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# PROJECT REPORT ON

# "Online Bus Pass Management System"

Project Report Submitted
In The Partial Fulfillment Of The Requirement For The
Degree Of

### **BACHELOR OF SCIENCE (COMPUTER SCIENCE)**

2019-2020

# SUBMITTED BY MR. MORE TUSHAR PRAKASH

UNDER THE GUIDANCE OF

Prof. Amol Borade (HOD Computer Science)

Prof. Anjali Girme (M.Sc. Computer Science)

SUBMITTED TO
COMPUTER SCIENCE DEPARTMENT

SHRI CHHATRAPATI SHIVAJI MAHAVIDYALAYA, SHRIGONDA

#### **CERTIFICATE**



This is certify that the project work entitled "Online Bus Pass Management System" has been successfully programmed by MR. MORE TUSHAR PRAKASH Computer Science, 2019-2020 at the Savitribai Phule Pune University under our supervision at the Computer Science Department, Shri Chhatrapati Shivaji Mahavidyalaya, Shrigonda, Ahmednagar.

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**Internal Examiner** 

**External Examiner** 

#### ACKNOWLEDGEMENT

I express our gratitude to the people who have rendered their valuable help for successful completion of this project.

I take this opportunity to express my sincere thanks to my project guide Mr. Amol Borade for not only initiating me in this project but also for her valuable help, guidance and hints during the course of this project completion.

I would also like to express my appreciation and deep sense of gratitude to Mr. Amol Borade, Head of Computer Science Department for his kind co-operation in extending all the necessary facilities of the department for the success of my project work.

Finally, I would like to thank all my classmates for their help during my project work.

**Mr.More Tushar Prakash** 

B.Sc. Computer science

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# **Project Profile**

Poject: - 24 Hourse Online Bus Pass System.

College: -Shri.Chatrapati Shivaji Mahavidyalaya,Shrigonda.

Front End: PHP / HTML / CSS / JavaScript

Back End: - MySQL

developed by: - Mr. More Tushar Prakash

Guide's By: - Prof.Borade A.B

#### INTRODUCTION

The "Online Bus Pass Management System" has been developed for only student. Online bus pass is useful for student who are facing problems override the problems prevailing in the practicing manual system. Moreover this system is designed for the particular need of the company to carry out operations in a smooth and effective manner.

The application is reduced as much as possible to avoid errors while entering the data. It also provides error message while entering invalid data. No formal knowledge is needed for the user to use this system. Thus by this all it proves it is user-friendly.

Online Bus pass generation is useful for students who are facing problems with the current manual work of bus pass registration and renewal. The studentsneed to register bysubmitt ing their details through online. After registration an OTP code will be send to student's mail. The administrator will verify the student details and if they are satisfied they will approve bus pass. The pass will be generated and send to student's mail. The student can login with their college idno and password and then renewal can be performed.

#### **EXISTING SYSTEM**

In the existing system bus pass registration and renewal process are carried out manually. The person has to visit the counter and have to submit the details and then they have to wait for approval. For each and every process there is time limit specified the person fails to go on time then all the transactions will be cancelled. In this existing system was used to bus details maintain through file. And after bus information are stored to computerize. The Project Metrics has to enter all the details of project, documents, and tasks. And, also the maintenance team information and also efforts estimation. For this purpose the organization maintain the size of the document, source code and update the information about team member's details manually. Whichis much of time consuming process and more importantly it is error prone. At present system bus pass collect from depot very rare one. User can facing lot of problems.

This system has the following advantages and Disadvantages: <a href="Advantages">Advantages</a>:</a>

- **1.** You can find all the bus pass related information online without going to the bus station.
- **2.** Times New RomanThis online bus pass software system will help students and passengers get bus passes online and eliminate the need of standing in queues for passes or collecting a ticket for each journey
- **.3.** The payment can be done online via credit or master card.

### **Disadvantages:**

- 1.It is time consuming.
- 2.it consumes lot of manpower to better results.
- 3.It lacks of data security.

