DATABASE MANAGEMENT SYSTEM

J COMPONENT-PROJECT REPORT

ONLINE TRAFFIC PENALTY MANAGEMENT SYSTEM

(E-CHALLAN)

NAME: ALLOKIK PRANSHU

REG NO.: (17BCI0036)

FACULTY: DR. S. MURALI

SLOT: D1

COURSE CODE: CSE2004

ABSTRACT

The main idea of this project is to provide an online platform to the user and convenient way to pay their penalties for traffic violation. The database will consist of all the violators' previous history and his credentials, which can be verified and a penalty can be imposed in case of any traffic violation. The main aim of the project is to reduce the paper work and manual processes and increase the convenience for the users.

➢ OVERVIEW OF THE PROJECT:

The front end will be accessible to two type of users - the traffic Police man imposing fine and the violator of the traffic rule, who pays for the imposed fine.

Every eligible driver has a unique driving license no. And every traffic policeman has a unique employee id no.

- ✓ The policeman imposing fine can login through his unique username and his password. He can verify the violators driving details. After verification he can impose the necessary penalties and remarks against the violators license.

✓ The violator will be given a certain amount of time to pay his fine and penalty. The user can login through his unique username and custom password after verification. If the user does not pay his fees in the due time he will be imposed an additional penalty per day delayed.

This management system will help in reducing the paper work and improve the convenience for the users.

➢ INTRODUCTION

E-Challan System is the software aimed at providing a wide range support in managing and monitoring the traffic and penalties, helping users regarding the problems they face in paying for their challan. The E-challan System is basically an interaction between Police and driver easily through an online platform or an app. This project prototype describes how challan becomes easy

for user through keeping it online. This project contains Two categories users namely Police and drivers who interact with rest of module.

This system has the following objectives:

- ✓ **Accuracy**:

  The E-Challan System provides the uses a quick response with very accurate information regarding the users etc. Any details or system in an accurate manner, as and when required.

- ✓ **Automation**:

  The E-Challan System automates each and every activity of the manual system and increases its throughput. Thus, the response time of the system is very less and it works very fast.

- ✓ **User-Friendly:**

  The software E-Challan System has a very user-friendly interface. Thus, the users will feel very easy to work on it. The software provides accuracy along with a pleasant interface. Make the present manual system more interactive, speedy and user friendly.

- ✓ **Militance Cost:**

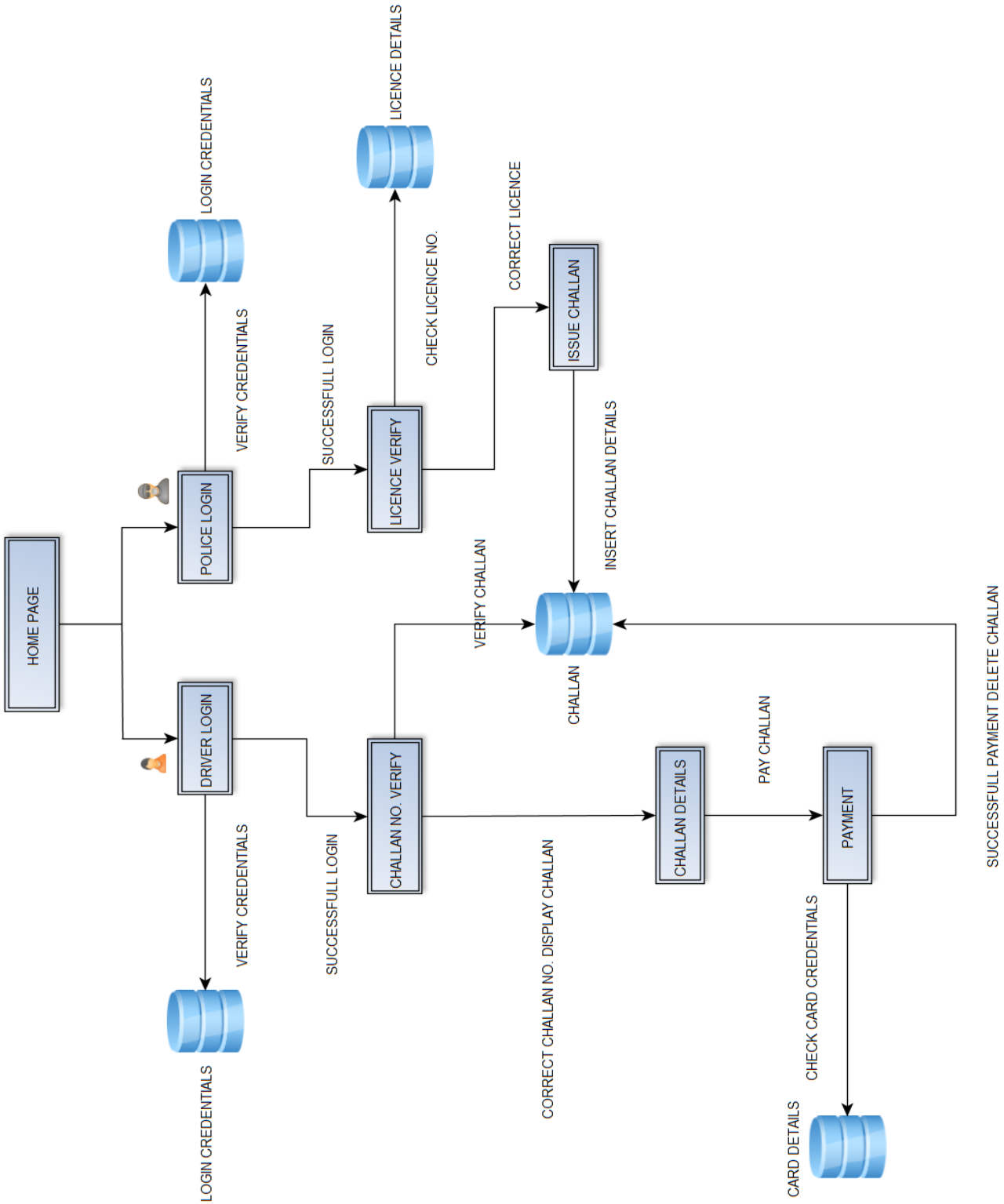
  The project aims at reducing the cost of maintaining the records of all the challan.

The aim of this project i.e. E-Challan System is all about challan system from anywhere, anytime. The extra feature involved in online payment option so that citizen can pay his challan online.

For implementation of the project following tools were used:

1. Yed graph editor: use for making E-r diagram and system architecture diagram.
2. WampServer: used as a back-end server which maintains and stores all the records and Information entered through front end
3. For making the front- end a very powerful tool used was MATERIALIZE which provide some of the best features by providing code of various elements used in a web page. A person who knows basic HTML can use these codes and organize them into a web page.

SYSTEM ARCHITECTURE



MODULE DESCRIPTION

There are mainly 4 main modules or web pages that have been connected to the database.

