MES COLLEGE OF ENGINEERING-KUTTIPPURAM DEPARTMENT OF COMPUTER APPLICATIONS 20MCA245– MINI PROJECT

Mini Project Proposal (III Semester MCA)

- Approval of the mini project proposal is mandatory to continue and submit the project work.
- The mini project proposal should clearly state the project objectives and the environment of the proposed project to be undertaken.
- The following documents should be submitted for approval:

1. Pro-forma for approval of the mini project (Present in this document)

2. Synopsis/Abstract with following contents

      i.   Title of the Mini Project.
      ii.   Introduction and Objectives of the Project. iii. Tools / Platform, Hardware and Software Requirement
      iv. Problem Definition and Initial Requirements
      v.   Basic functionalities of the project

THE ABSTRACTS SHOULD BE SUBMITTED ON OR BEFORE 03.10.2023

Note: Atleast **3 topics** should be submitted, ordering them according to your preference.

MES COLLEGE OF ENGINEERING, KUTTIPPURAM DEPARTMENT OF COMPUTER APPLICATIONS 20MCA245 – MINI PROJECT

PRO FORMA FOR THE APPROVAL OF THE THIRD SEMESTER MINI PROJECT

(Note: All entries of the pro forma for approval should be filled up with appropriate and complete information. Incomplete Pro forma of approval in any respect will be rejected.)

Mini Project Proposal No: _____ *(Filled by the Department)*	Academic Year : 2022-24 Year of Admission : 2022

1. Title of the Project :
   _____

2. Name of the Guide :
   _____

3. Register Number of the Student:
   _____

4. Student Details (in BLOCK LETTERS)

   Name : FATHIMA NESRIN

               Roll Number : MES22MCA2019   Signature

   Date: _____   _____   _____

Approval Status: Approved / Not Approved

Signature of
Committee Members

Comments of the Mini Project Guide   Dated Signature

Initial Submission :

                                                 _____

First Review :

                                                 _____

Second Review :

                                                 _____

Comments of the Project Coordinator   Dated Signature

Initial Submission:

                                                 _____

First Review

_____

Second Review

_____

Final Comments:

CAR SERVICING SYSTEM

Introduction

This is a Project entitled Car Service System. This project is a simple web application for a car repair/service shop or business. This application provides an online platform for the said shop's clients or possible clients to submit their service requests. This project can help to lessen the time consumed by both ends (Management and Clients) in terms of managing their service requests. It has a simple user. Interface and user-friendly functionalities

This project has a Public Module and Admin Module. The Admin module is the side of the project where can the management manage all the data recorded/will be recorded on the system. The admin can manage the list of vehicle categories that does the shop handles and other important and relative data for this project such as the mechanic list and service requests list. On the public side, the clients can explore the list of services does the company/shops provide. The client can submit their service request at this side and the submitted request will be marked as pending. This simple project also generates a date-wise printable service request report.

Objectives

The benefits of regular car servicing are both technical and economical. Regular servicing will ensure that the car is technically strong enough that you can use the car for long-distance travel unconcerned. The economic aspect includes increased fuel efficiency, thus saving on fuel expenses, fewer repair works, good resale value and so on. We always advise the clientele to keep a watch on the periodic servicing due date and undertake the same without any delay

PROBLEM DEFINITION:

- Develop online booking, Thus increase the company's order level.
- Calculate the vehicle service charge based through booking details.
- Provide better services to customer.
- Communicate among the system through message via email or SMS.
- Get feedback from customers to analysis the company services within the customer point of view
- Customer can make booking through online.
- Customer can make payments through online (credit card, debit card or ez cash).
- Get the variety of vehicle services and service details. By using this system the customer may save their time and money

BASIC FUNCTIONALITIES

Modules

1. User Registration
2. Service Charges
3. Submission module

MODULE DESCRIPTION

User Creation:-
In this module we are Registration the username password Phono and vehicle no, warranty and branch no' are user creations.

Service Charges:
In this module we are Registered the Customer Name, Vehicle no. Parts and Servicing Charges as well as Paying the money

Submission Module:-
In this module the dealer is handover to the Customer and before registering the Customer name, Vehicle no and phone. Maintenance Order Registration and Warranties.

SOFTWARE AND HARDWARE REQUIREMENTS

HARDWARE REQUIREMENTS
- Processor: Intel(R) Core (TM) i7-5500U CPU @ 2.40GHz 2.40 GHz
- Ram: 8.00 GB

SOFTWARE REQUIREMENTS
- Front end: Django, HTML, CSS
- Back end: Python, MySQL

TOOLS
- Visual Code Studio

SCHOOL MANAGEMENT SYSTEM

Introduction

A school management system is a software application that is designed to streamline various administrative tasks within a school. This system is designed to automate a range of processes such as student enrolment, course scheduling, fee management, library management, attendance tracking, and more. The goal of a school management system is to simplify these processes and make them more efficient, saving time and reducing errors. One of the biggest benefits of a school management system is improved efficiency. By automating a range of administrative tasks, schools can save time and reduce the risk of errors. This allows teachers and administrators to focus on more important tasks, such as improving the quality of education.

