRAVAN R (SNC19CS032)

Under the guidance of

Prof. HARITHA M V

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

AFFILIATED TO A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA

2022-2023

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report entitled **"MACHINE LEARNING BASED MECHANISM FOR OFFTYPE PLANT IDENTIFICATION IN CROP"** submitted by **AMAR RAJENDRAN(SNC19CS006), MUHAMMAD JISHAN P T K (SNC19CS021), SRAVAN R(SNC19CS032), MUHAMMED ZAHID A P(SNC19CS023)** in the partial fulfillment for the award of the Degree of Bachelor of Technology in Computer Science and Engineering to **A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA,** is a record of bonafide work carried out under my guidance and supervision.

GUIDE:

Prof. HARITHA M V

HEAD OF DEPARTMENT:

Prof. SUNDER V

Dr. LEENA A. V.
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY, PAYYANUR
KANNUR

DECLARATION

I, **SRAVAN R** hereby declare that the dissertation entitled **MACHINE LEARNING BASED MECHANISM FOR OFF-TYPE PLANT IDENTIFICATION IN CROP**, submitted for the BTech Degree is my original work and the dissertation has not formed the basis for the award of any degree, associate ship, fellowship or any other similar titles.

Place :

Date :

NAME OF THE STUDENT: SRAVAN R

REGISTER NUMBER: SNC19CS032

DATED SIGNATURE:

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OBJECTIVE

The main objective of the project on "Machine Learning Based Mechanism for Off-type Plant Identification in Seed Crop" is to identify plants with undesirable characteristics in agricultural fields. This identification is crucial for preserving the genetic integrity and significant traits of a given plant variety. The project aims to detect off-type plants in seed crop fields

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

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At the outset, I thank the lord almighty for the grace, strength and hope to make my endeavor a success. I express my sincere gratitude to our Management **SREE BHAKTHI SAMVARDHINI YOGAM, TALAP, KANNUR** for having me provided with all the facilities required for the success of this presentation.

I express my heartfelt gratitude to **DR. LEENA A.V**, SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY, PAYYANNUR for providing the necessary facilities. I am greatly obliged to **Prof. SUNDER V**, Head of the Department of CSEfor giving me this opportunity and encouragement throughout the presentation.

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I would like to thank my guide, **HARITHA MV,** Assistant Professor, Department of CSE, Sree Narayana Guru College of Engineering and Technology, Payyanur for her great support and guidance. I, on this occasion, remember the valuable suggestions and constructive criticism from my teachers which were inevitable for the successful completion of my seminar. I expressmy thanks to all staff members and friends for all the help and co-ordination extended in bringing out this seminar successfully in time. Last but not the least; I am very much thankful to my parents who guided me in every step which I took.

Thanking you

SRAVAN R (SNC19CS032)

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

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Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

ABSTRACT

Image analysis is a state-of-the-art technique for seed quality testing. This tool provides vast usage in evaluation of various physiological and morphological characteristics of the seed with a more comprehensive perception. It is based on the extraction of numerical data from a captured image for characteristics like color, size, shape of seed and seedlings and their subsequent processing with the help of suitable computer software. Speedy analyses, cost-effectiveness, automatic nature and user-friendly environment for work are some important advantages of Image Analysis over other conventional techniques. Numerous software has been developed for application in different fields of seed science research like germination studies, vigor estimation, varietal identification and purity testing etc. and most of these showed their potential adoption in the future as such or with some required transformations.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF FIGURES

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF ABBREVIATIONS

1	ANN	Artificial Neural Network
2	CCV	Color Coherence Vector
3	GUI	Graphical User Interface
4	HIS	Hue Intensity and Saturation
5	ML	Machine Learning
6	MM	Markov Model
7	NN	Neural Network
8	ROI	Region of Interest
9	RGB	Red Green and Blue
10	SOM	Self-Organizing Map
11	SVM	Support Vector Machine

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT REPORT
on the title

"FURNITURE FIT"

Report submitted in partial fulfillment of the Requirements for the Award of the Degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

By

ANAGHA K (SNC19CS008)

ANAGHA M (SNC19CS009)

HRIDYASREE VALSAN (SNC19CS014)

RAMRITHA RAJEEVAN (SNC19CS027)

Under the guidance of

Prof. VARSHA M

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

AFFILIATED TO A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA

2022-2023

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report entitled **"FURNITURE FIT"** submitted by **ANAGHA K(SNC19CS008), ANAGHA M(SNC19CS009), HRIDYASREE VALSAN(SNC19CS014), ARAMRITHA RAJEEVAN(SNC19CS027)** in the partial fulfillment for the award of the Degree of Bachelor of Technology in Computer Science and Engineering to **A P J ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA,** is a record of bonafide work carried out under my guidance and supervision.