#### PROPOSED SYSTEM

The proposed system overcomes the drawbacks in the existing system. In the proposed system user register their details through online and get their unique username and password for further processing. The bus pass will be differ for different types of users. In this bus pass, all the required details such as candidate name, address, date of birth, mail id, name of the school(government/private), validity period, amount paid (free for government school students) and photo copy of the candidate are provided. Instead of school details, working organization details will be provided in employees bus pass. The renewal process canbe donemonthly as per user wish. Based on that renewal period amount will be deducted.

### A.Features of the Proposed System:

- To make accuracy and efficient calculations. To provide proper information briefly.
- To provide huge maintenance of records.
- Flexibility of transactions can be completed in time
- Easily bus pass apply through online.
- Eco\_Friendly.
- User\_Friendly.
- Easy and Secure. Well designed reports.
- Work becomes very speedy.

#### SCOPE OF THE SYSTEM

Online Student Bus Pass Generation system is a web application for students to get bus passes through online.

Before this application implementation the manual process is used to do the process of issuing the Bus pass to the students. This Manual process requires manpower and more time consuming. To avoid such difficulties we implemented this system

# The key components of A Student Bus Pass Generation system is:

- Bus pass renewal
- It satisfies the user requirement.
- Be easy to understand by the user and operator.
- Be easy to operate.
- Have a good user interface.
- Be expandable.
- > Delivered on schedule within the budget
- Bus pass generation

### **OBJECTIVES OF THE SYSTEM**

The main objective of the Project on Online Bus Pass Management System is to manage the details of Students, Staff Login, Pass Fee and also find Live Bus locations. The purpose of the project is to build an application program to reduce the manual work for managing the Students, Smart Card, Pass Amount Receipt, Connection. It tracks all the details about the Buses, Staff. The "Online Bus Pass Management System" has been developed for only student. Online bus pass is useful for student who are facing problems override the problems prevailing in the practicing manual system. Moreover this system is designed for the particular need of the company to carry out operations in a smooth and effective manner.

- To tracks all the information of Buses, Staff, Students, Smart Card etc.
- To Shows the information and description of the Students and senior citizens.
- To make accuracy and efficient calculations. To provide proper information briefly.
- To provide huge maintenance of records.
- To Manage the information of Students.
- Easily bus pass apply through online.

### **SYSTEM REQUIREMENT**

### **Software Requirements:**

• Operating System - Window 7, Ubuntu and Above.

Front End
 Back End
 HTML and CSS
 MySQL and PHP.

### **Hardware Requirements:**

• Processor - Pentium ( min ).

• Speed - 1.1 GHz ( min ).

• RAM - 500 MB ( min ).

• Hard Disk - 50 GB ( min ).

• I/O Devices - Mouse, Keyboard, Monitor, Printer

#### SYSTEM ANALYSIS

#### **FEASIBILITY STUDY:**

After doing the project Online Bus Pass System, study and analyzing all the existing or required functionalities of the system, the next task is to do the feasibility study for the project.

The primary goal of the system analyst is to improve the efficiency. It is very good project for college students and senior citizens. It is online project user and college student are going to web site and apply for smart card and also recharge for smart card it is very good and user friendly.

Students get 10% discount and senior citizens get 30 percent discount of the pass. It is very good and usefull. The pass is available on monthly. In this project user are fullay seatify and also all the user requirements will be complected fot this project online bus pass system.

### **1.** Technical Feasibility:

This included the study of function, performance and constraints that may affect the ability to achieve an acceptable system.

performance and constraints that may affect the ability to achieve an acceptable system. For this feasibility study, we studied complete functionality to be provided in the system, as described in the System Requirement Specification (SRS), and checked if everything was possible using different type of frontend and backend platforms

### 2. Operational Feasibility:

No doubt the proposed system is fully GUI based that is very user friendly and all inputs to be taken all self-explanatory even to a layman. Besides, a proper training has been conducted to let know the essence of the system to the users so that they feel comfortable with new system. As far our study is concerned the clients are comfortable and happy as the system has cut down their loads and doing.

### **FACT FINDING TECHNIQUES**

A fact finding study was undertaken to study the activity involve in Online Bus Pass System.

The System was studied by means of:

- 1. Interview.
- 2. Questionnaire.
- 3. Record Review.
- 4. Observation.

