Abstract

The Bus Ticket Booking (BTB) is a system or software to facilitate the travelers as well as the authority & employees by making the transportation much easier. In this project we have tried to make the transportation system better & comfortable for the travelers.

It is very annoying for the long route bus passengers to collect ticket by standing in a line for hours and hours. It is also pretty much difficult for the authority to manage the system manually and reserve the information of every traveler. That's why this project is actually for managing the system in a digitized way so that the passengers can get their tickets, know about the time schedule, book their seats, pay their money and get any kind of information without being physically present. And the authority also can do their job in a very systematic way and reserve the information of a passenger easily.

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1. Introduction

Our project is on "Bus Ticket Booking". Actually this is all about a good booking system. Transportation has become nowadays a great problem in Bangladesh. As our population is increasing very fast and we are already an overpopulated country, we all have to suffer a much while travelling anywhere. But it will have an efficient solution if we can make all our transportation system digitized and can manage them in a very systematic way. Today the whole world is using technologies to make their life much easier. So in our project we have tried to make a simple technology based transportation system for reducing the sufferings of both the passengers and the authority by giving the opportunity of booking bus ticket easily instead of standings in the queue especially in the vacation period.

1.1. Background of the project

Before implementing the project, we have gone through many articles about the present condition of transportation system in Bangladesh and other countries also. From many researches it is pretty clear that we are actually not technology dependent. That's why like all other problems the transportation has also become a huge problem for us. Except a few well-known companies, the digitized transportation or ticket booking has not been established yet. Meanwhile, in other progressed countries it has been implemented many years ago.

That's why observing the above mentioned condition and thinking about the facilitation of the general people we started our project. We hope that if it became successful it will bring a huge change in our entire transportation system.

1.2 Conceptual framework

Our main focus on this project is removing the problems regarding transportation system. It is mainly to facilitate three groups of people.

Admin

BUS TICKET BOOKING
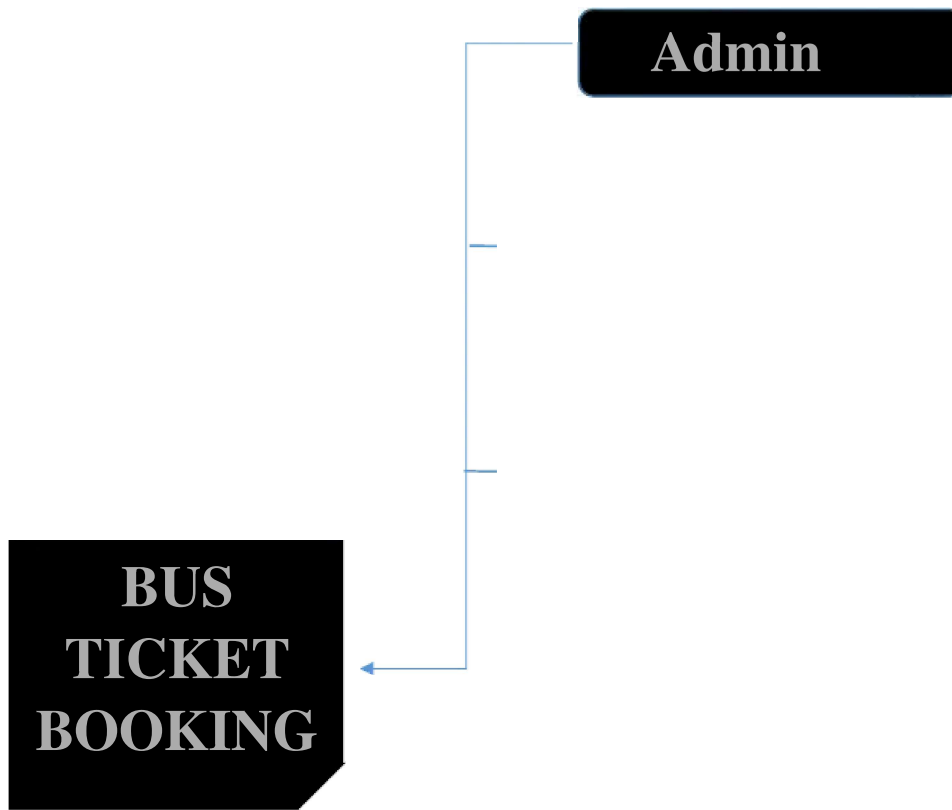
So the concept of our project is based on the idea where these three groups will be able to communicate through a system. Travelers will receive the service and the administrative part will provide the service through this system or software. So the main concept was to bind together all three groups for a systematic management.

Except these three types of logging there is "No Login" system. This allows a normal user to access the system only for query of bus route or other information related to the services.

