PRO FORMA FOR THE APPROVAL OF THE FOURTH SEMESTER MAIN 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.)

Main Project Proposal No : _____
(Filled by the Department)

Academic Year   : 2021- 22

Year of Admission   : 2020

1. Title of the Project   : Fingerprint-Based Licensing For Driving
2. Name of the Guide   : Muhammad Jabir C
3. Student Details (in BLOCK LETTERS)

Name	Register Number	Signature
SAFWANA V J	MES20MCA-20042	

Date: 11-05-2022

Approval Status :   Approved / Not Approved

Signature of
Committee Members

Comments of the Guide   Dated Signature

Initial Submission   :

First Review   :

Second Review   :

Comments of the Project Coordinator   Dated Signature

Initial Submission:

First Review

Second Review

Final Comments :   Dated Signature of HOD

Introduction: The average number of accidents worldwide is increasing day after day. This happens due to various reasons. A majority is still extensively due to rash drivers who don't have the right knowledge about the traffic rules and regulations. Some are even because they are underaged drivers and don't have the right mindset and responsibilities. This has become a major issue affecting not just the drivers but also the people in their surroundings. Through this project, we would like to bring in better and more responsible drivers on the roads which would reduce the death rate. A driving license is issued keeping in view the safety of the driver and all the other people on the roads. It is issued only after concerned authorities have made sure that the applicant is well acquainted with the traffic rules. We propose to achieve this by introducing a double verification of the driver to ensure that non-eligible people and those without a driving license are not allowed to drive. In addition, we have added a mobile application which would not only carry information about the vehicle history and the driver history but also alerts the user about the expiry of the driving license, allows the owner of the vehicle to authorise a remote user to use his/her vehicle, and allows a user to handle emergency situations.

Objectives: A major cause of death in modern times has been due to road accidents. People who have never been tested for a driving licence and underaged drivers take up a majority role in this cause. In this paper, we aim to prevent such drivers from accessing the vehicle and in-turn reduce the number of irresponsible drivers on the road and hence the percentage of road accidents on a daily basis. The main objective of this project is to develop a fingerprint authentication mechanism as a prerequisite for vehicle ignition along with the driving license verification of the user.

Problem Definition: The base of this project is the driver's license authentication and fingerprint verification of the driver. Fingerprint recognition has become one of the most reliable ways for human identification due to its uniqueness and consistency [3]. Hence, we have chosen the fingerprint verification along with the driving license verification.The driving license has to be first authenticated and checked for the expiry and then the fingerprint of the user would have to be verified to ensure that the fingerprint on the driving license matches and thereby provides necessary authentication. Once both the driving license and the fingerprint are verified, the engine would turn on thereby ensuring optimum security. Novel with its implementation, the use of RFID system and Fingerprint recognition algorithm along with the presence of the mobile application, our project provides convenience as well as assurance of safety to the drivers and the people on the road..

Basic functionalities: tools / platform, hardware and software requirement

Hardware Requirements

- Input Device   : Mouse,Keyboard

- Output Device   : Monitor

- Memory   : 4 Gb Ram(Minimum)

- Processor   : Intel core i3 or above

Software Requirements

- Operating System   : Windows 8 /10for Better Performance

- Front End   : Python

- Back End   : mysql

- Software Used   : Pycharm