#### 1. Interview:

- Interview is the most commonly used technique to collect information from the face-to-face interviews.
- The purpose of interview is to find, verify, clarify facts, motivate end-users involved, identify requirements and gather ideas and opinions.
- The role of interview includes interviewer who is system analyst and interviewee who are system owner or user.
- Interviewing technique needs good communication skills for interaction between system analyst and user.

### 2. Questionnaire:

- Questionnaires are also one of useful fact-finding technique to collect information from large number of users.
- •Users fill up the questions which are given by the system analyst and then give the answers back to the system analyst.
- •Questionnaires can save time because system analyst does not need to interview each of users and if the time of interview is short, questionnaires are more useful.
- •To ful fil the requirements of the system objective, system analyst should have the ability to clearly define the design and frame of questionnaires.

#### 3. Record Review:

- To gather details about the Online Bus Pass system, many kinds of record and report were reviewed.
- The study covered.
- Standard / Traditional Operating procedures.
- Reports generated by the existing system.

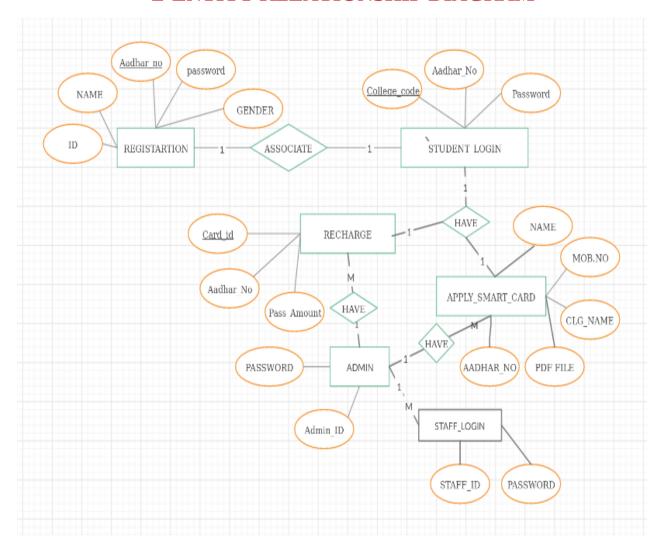
#### 4. Observation:

Observation is the most useful when the analyst needs to be actually observe how document are handle, how process is carried out and specified step are follows or not. Sitting in the warehouse enables us to observe how the stock deals with the student and course database.

Observation help in finding alternative routes and procedures also helps in making proper usage of documents.

### **SYSTEM DESIGN:**

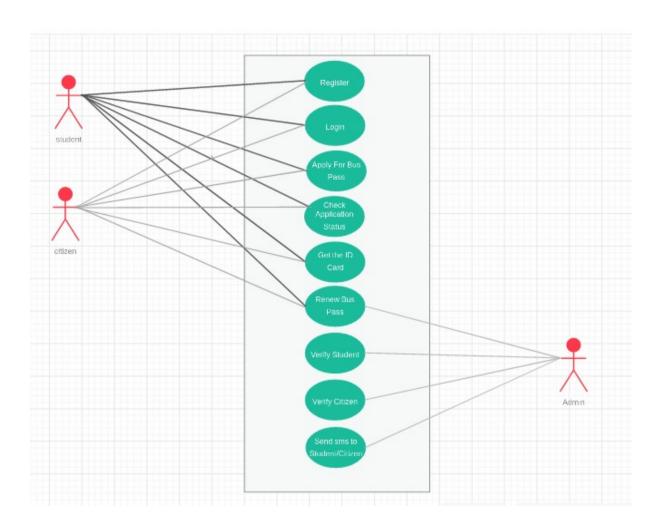
### 1 ENTITY RELATIONSHIP DIAGRAM



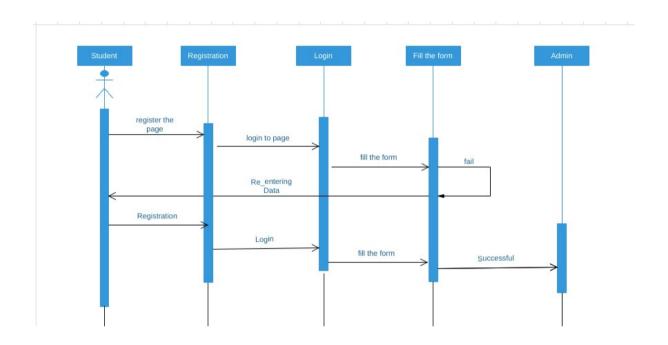
**ER Diagram for Online Bus Pass System** 