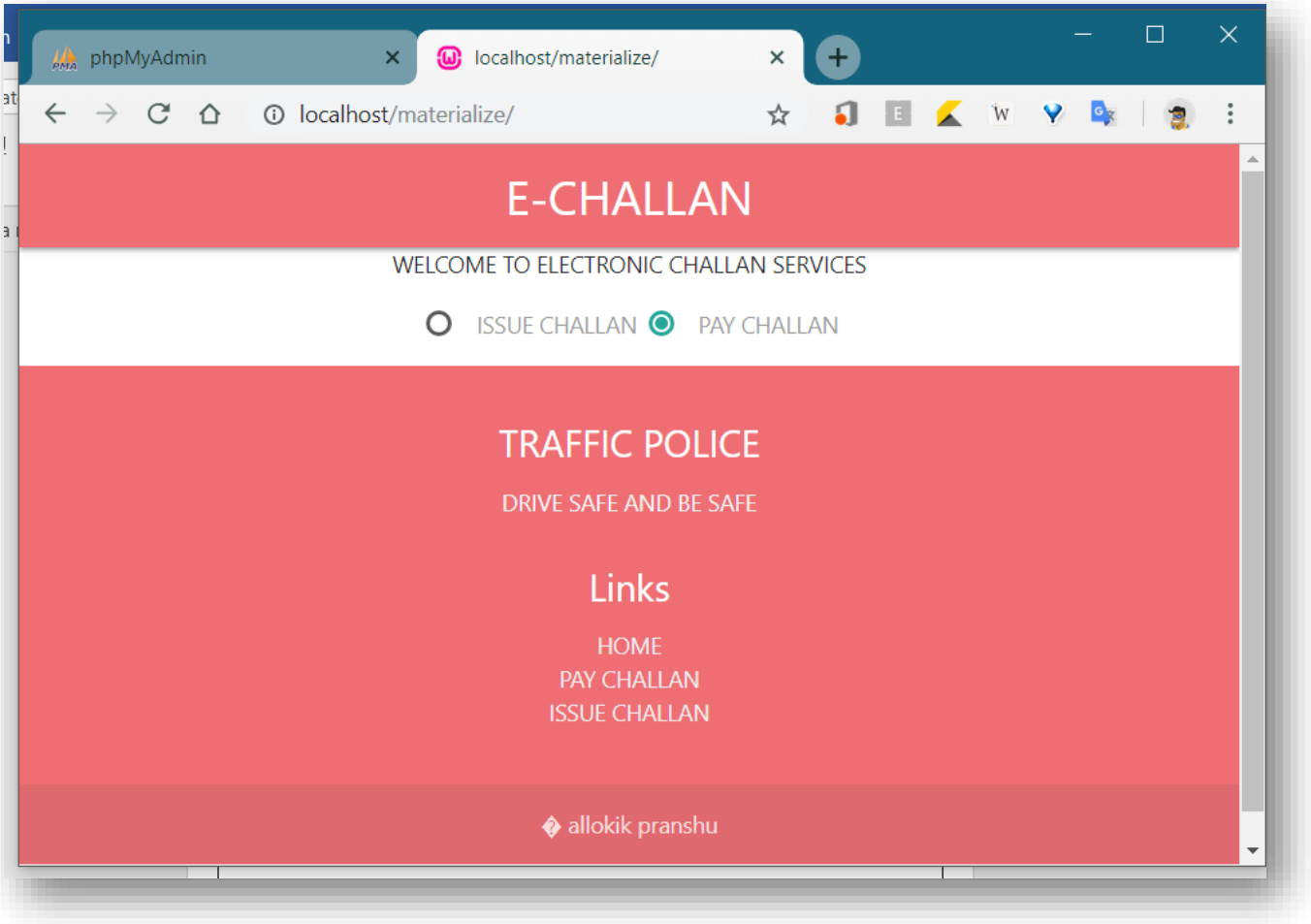
(a) LOGIN PAGE

(b) ISSUE CHALLAN PAGE

(c) CHECK CHALLAN DETAIL PAGE

(d) PAY CHALLAN PAGE

- The first appearance appears like below and is also the home page:

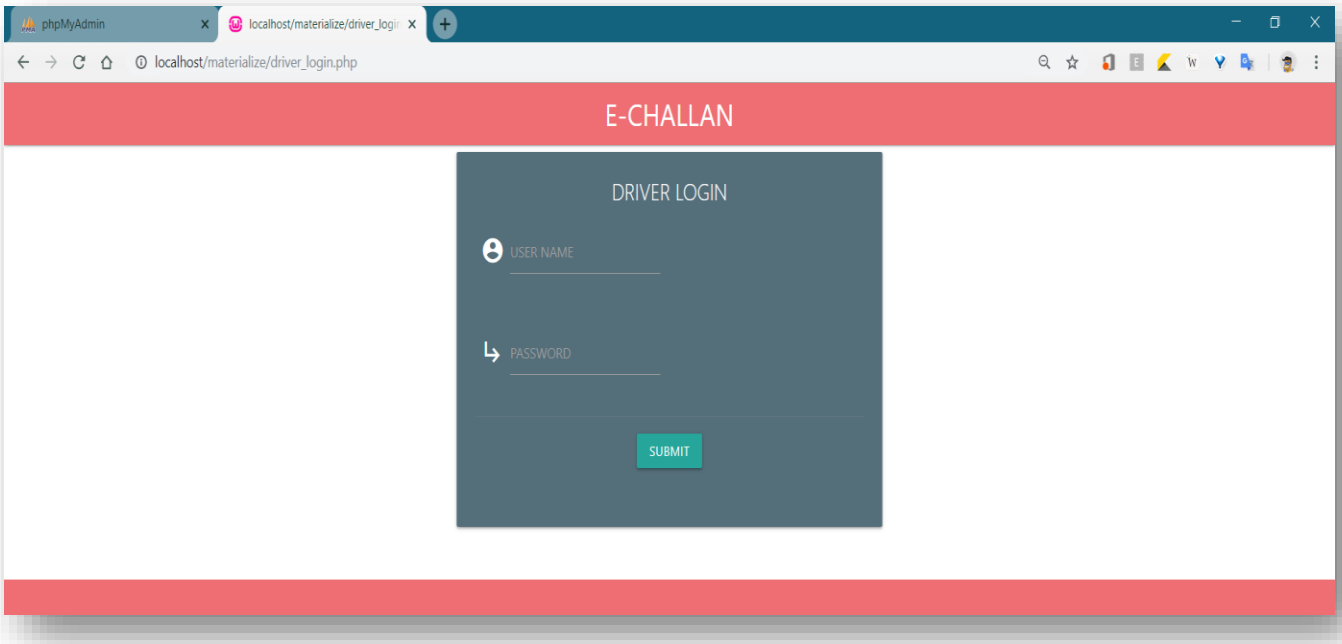


There are 2 radio buttons for the 2 types of users. - ISSUE CHALLAN is for the policeman who want to issue the challan and PAY CHALLAN is for the violators who want to pay their challan.

