BSCS IV ‘Section (A)’

BUS Service Database Management System

Schema Proposal

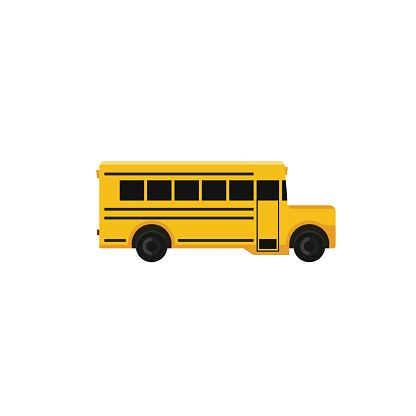
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Group Alpha

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# Introduction:

It is observed that people go to bus station booking offices and ask for the suitable bus and tickets and it takes much time. So that we had decided to create an app for the people’s ease that they can save their and also others time by using that app. In that app we are going to use bus station’s database to manage it and use some queries by which people can easily select their suitable bus according to their budget.

Our application name is “***Look Your Bus***”. We are going to give many queries to the passengers like bus schedule, available tickets and stations timing. Actually our main priority is to put some contribution in the technology of Pakistan, if our bus station department will be digitalized it can generate more revenue and more people will like to travel through bus.

**Scope:**

As everyone knows that it is the era of technology every person wants to do the things in the couple of seconds. So keeping in view, we decided to create an application to make the bus station database digitalized every one can see the available seats in the bus and book them also. We are going to categorize the tickets fairs as according to the class like business, standard and economy. Bus and stations schedule also will be mentioned with query.

The system will give us a lot of market value because it comes in the e-commerce category and we observed that the companies who moved to e-commerce they got much revenue and by that revenue our department of bus station will grow more.

The system will have login and signup page. It will have a dashboard, menu section, setting section, stations schedule, customer detail, bus schedule, booking menu and bus details also.

**Efficiency:** The application will have attractive GUI. Customers can easily use the app and put their desired query easily.

**Accuracy:** The system will be more accurate because everyone can do the booking by their self, in this case chances of mistake are very less rather in the booking offices there is very hectic environment and in this way booking officers sitting on the booking counter do more mistakes.

**Group Members:**

**Najiullah Qureshi: -** write the proposal, work together in query setting and connecting database with GUI.

**Hamza Hamid: -** Do coding, query setting and help in connecting database with GUI.

**Muzammil Khan**: - Building the database and help in writing the proposal.

Our all task setting will be together because as a team we will take a major task and do that in small divided tasks to create the more team interaction and mobility. In that way there are much chances of getting the perfect output.

**DOMAIN AND DATA TO BE STORED:**

Bus station management system lies in the domain of e-commerce marketing. The data we are going to store in that system is login info of the admin and the management contains information about the buss and passengers that what is the bus schedule and passengers booking information. We will show the status of passenger’s payment, information about their bus departure and arrival, stations timing and so on. And in the end it will store all the data date-wise and you can search it either by passenger name or bus, there will also be an option of manage bus timing if the schedule is updated so that the data will be organized and easily accessed by the admin. In the nutshell, the tables in our project will be:

* Admin (admin\_id, fname, lname, gender, age etc)
* Passenger (customer\_id, fname, lname, gender, age etc)
* Bus ticket (ticket\_id, ticket\_num, destination etc)
* Station (station\_id, bus\_id, station\_name etc)
* Transaction (Trans\_id, trans\_num etc)

**Conclusion:-**

Overall we are going to provide the bus station’s passengers a very attractive and easy to use application from which they can easily book their tickets and see their bus schedule. We will also give ease to the admin so that he can maintain and organize the bus schedule and their fairs accordingly.

**SQL SCHEMS FOR Ticketing Management**

CREATE DATABASE Ticketing Management;

USE Ticketing\_Management;

CREATE TABLE Bus\_INFO(

Bus\_numberVARCHAR(30),

Available\_seatsint(10),

Booked\_seatsint(10),

Departure\_timeVARCHAR(30),

Arrival\_timeVARCHAR(30),

Bus\_typeVARCHAR(30),

Date VARCHAR(30),

Location VARCHAR(30),

Destination VARCHAR(30),

Seat\_numberint(10),

Total\_seatsint(10),

primary key (Bus\_number)

);

CREATE TABLE Route\_Info(

Route\_idVARCHAR(30),

Pickup\_pointVARCHAR(30),

Route\_pointVARCHAR(30),

primary key (Route\_id),

foreign key(Bus\_number) references Bus\_INFO(Bus\_number)

);

CREATE TABLE Passenger\_Info(

Passenger\_idINT(30),

passenger\_first\_name VARCHAR(30),

passenger\_last\_name VARCHAR(30),

cnic VARCHAR(10),

contact VARCHAR(30),

address VARCHAR(30),

genderVARCHAR(30),

ageint(10),

Bus\_numberVARCHAR(30),

primary key (Passenger\_id),

foreign key(Bus\_number) references Bus\_INFO (Bus\_number)

);

CREATE TABLE TICKET\_INFO(

ticket\_id INT(30),

adult/child VARCHAR(30),

destination VARCHAR(30),

total\_ticketsINT(30),

ticket\_price INT(30),

final\_priceINT(30),

Bus\_numberVARCHAR(30),

Passenger\_idINT(30),

primary key (ticket\_id),

foreign key(Bus\_number) references Bus\_INFO (Bus\_number),

foreign key(Passenger\_id) references Passenger\_Info (Passenger\_id)

);

**BUS TICKETING MANAGEMENT SYSTEM**

Passenger

Bus

ONE

ONE

MANY

TravelVia

ONE

Buys

Ticket

Route

Boards

MANY

MANY