# **UML DIAGRAM:**

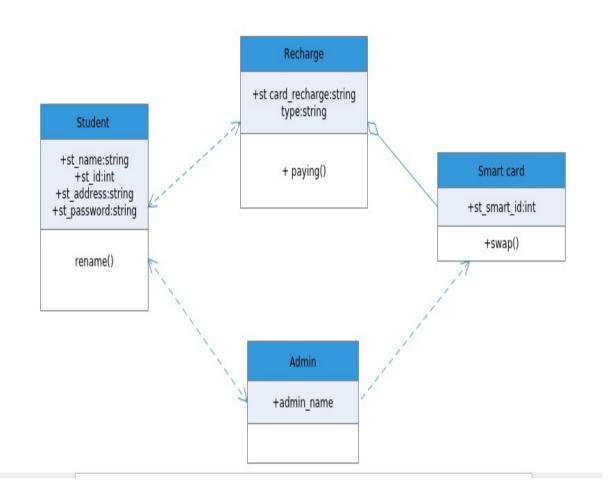
# 1. Use Case Diagram



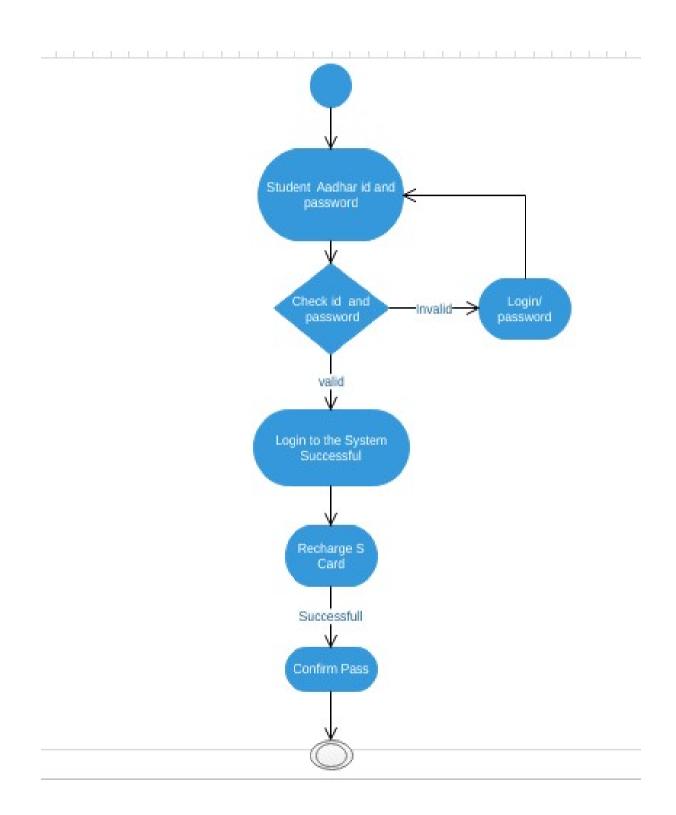
# 2. Sequence Diagram



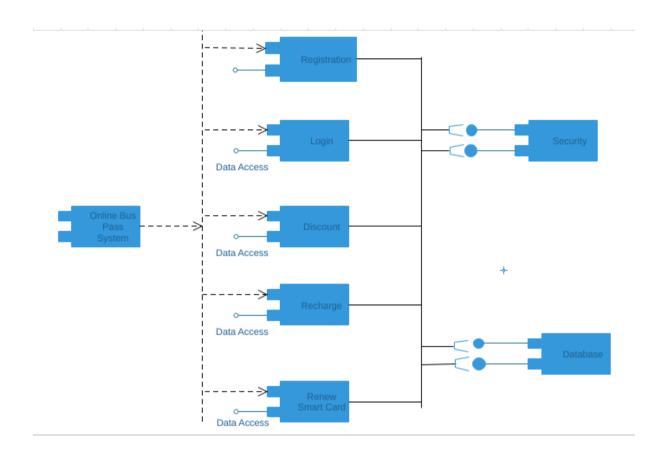
# 3. Class Diagram



# **4.Activity Diagram**



# 5. Component Diagram



### **DATA DICTIONARY**

Data flow diagrams themselves not describe all details about data flows. For investigation one more tool is used to support DFD's which is called as Data Dictionary. Data Dictionary provides additional information about the system. Data dictionary is also called as catalog.

# 1. Login Details of Students:

FIELD NAME	DATA TYPE	DESCRIPTION	SIZE
Aadhar No.	varchar	Aadhar Card Number	30
Password	varchar	Password of Student	30

# 2. Student Registration Details:

FIELD NAME	DATA TYPE	DESCRIPTION	SIZE
Id	Integer	No. of Students	40
First Name	Varchar	First name of student	20
Last Name	Varchar	Last name of student	50
Middle name	Varchar	Middle name of students	30
Gender	Varchar	Gender of student	5
Mobile No.	Integer	Mobile No. of student	15