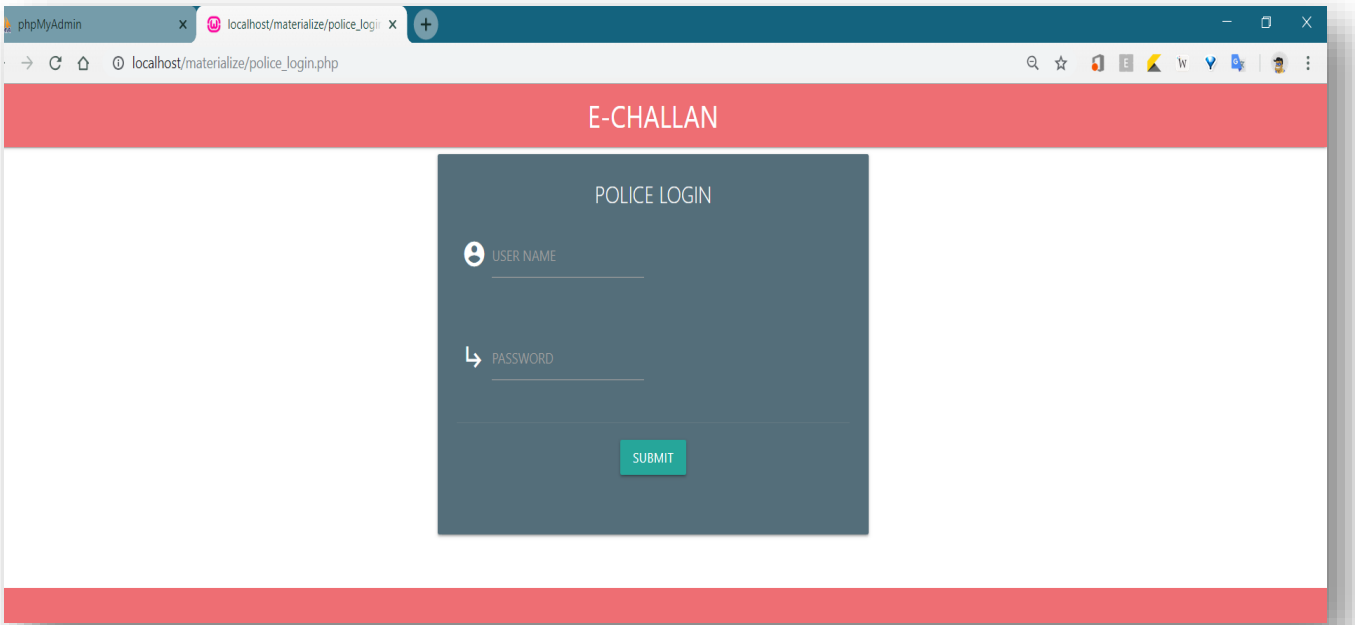
MODULE 1

- Selecting on either one of them will migrate the user to one of the login page as below:

DRIVER LOGIN:



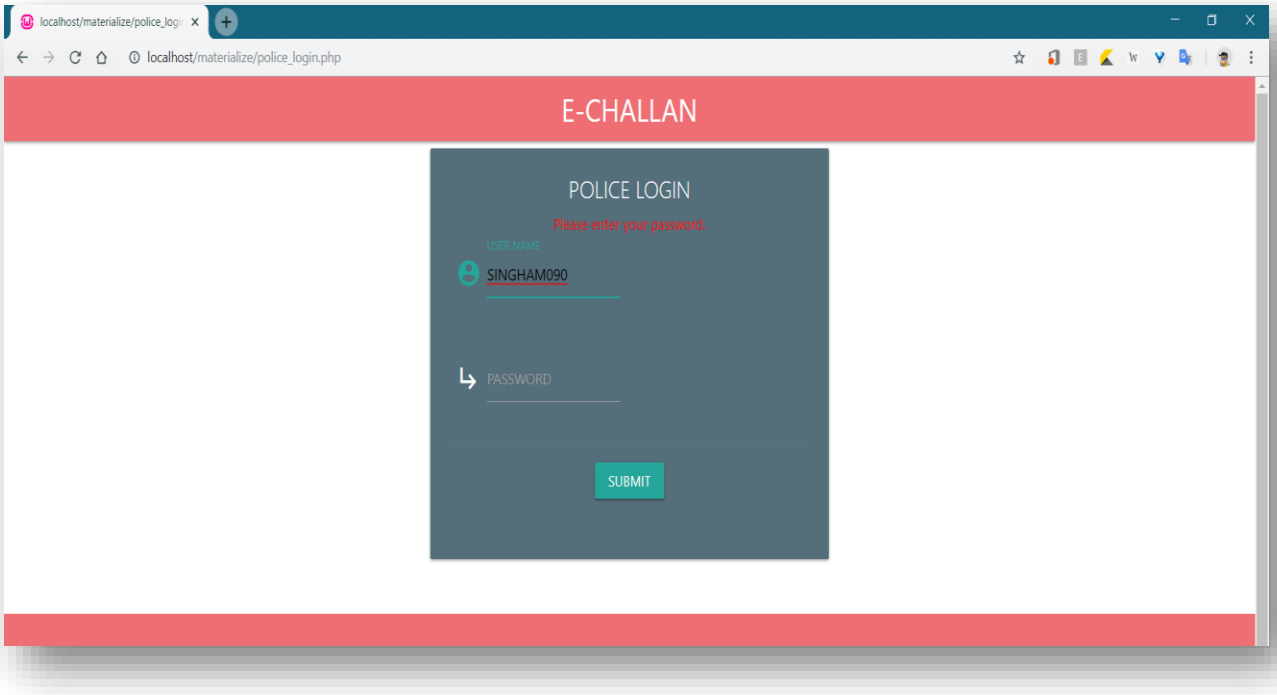
POLICE LOGIN:



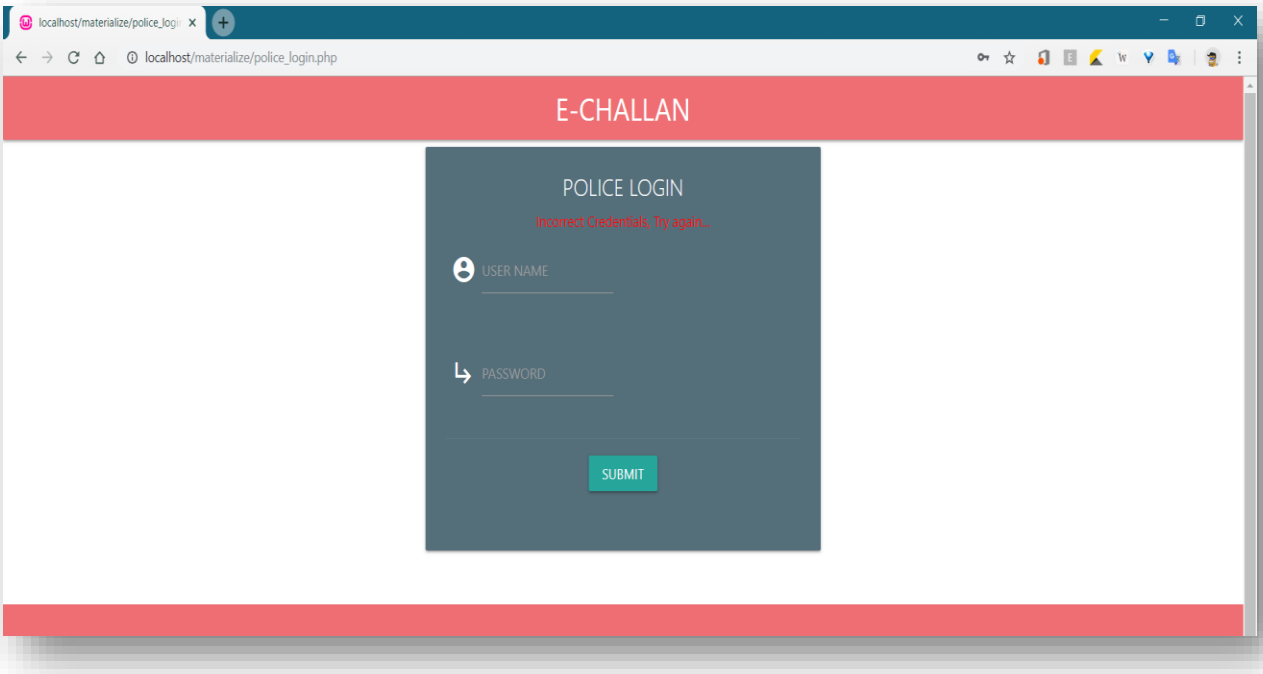
- For going further, the user must enter a valid credential details in the login space, If not the page will show an error describing it.

