



# **Ahsanullah University of Science & Technology**

## **Department of Computer Science & Engineering**

**Course No : CSE3104**  
**Course Title : Database Lab**  
**Subject : Final Project Report Submission**

**Submitted By-**

**Group : Bus Ticket Management System(Bus\_Log)**  
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## Abstract

**Bus Log** is a Database project which we developed in Java Frame work. Bus Log is mainly developed for bus counter manager where he/she can easily book the ticket for the passengers. In this project we try to add all possible route and well known bus company.

In this project we have used JAVA (jdk-8.0.2) language along with an open-source Java-based framework, Java Swing. Java Swing is used to design our interface and UI. For managing data we have used a relational database management system (RDBMS). In this project we have used Microsoft SQL Server 2019.

## Objective

We will analyze the project scenario and find out all the possible entities, relationships, and attributes. Then we will make a ER Diagram along with Relational Schema. We will ensure that the cardinality constraints and the relationships are accurate and meet up real-life scenarios. We will make the UI user-friendly so that users can easily find out the features they need and save time.

## Strategy & Technology Used

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We developed **Bus Log** in Netbeans(8.2) which is very user friendly . We connect Microsoft SQL Server 2019 with Netbeans(8.2) JDBC server connector([mssql-jdbc-9.4.0.jre8](#)). To show the data from the database we add a .jar file which name is [rs2xml.jar](#) By using this .jar file the work complexity dropped.

## Database Table and Relation

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### RouteList

RouteId **int** (Primary Key)  
RouteFrom **varchar**  
RouteTo **varchar**  
Distance **int**  
PerKMFare **int**

### Bus

BusNo **varchar**(Primary Key)  
BusName **varchar**  
Model **varchar**  
Condition **varchar**

BusType varchar  
Seat int  
DepartureTime time  
BusStatus varchar  
RouteId int(Foreign key)

### **Customer**

CustomerId int(PRIMARY KEY)  
FirstName varchar  
LastName varchar  
Email varchar  
PhoneNo varchar  
CustomerAddress varchar

### **Orders**

OrderId int (Primary Key)  
OrderNo int  
CustomerId int(Foreign Key)  
BusNo varchar(Foreign Key)  
SeatCount int  
OrderDate date  
Departuredate date  
Total\_Fare int

### **Users**

UserNo int (Primary Key)  
UserID varchar  
Userpassword int