2. Objective

Transportation system of our country is so poor that we have to suffer a lot for booking ticket, collecting ticket, paying for ticket and we cannot do these things without being physically present. Even the authority also suffers a lot for managing the passenger's requirement. That's why our project is to reduce all these problems.

Firstly, our aim is to make the system by which the passengers can book their tickets. They can also choose the bus which is affordable for them. They can also choose the route where they want to travel. And they can also choose their seat where they prefer to be sited. All they can do without being physically present. They will just come at the time of travelling. Their personal information will also be preserved by the authority.

Secondly, the authority or administration will also able to provide good services to the travelers and manage the system very efficiently and quite easily. It is very difficult mange the whole system manually. There is a great possibility of many difficulties to provide the seat booking system and payment system. Often there creates argument and other problems between the travelers and the authority regarding the mismanagement. So our target is to remove this problem also.

Thirdly, our objective is also to facilitate the employees to do their job properly. They can use the software for making their job very easy. That's how the authority also can be benefitted when the employees also be able to manage their work properly.

Fourthly, there is also a query system included where passenger or normal people can access for the basic information like, bus route, bus schedule, bus fare etc. Now a days, people usually go to the bus counter to know these types of information and largely waste their time by standing in the queue. And also a great sufferings for the employee and administration.

3. Literature Review

To implement this project we have gone through so many projects and reports which were done before. Even we have observed so many projects on different topics like Student Information System, Hospital Management System and different projects on Vehicle Management and Transportation. On the basis of these ideas we tried to complete the project. But there are so many differences in these projects and our projects.

College Bus Management System Project in Java | 1000 Projects

(Collected From: http://1000projects.org/college-bus-management-system-project-in-java.html)

The **College Bus Management System Project in java** is being developed to provide a tool for the different colleges to easily maintain the college bus information. The system will give an effective output for the Java & Microsoft excel given as input to the system. The compiled java program given as input to the system, after scanning the program will generate different reports.

This system actually for the management of college bus. Here they provides the college students the transportation facility and reserve their information. In our

project we have made the system for general people to where their information also being reserved. So it is almost similar to our project.

Programmer's Place: Transport Management System in java

(Collected From: http://placeforcoder.blogspot.com/2015/05/transport-management-system-in-java.html)

This java program for transport management system contains all the information for bus route, bus information, driver information, passenger information, Ticket information and many more. It is a very good project on transport management. Following this we have also tried to keep different types of features regarding bus routes, departure time, payment for seat booking, passenger information, type of bus etc.

This program is Transport Management System called AwetraSoft. It allows user to add driver, sell tickets and other cool features. In our system we have also tried to provide travelers to book seats, buy tickets and reserve their information in the system.
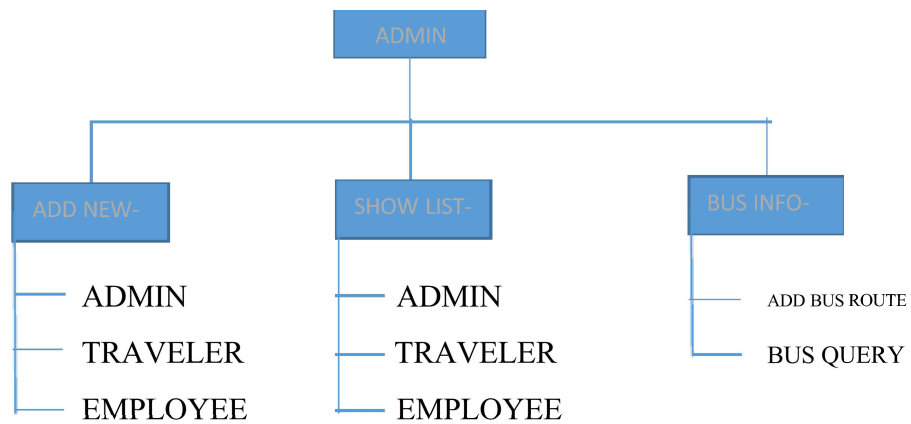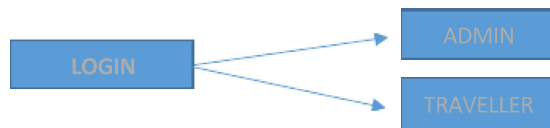
Besides those projects we have also studied many more projects on Transportation, Ticket Booking, and Reservation System. Different projects have made including different features. Some have added driver information also. Finally studying all of these projects we have made our project in our own way.

4. Methodology

The first page of the project contains login option for admin traveler, and employee along with choosing no login option.