There are mainly 2 types of error that have will be displayed:

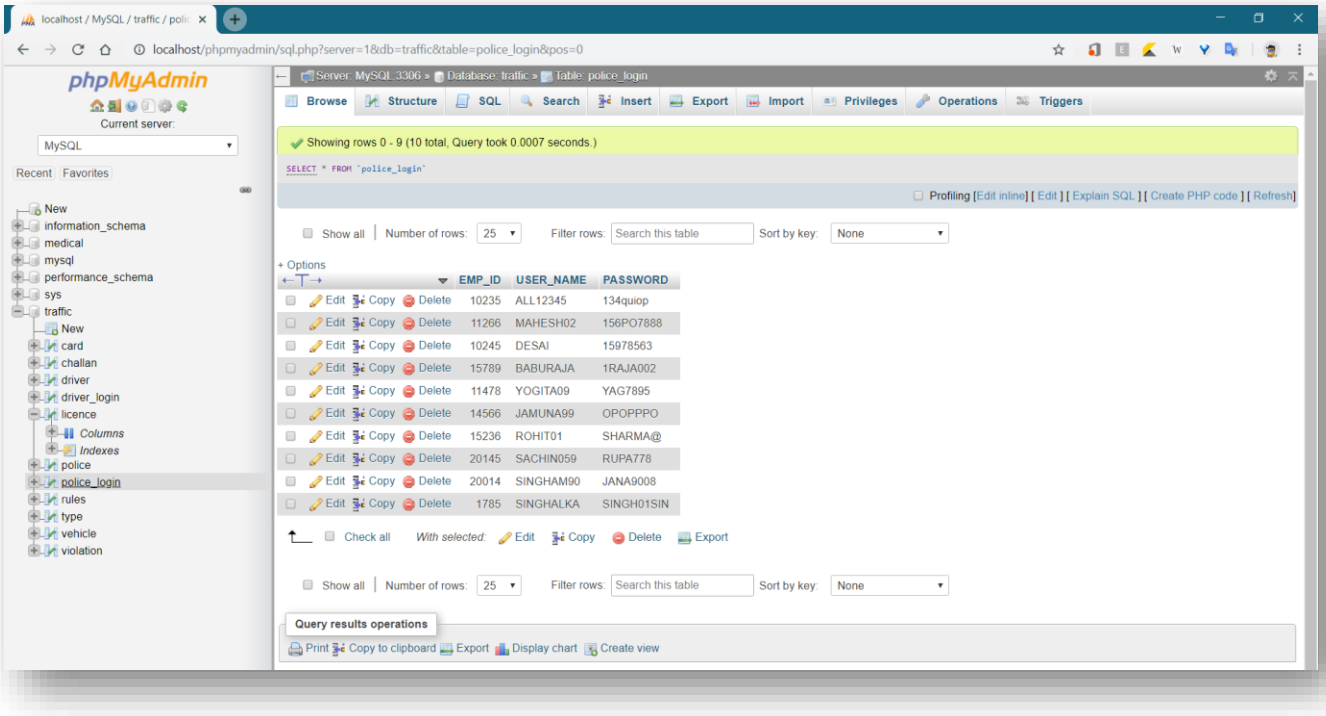
1. When the user does not enter either one of the required credentials.

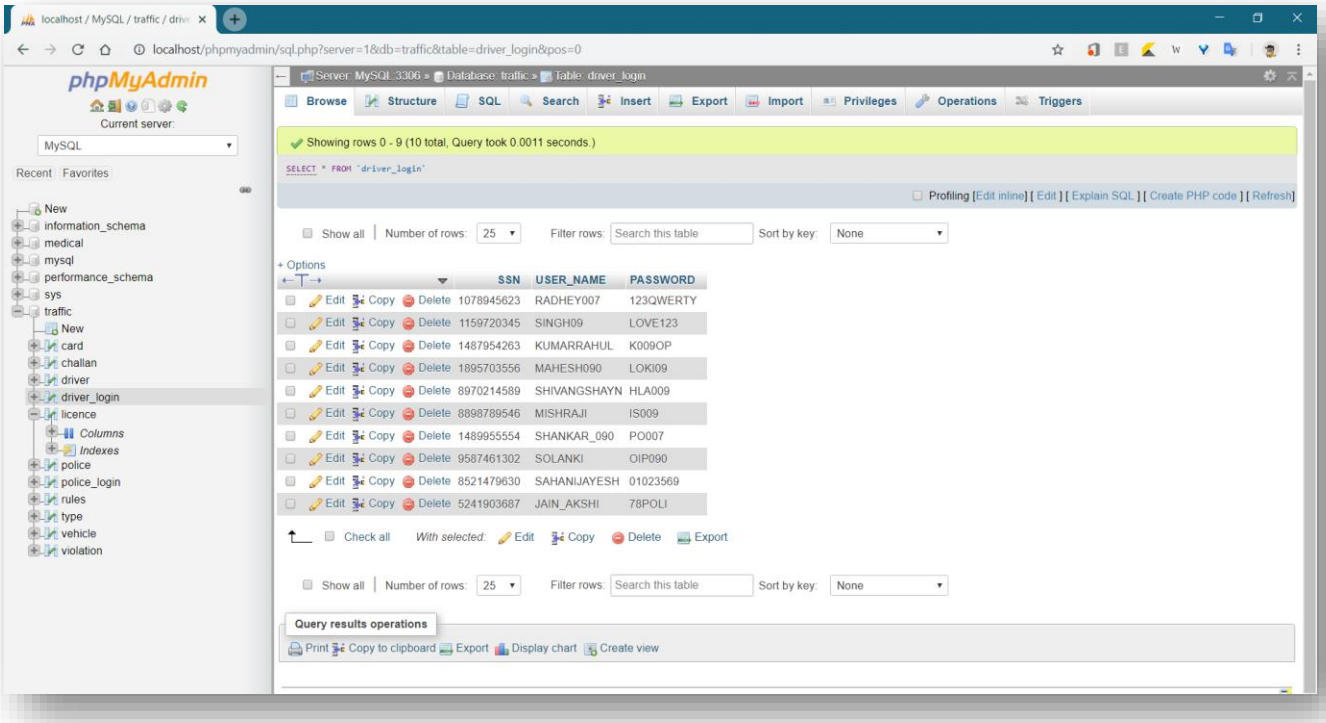


2. When the user enters wrong credentials.



The Driver login page has been connected to the driver_login table. And the Police login page to police_login.