Objectives

School management software has become an indispensable tool for educational institutions in today's digital age. This software is designed to streamline various administrative tasks, improve communication and enhance overall efficiency. School management software helps to organise administrative tasks such as managing student records, scheduling classes, tracking attendance, and managing grades. This software also helps to reduce paperwork and the associated clutter in classrooms. School management software is designed to enhance the security of student data. It allows schools to manage access to student records, grades and other important information, ensuring that it is only accessible to authorised individuals.

PROBLEM DEFINITION:

- Lack of data arrangement that is record by using manual system and using a lot of paper to record the student information, student result and performance.
- The manual system is hard to search and update about the student information, result and performance
- The manual system is not providing the security of the academic information that might be lost.
- Some information released by the school is not known by the parents or teachers.
- The objectives of this system are: To record all of the student academic information for future reference and enhancement and to update and search student information include personal information, result and performance .
- To record student attendance and notify.

BASIC FUNCTIONALITIES

Modules

1. Academy Management
2. Student Management
3. Employee Management
4. Fees Management
5. Result Management

MODULE DESCRIPTION

Academy Management
This module will show the information about a specific school whether it is primary, secondary, or tertiary. The school information includes the number of rooms and instructors they have as well as the count of slots for enrolees and students.

Student Management
The information of the student must also be managed in school management because the student information was the most important data that the system should process.

Employee Management
It is essential to put into consideration because the teachers must be rationed to the count of the students that the school will cater to. The information of the teachers also matters because the system should check the qualifications before they could teach.

Fees Management
Management of fees and payments is also covered in the school management system. The fee and payment information is processed from the enrollment and then the parents or students will be updated about their accounts to avoid conflicts.

Result Management
Add Result, Edit Result, And Manage Result.

SOFTWARE AND HARDWARE REQUIREMENTS

HARDWARE REQUIREMENTS
 • Processor: Intel(R) Core (TM) i7-5500U CPU @ 2.40GHz 2.40 GHz
 • Ram: 8.00 GB

SOFTWARE REQUIREMENTS
 • Front end: Django, HTML, CSS
 • Back end: Python, MySQL

TOOLS
 • Visual Code Studio

QR CODE GENERATOR

Introduction

QR codes are much more useful as they can store and digitally present much more information/data than the usual barcode that only contains a numeric value of a product. QR code can contain a wide variety of information such as a link to your business page, social media sites, a text, and details about your event, and so much more. QR Code is a machine-readable matrix barcode that uniquely represents information. With the increase in optical capabilities of smartphones, the use of QR codes started increasing. In this project, we will build a QR Code generator using Python Modules.

Objectives

Additionally, This `Project` contains a grid of black squares on a white background, which can be read by any imaging device such as a camera, and processed to extract the required data from the patterns that are present in the horizontal components of the image. Nowadays we all use QR code for multiple purposes like making payments, sharing Wi-Fi, etc. Have you ever wished to generate such QR code on our own People now keep track of their favourite brands and products through their mobile devices, which is what makes QR Codes especially attractive for marketing. Targeted to mobile users, QR Codes are cost-effective, universally applicable, and help you reach your target audience in the offline world and connect them directly to your digital platforms

PROBLEM DEFINITION:

- A QR code generator is an application that stores any required textual data into a QR code which can be later scanned with a QR code scanner to reveal the stored information.
- This QR Code can be used anywhere, for example, on a poster or website to allow users to get additional information
- This application will allow the user to type in the data required and save it a PNG or SVG image of the QR code.
- QR Code is a machine-readable matrix barcode that uniquely represents information. With the increase in optical capabilities of smartphones, the use of QR codes started increasing.

BASIC FUNCTIONALITIES

Modules

1. Login
2. Pyqrcode
3. PyPng

MODULE DESCRIPTION

Login

The main modules available in this project are Login module which manages the functionality of Login, Username is normally used for managing Username, Groups contains all the functionality realted to Groups, Permission manages the Permission functionality, Changing Password has all the features of Changing Password and Email module manages the functionality of Email

Pyqrcode

The main job of PyQRcode as the name implied is the creation of a QR Code

PyPng

This module which is PyPng is used for representing our QR Code as a png image

SOFTWARE AND HARDWARE REQUIREMENTS

HARDWARE REQUIREMENTS
  • Processor: Intel(R) Core (TM) i7-5500U CPU @ 2.40GHz 2.40 GHz
  • Ram: 8.00 GB

SOFTWARE REQUIREMENTS
  • Front end: Django, HTML, CSS
  • Back end: Python, Tkinter, MySQL

TOOLS
  • Visual Code Studio