Database class includes a **SQLite** database connection of the login facility, adding new members, adding bus route, bus seat info, booked ticket info, and so on.

Login class can access another classes includes admin, traveler, employee, no login, wrong login class.

LOGIN → ADMIN
LOGIN → TRAVELLER

ADMIN

ADD NEW-	SHOW LIST-	BUS INFO-
ADMIN	ADMIN	ADD BUS ROUTE
TRAVELER	TRAVELER	BUS QUERY
EMPLOYEE	EMPLOYEE	

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                          ┌──────────────┐
                          │   TRAVELER   │
                          └──────┬───────┘
             ┌───────────────────┼───────────────────┐
      ┌──────┴──────┐     ┌───────┴───────┐    ┌──────┴──────┐
      │  BUY TICKET │     │ SHOW BOOKED   │    │  BUS INFO-  │
      │             │     │    TICKET     │    │             │
      └──────┬──────┘     └───────┬───────┘    └──────┬──────┘
```

BUY TICKET
- JOURNEY DATE
- SELECT COUCH
- SEAT NO.
- CONFIRM TICKET
- PRINT TICKET

SHOW BOOKED TICKET
- COUCH NO.
- JOURNEY SCHEDULE
- SEAT INFO

BUS INFO-
- AVILABLE SEAT
- BUS QUERY
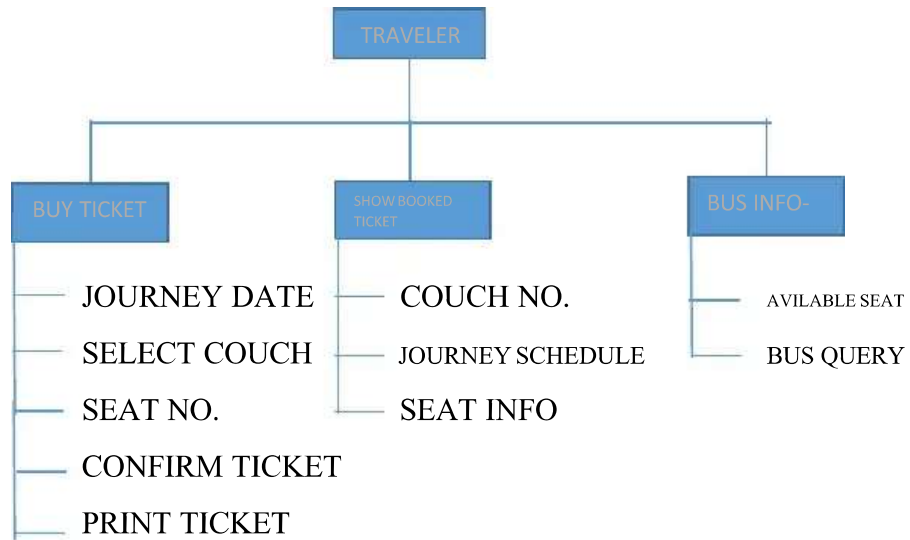
5. Result

After finishing our project we got a system on transport management. Using the system now we can manage the transportation very easily. The output is shown

Here we can see two parts. The selection of types and other one is login panel. First we have to select the login type according to the choice or types. And in the login panel we have to give username and password according to login type in order to login in the system.

If we select 'Administration' mode and put username and password and select 'Login' button it will open a new window containing the functions that should be controlled by an admin.

It will open a new window containing three facilities- Buy Ticket, Showing Booked Ticket and Bus Query. But at the top it will also show the travelers Full name.

Buy ticket button will open an internal window showing the reserved system. Here, we can select journey date, couch no, seat no. The other information like, bus route, available seat, journey time will be automatically provided from the database.

The 'Confirm Ticket' button will reserved the seat which the user selected. After confirmation the "Confirmed" panel and a ticket preview will be shown where there will be all the information included regarding journey (Schedule, Fare, and Seat No.).

CHAPTER 6

RECOMANDATION

6. <u>Recommendation</u>

We have made a fundamental system of **BOOKING TICKET**. But it can be made more efficient by adding many more features. There can be added driver's information and employee's information also. So it would be easier for the admin to control the entire system.

Technology is becoming more advanced day by day. So it would be a wonderful project if we can make it more technology based. It can be made more beneficial for the travelers if we could add extra facilities.

If someone wants to implement further project on transport management, he can think about how it can be more efficient and beneficial both for the passengers and the authority. But before implementation the things which should be keep in mind-

a) How much efficient it is.
b) Is it complicated or user friendly system.
c) How much secured the reserved information are.
d) Is the system updating frequently or not.

Keeping all these things in mind one should go for the implementation of the system.

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