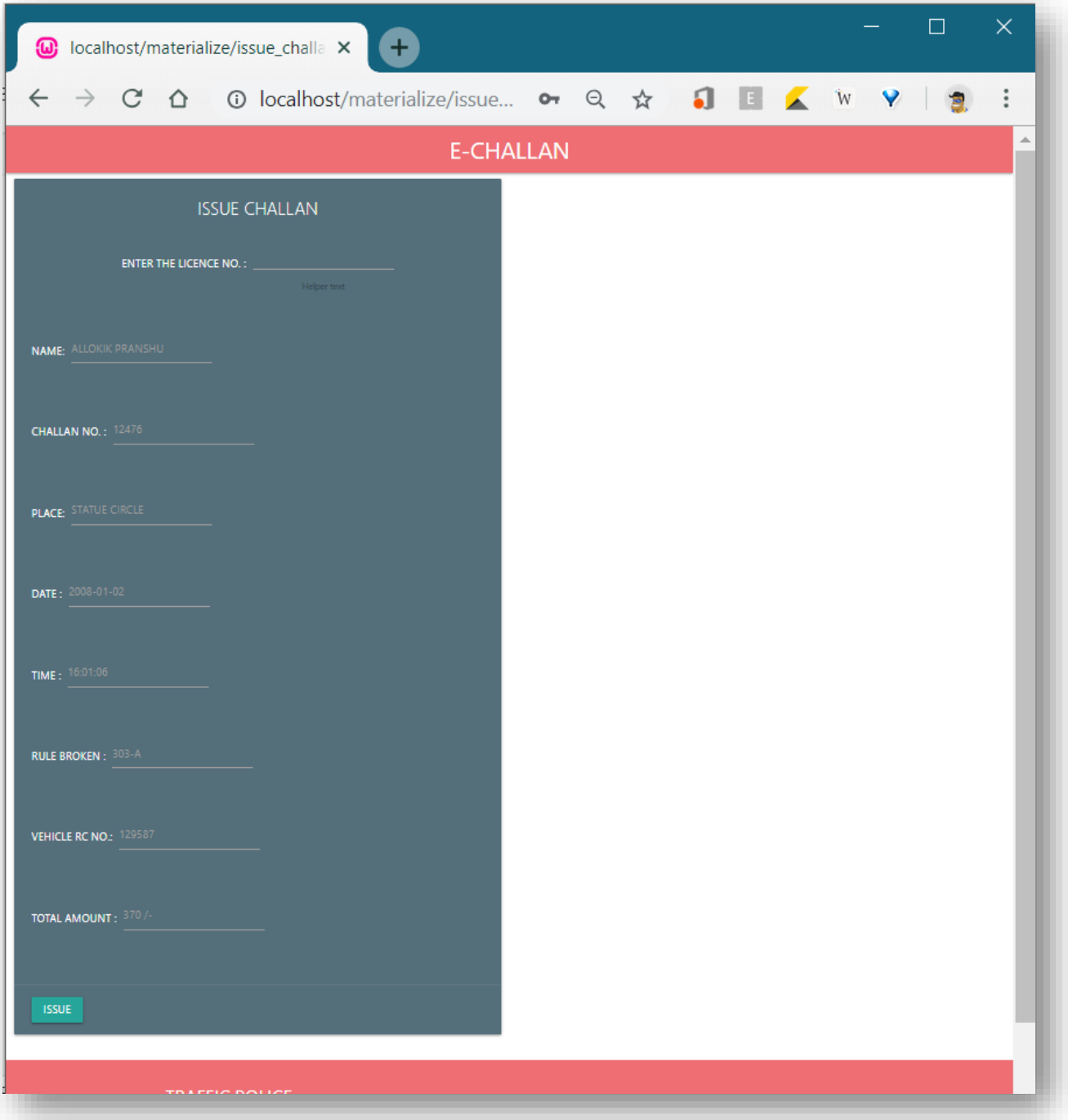




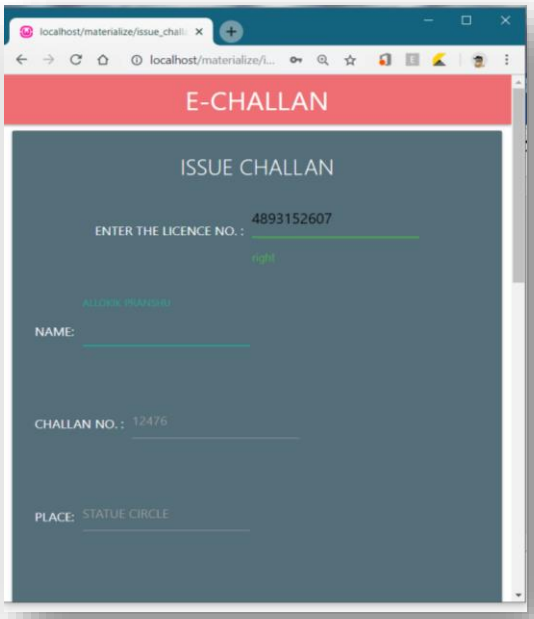
Entering correct credentials will migrate the user to the needed page i.e. POLICE to ISSUE challan page and DRIVER to PAY CHALLAN page.

MODULE 2 – ISSUE CHALLAN

The issue challan for the Police appears as follows:

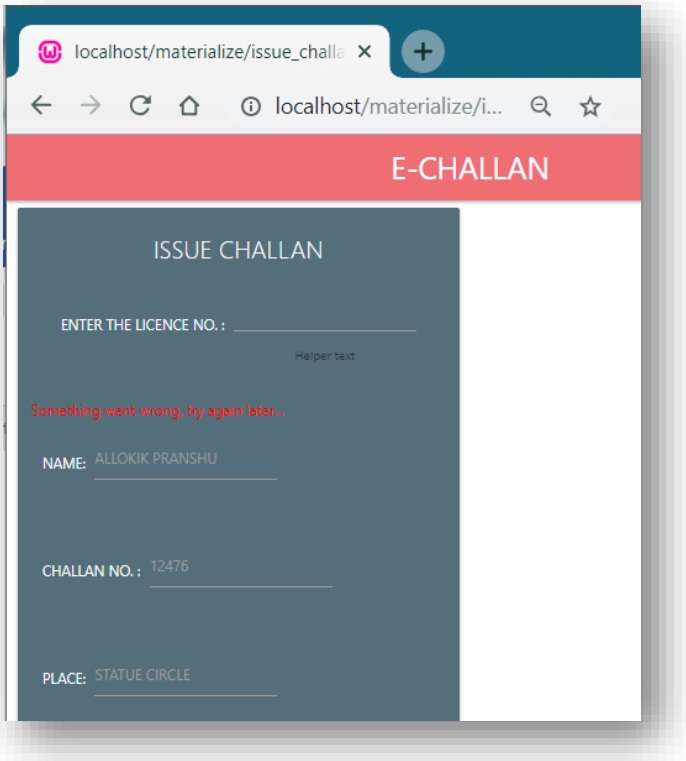


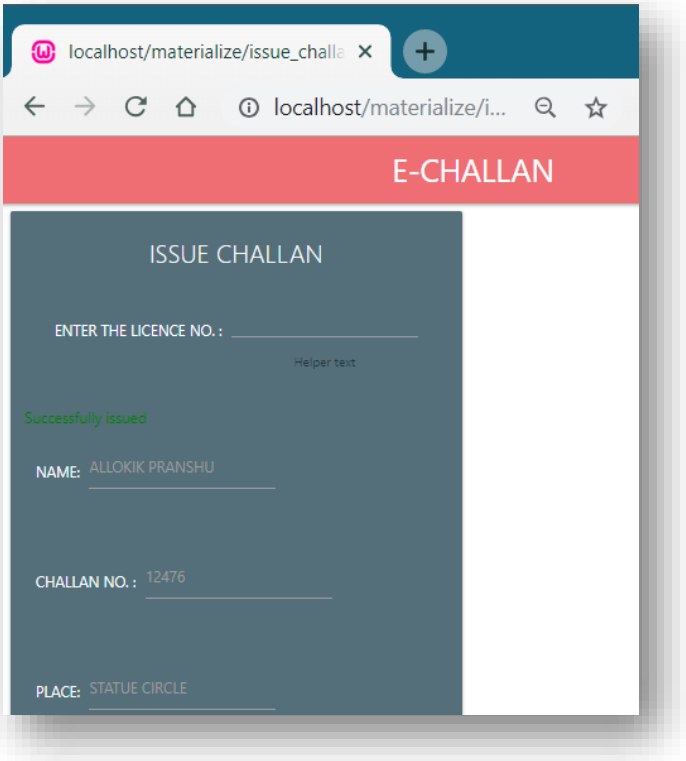
In the issue page, at the top there is text input to input licence no. The user enters the licence no. which is verified at the back end table and the user is given a verification message.



After that the user can enter necessary details of the driver below and issue a challan by clicking on issue.

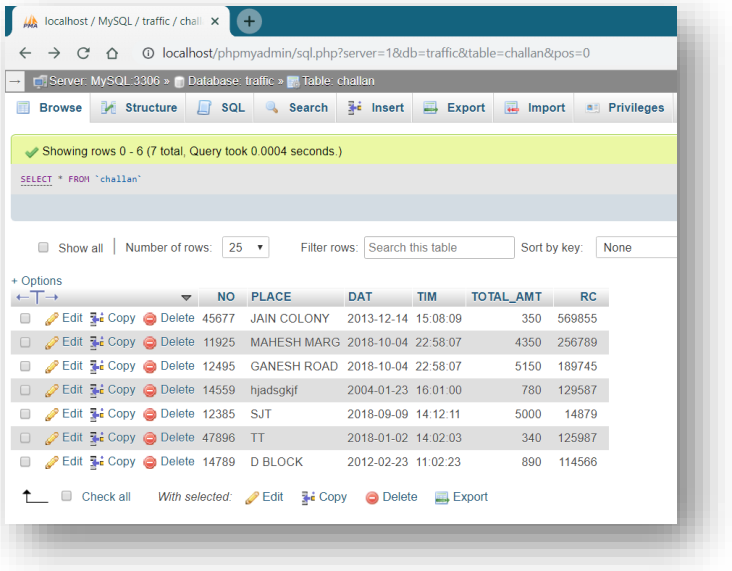
If all the entered details are correct as verified from back-end, the challan will be issued, otherwise an error message will be shown as below.



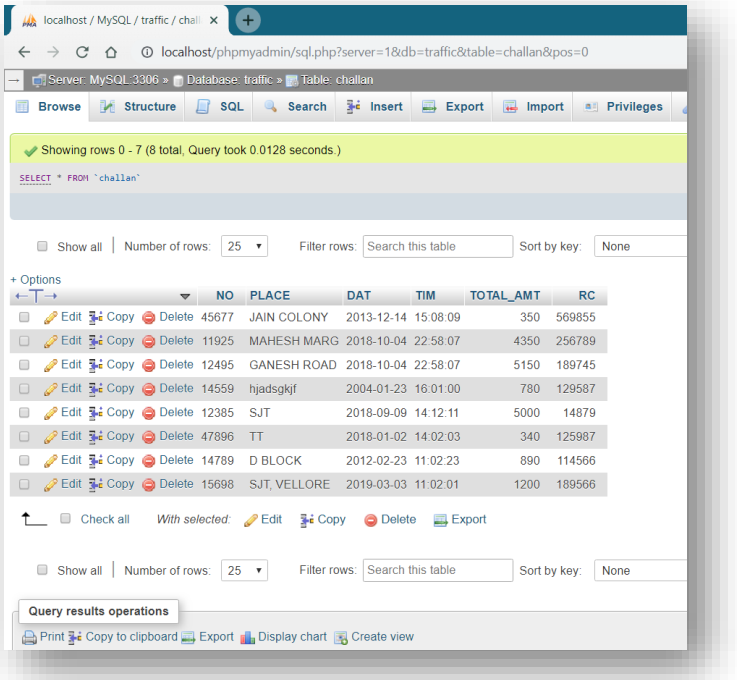


The entered values will be reflected in the back-end in the challan table.

INITIALLY:



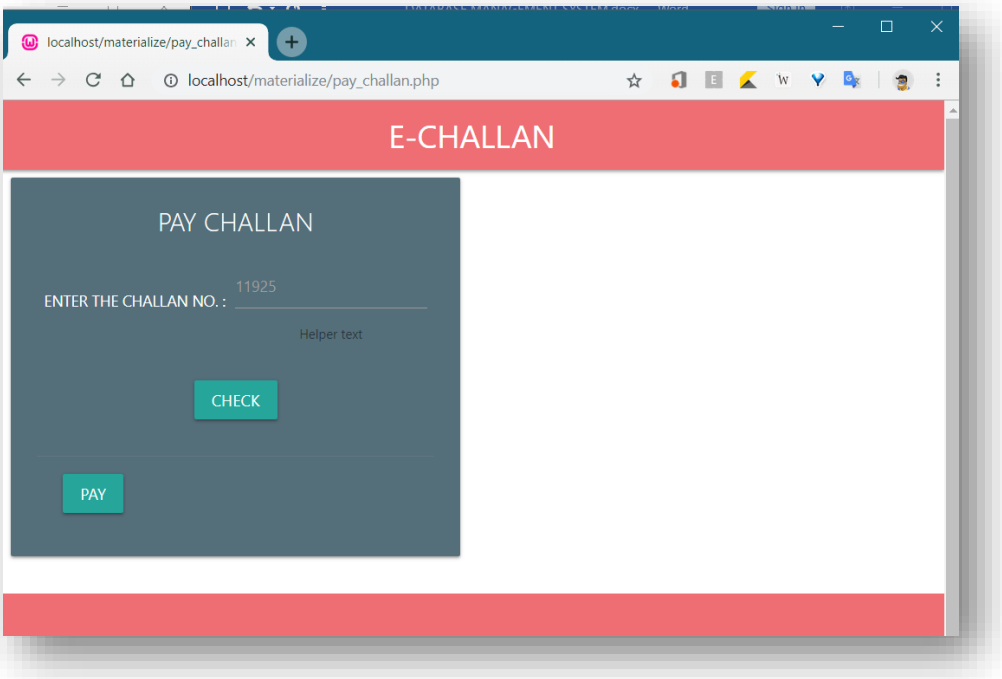
AFTER CHALLAN ISSUE:



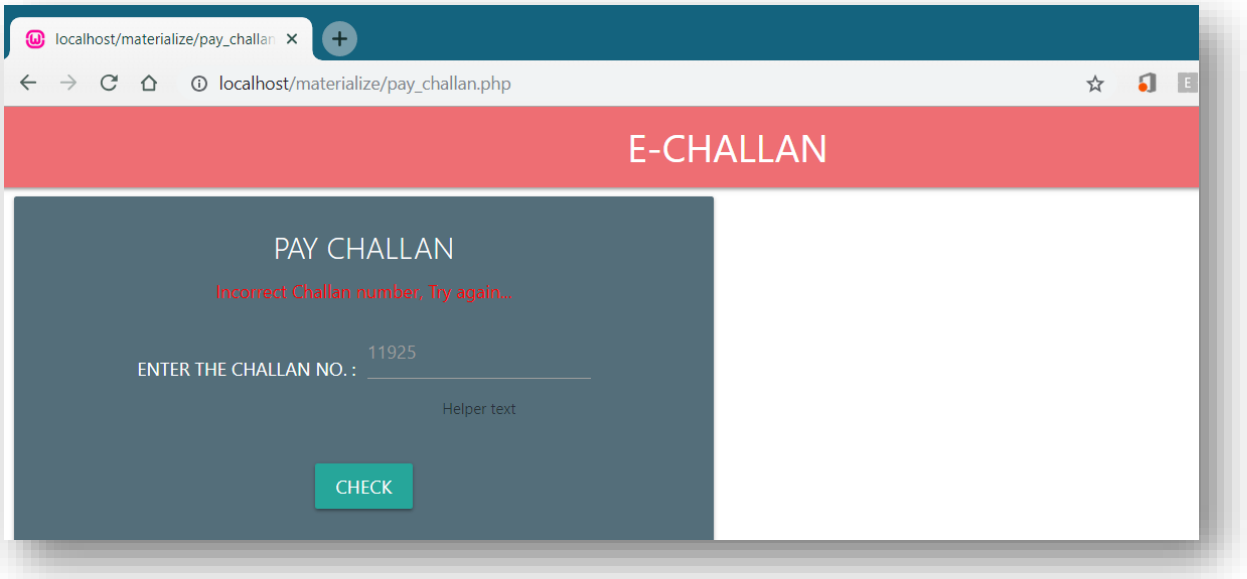
In the above module or page, the values entered in the issue page are been inserted in the challan table.

MODULE 3 – PAY CHALLAN

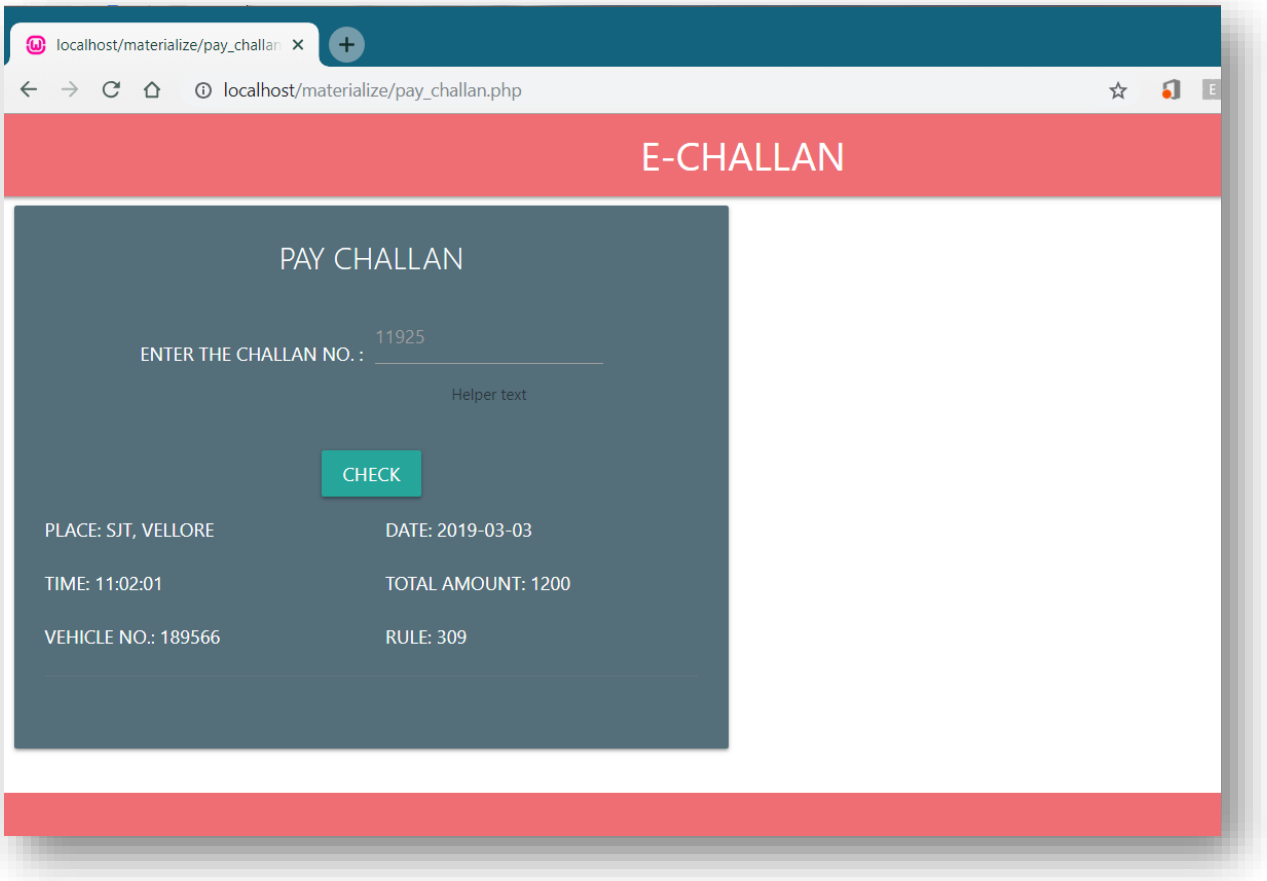
The driver or violator after successful login will be migrated to this page where he can check the details of his challan by entering a valid challan no. or he can directly click on PAY button to proceed to the payment gateway



If the challan no. is not valid it will show an error message.