Aadhar No.	Integer	Aadhar No. of student	14
Password	Varchar	Password of student	40

# 3. Student Recharge Details:

FIELD NAME	DATA TYPE	DESCRIPTIO N	SIZE
Card No.	Integer	Card no. of Student	20
Aadhar Card No.	Integer	Aadhar no of Student	20
Pass Amount.	Integer	Pass Amount	05

# 4. Apply for Smart Card Details;

FIELD NAME	DATA TYPE	DESCRIPTIO N	SIZE
First Name	Varchar	First name of student	20
Last Name	Varchar	Last name of student	50
Middle name	Varchar	Middle name of students	30
Gender	Varchar	Gender of student	5
Mobile No.	Integer	Mobile No. of student	15
Select1	Varchar	Name of villages	20
Select2	Varchar	Name of villages	30
College Name	Varchar	Name of college	20
Aadhar No.	Integer	Aadhar No. of student	14
Photo PDF	File	Photos	14
College- Bonafied PDF	File	Bonafied of college	12

# **Admin Login Details:**

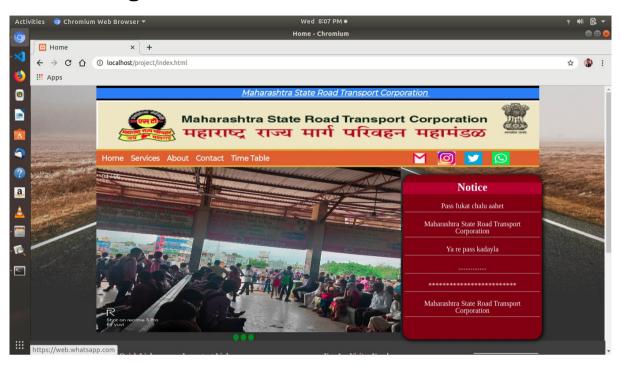
FIELD NAME	DATA TYPE	DESCRIPTIO N	SIZE
Admin ID	varchar	User ID of Admin	40
Password	varchar	Passsword of Admin	40

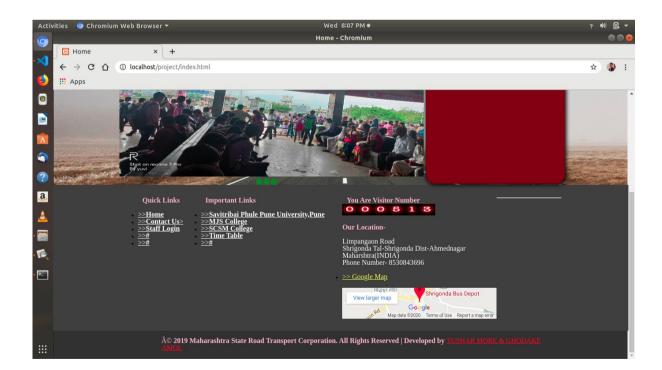
# Staff Login:

FIELD NAME	DATA TYPE	DESCRIPTIO N	SIZE
Staff ID	varchar	User ID of Staff	40
Password	varchar	Passsword of Staff	40

### **FORM DESIGN**

### 1. Home Page:



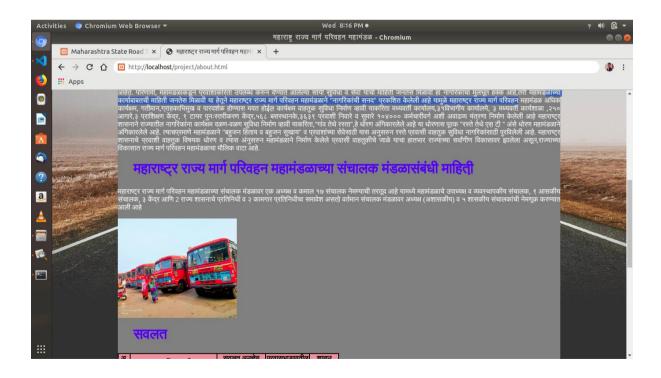


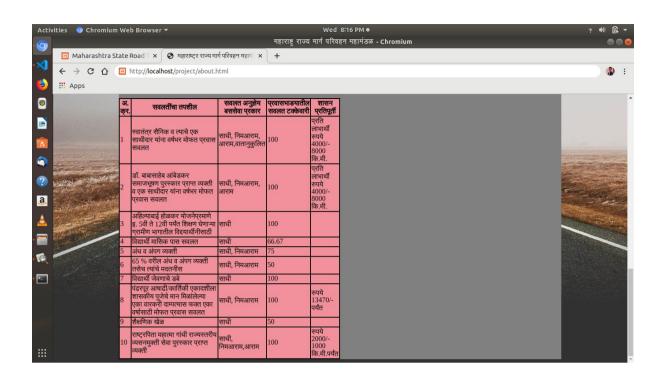
# 2. Service Page:



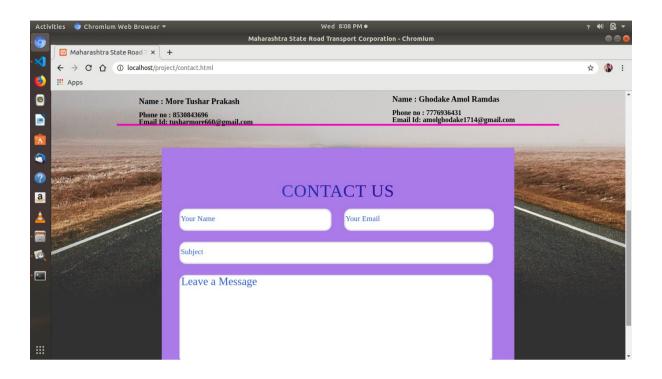
### 3. About Page:



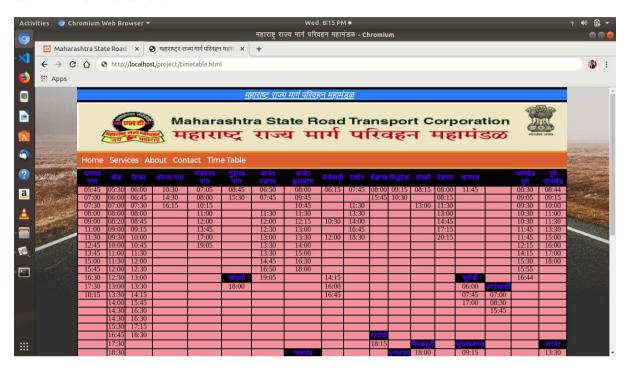


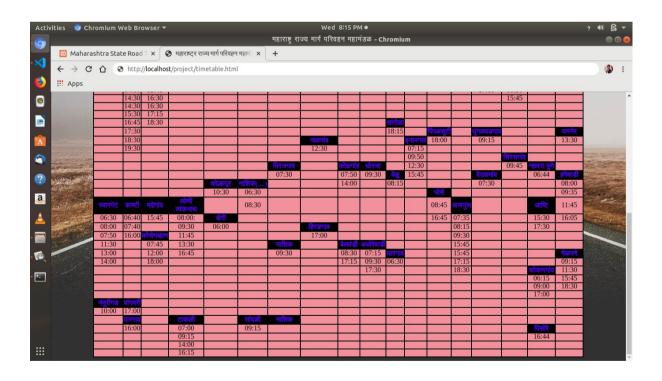


# 4. Contact Page:



### 5. Time Table:





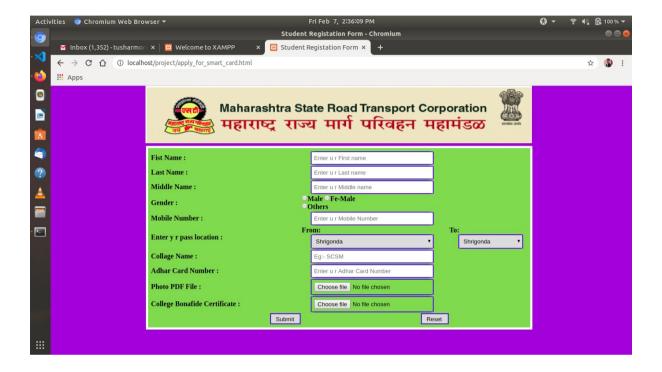
# 6. Student Registration Form:



# 7. Student Login Form:



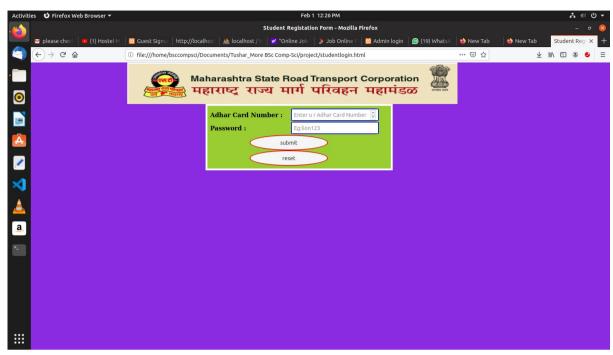
### **Apply for Smart Card Page:**



# 8. Student Recharge Form:



### 9. Admin Login:



# 10.Staff Login:



#### LIMITATIONS OF SYSTEM

Students can apply for Smart Card over the Internet, 24 hours a day throughout the week, this solves the issue of students bus pass and also bus ticket. In addition, the online system lets the customers check the availability of the bus ticket before they buy bus ticket. Furthermore, customers no need to pay cash to buy bus ticket because they can pay the bus ticket by using Credit Card (e.g. Master Card, Visa Card). and students give a pass online and recharge smart card online students no need to pay cash you want to pay Credit Card (e.g.Master Card, Visa Card).

Hence, there is a need of reformation of the system with more advantages and flexibility. The Bus Scheduling and Booking System eliminate most of the limitations of the existing software. Bus pass web system to put it simply, means system can provides pass identification using bar-code, Pass renewal, cancellation, updating, Student discount etc.

Using this website we can check all details related Bus pass and instruction like how to renew pass how to update it, and also provide details of student discount. This website keeps all information of all Bus pass. This online bus pass software system will help students and passengers get bus passes online and eliminate the need to stand in ques for passer or collecting a ticket for each journey. Passengers first need to verify themselves the system using various address and photo proofs. Once verified the system allows them to book passes for any route online.

- •You could not pay pass amount Off-line.
- •Take the signature of Bus Office Head and take your pass receipt.
- •In Summer Hollydays You can't Renew Your pass.

### CONCLUSION

This is very useful project for public who are facing problem with manual work of bus pass. It is a real time project for registration and renewal of bus pass. It also help people by providing or sending a message or mail before completion of his or her bus-pass validity. The registration be done and renewal can using online payment. In this project the new requirement can be or changed by easily added the Admin. Following changes can be updated by the admin First is admin can view new route information as well as fare can be calculated i.e. payment system can be improved or updated.

I have learned how to undertake certain tasks under pressure. Going through the entire life cycle process of software development made learn how to get organized in everything. The set of documents that I have produced an insight into the necessity and usefulness of rigorous documentation.

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