GUIDE:

Prof. VARSHA M

HEAD OF DEPARTMENT:

Prof. SUNDER V

Dr. LEENA A. V.
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY, PAYYANUR
KANNUR

ACKNOWLEDGEMENT

First of all, I would like to thank God for giving strength, courage and blessings to complete this work. I would like to extend my gratitude to everyone who helped me in the completion of this project. I express my sincere gratitude to our Management **SREE BHAKTHI SAMVARDHINI YOGAM, TALAP, KANNUR** for having me provided with all the facilities required for the success of this presentation.

I would like to thank our Principal **DR. LEENA A V** for providing the necessary tools. I am greatly obliged to **Prof. SUNDER V**, Head of the Department of CSE for giving me this opportunity and encouragement throughout the presentation.

I express my deep sense of thankfulness to **Prof. VIJINA VIJAYAN** and **Prof. NIMISHA M K**, Assistant Professor, Department of CSE, for providing the guidelines and correcting me whenever I go wrong while carrying out the work of this project.

My special thanks and sincere gratitude to my guide, **Prof. VARSHA M**, Assistant Professor, Department of CSE, her great support and guidance throughout my project. Without her constant support this work would not have become true. I, on this occasion, remember the valuable suggestions and constructive criticism from my teachers which were inevitable for the successful completion of my project. I express my thanks to all staff members and friends for the help and co-ordination extended to me in bringing out this project successfully in time. I wanted to take a moment to express my sincere thanks to "Cee Furniture" company for giving me the opportunity to work on the project with your esteemed team. It was an incredible learning experience for me, and I appreciate the trust you placed in my abilities. Last but not the least I am very much thankful to my parents who guided me in every step which I took.

Thanking you,

ANAGHA K

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

PROJECT OBJECTIVE

The main objectives of this project are:

1) To design application to enhance the growing recognition of brands as well as technology advanced furniture.

2) To develop applications for customers using interactive approach.

3) To implement and evaluation the application for the seller at their furniture store.

PROJECT OUTCOME

The main outcome of this project is a mobile application for furniture shopping using augmented reality. By using this application it will be convenient for the user to do online shopping of furniture items. This will additionally help the user to try out the furniture items in their room and they will be able to see how it will look after placing furniture in it. User can attempt multiple combination of furniture objects virtually without physically moving the furniture items.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

INDEX

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

ABSTRACT

Augmented reality is a technology within which we can see the objects in physical world virtually, thus providing a composite view. It gathers a wide variety of user experiences. We are going to develop a mobile application with augmented reality that lets user to try on virtual furniture in user's real home structure before buying. From this user will be able to choose furniture objects a lot easier. It will not be necessary to go shopping and long searching for the large user need, or use a measure tape to find out whether or not the furniture would fit in customer's room or not. The main purpose of this project is to develop an application for various furniture items in furniture stores virtually without using the actual means that is incredibly exhaustive and time consuming activity. By using this application it will be convenient for the user to do online shopping of furniture items. This will additionally help the user to try out the furniture items in their room and they will be able to see how it will look after placing furniture in it. User can attempt multiple combination of furniture objects virtually without physically moving the furniture items. Our motivation here is to increase the time efficiency and additionally improve the accessibility of furniture try on by making this layout in augmented reality.

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

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Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF TABLES

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR

LIST OF ABBREVIATIONS

SYMBOL	DESCRIPTION
AR	AUGMENTED REALITY
SRS	SOFTWARE REQUIREMENT SPECIFICATION
VR	VIRTUAL REALITY
HTML	HYPERTEXT MARKUP LANGUAGE
CSS	CASCADING STYLE SHEET
XML	EXTENSIBLE MARKUP LANGUAGE
VGA	VIDEO GRAPHICS ARRAY
API	APPLICATION PROGRAMMING INTERFACE
SQL	STRUCTURED QUERY LANGUAGE
IOS	I-PHONE OPERATING SYSTEM

Dr. LEENA A V
PRINCIPAL
SREE NARAYANA GURU COLLEGE OF
ENGINEERING & TECHNOLOGY
PAYYANUR, KANNUR