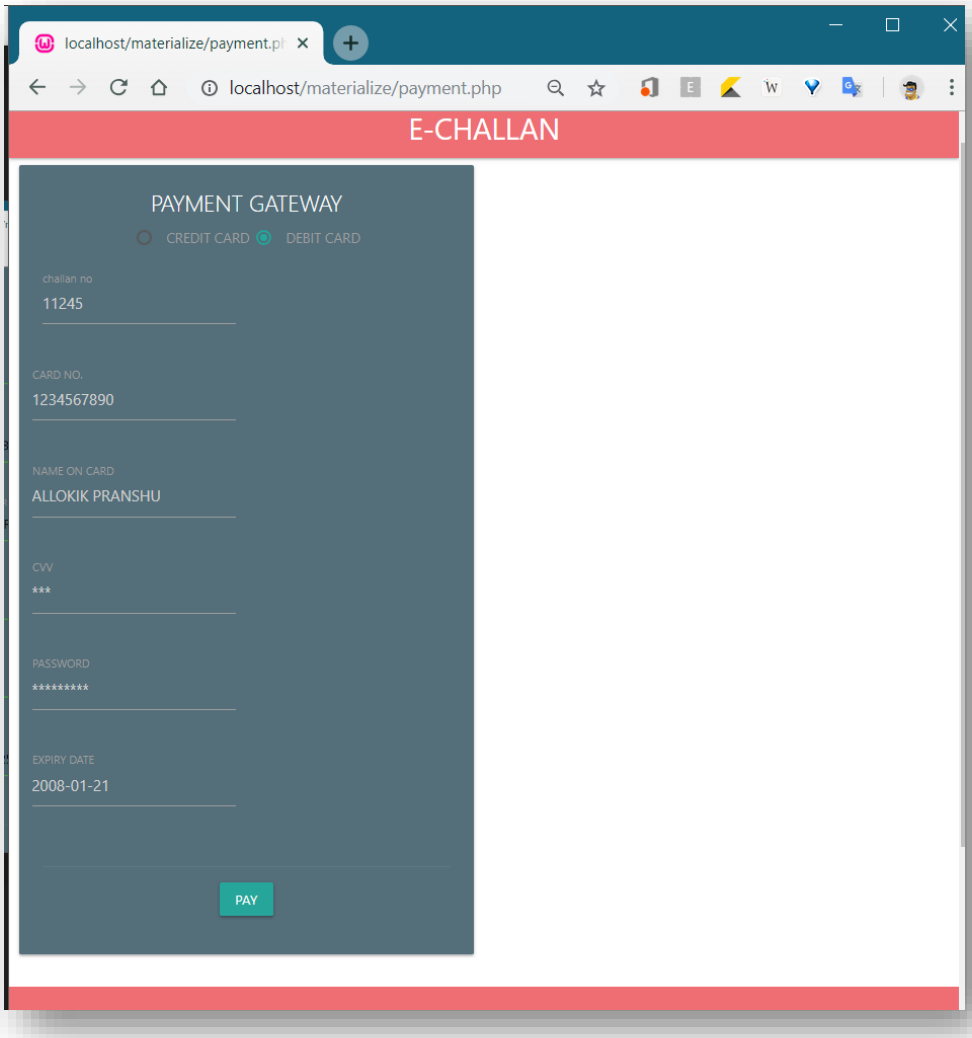
After entering a valid challan no. and clicking on check, all the necessary details of that challan will be displayed to the user .



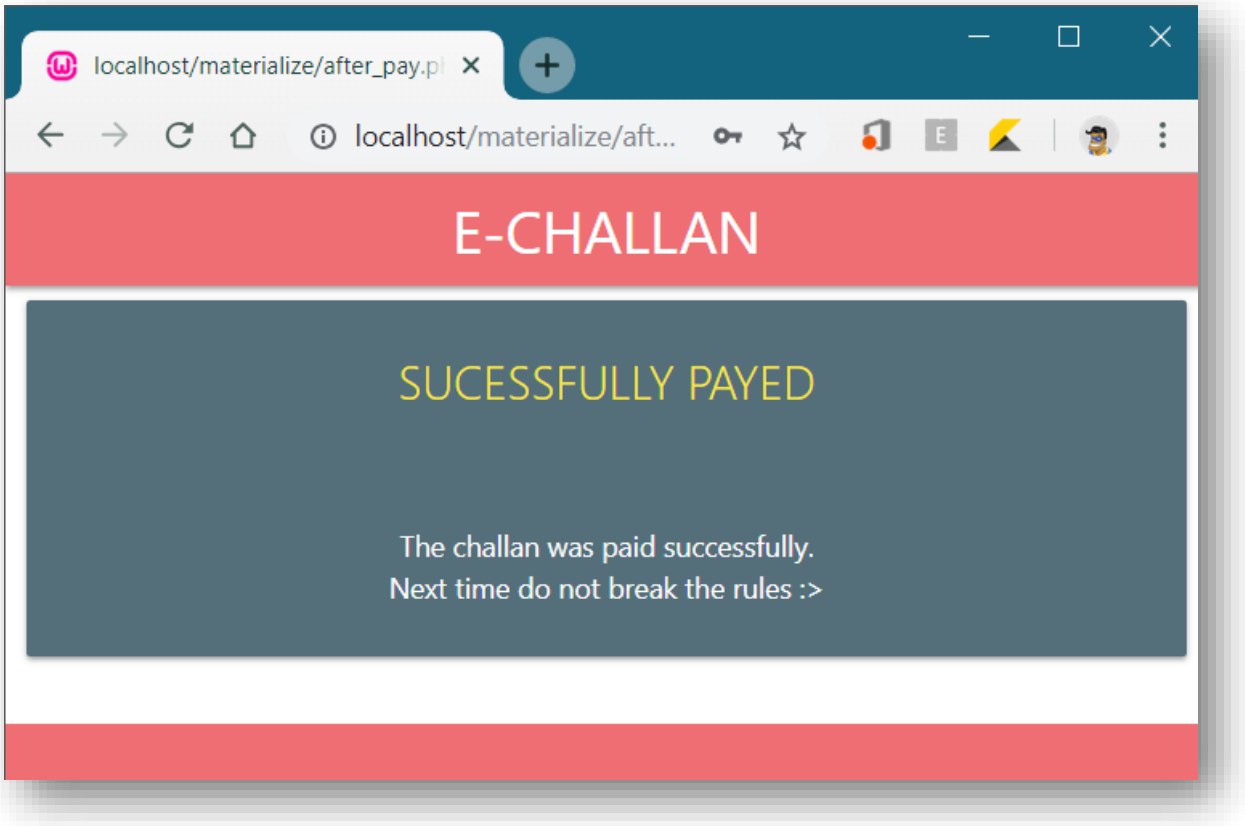
After that the user can proceed to the payment gateway page where after proper verification the user can successfully pay his/her challan.

MODULE 4 – PAY CHALLAN

In this page the user will enter the challan no. for which he is paying and his card details by which he is paying.



After verification from the card table at the back-end, if correct card credentials the payment for the challan no. will be received and the particular challan no. details will be deleted from the challan table. The user will be directed to the successful payment page.



RESULTS AND DISCUSSIONS

This project is a beautiful example of application of database management system. This project is developed to realize the potential of an automated system and database management which can reduce a great amount of manual work and enhance the accuracy and result. This project is just a single instance of a large potential application. It can be further developed to make it into a wide application with different features like license-issuing, driving license application, slot booking for driving license test and many more. This project was a wonderful learning experience giving an opportunity to learn the connection between front and back end and development of a database by undergoing through various stages of refinement, reducing redundancy, size etc. Overall this project gave a real world exposure to the problems of the world and an opportunity to solve through our knowledge.

REFERENCES

- http://breakthesecurity.cysecurity.org/2011/07/how-to-run-php-files-using-wamp-server.html
- https://www.c-sharpcorner.com/article/working-with-wampserver/
- https://materializecss.com/
- https://www.echallan.org/publicview/
- https://echallanweb.gov.in/
- https://www.quora.com/What-is-a-system-architecture-diagram-for-web-applications