



Green University of Bangladesh
Department of Computer Science and Engineering (CSE)
Faculty of Sciences and Engineering
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Course Title: Database Lab
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Lab Project Name: Railway Management System

Student Details

	Name	ID
1.	Nahida Pervin Nisha	203002028
2.	A.K.M Hasnine Mamud	203002004
3.		

Submission Date : **08-09-2022**
Course Teacher's Name : **Md. Gulzar Hussain**

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<u>Lab Project Status</u>	
Marks:	Signature:
Comments:	Date:

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Chapter 1

Introduction

1.1 Introduction

A user may quickly handle customer information, booking information, and timetable information using the **Railway Management System**, an internet program. It is the computerized mechanism for making in advance reservations for train seats. It is primarily utilized on lengthy routes. In both the short- and long-term, railway operators may boost performance and efficiency by putting the right positioning infrastructure in place.

1.2 Design Goals/Objective

Railway Management - Railway Management is the main feature of this system wherein the ER diagram contains the basic details needed for managing ticket records and availability. This basic information was composed of railway records, ticket sales, counts, and availabilities. It will also monitor or check about the customers' info and purchasing or reservation status. **Customer Management** - This feature plays a big role in the system because this gather and manages the important information of the customer. This information was used to track their transaction and reservation records and other important matters regarding the system to assure that the services were given properly. **Manage Tickets** - The ticket management will be done by the admin to track the number of reserves and remaining available. This will also monitor the count of their customers as well as their revenues. **Manage Revenues and Record Transactions** - Its feature will manage and monitor the revenues and secures every transaction made by the customer. This is also the basis for their income and expenses. Through this, the admin will have the records of transactions and review them for future use.

Chapter 2

2.1 Schema Diagram

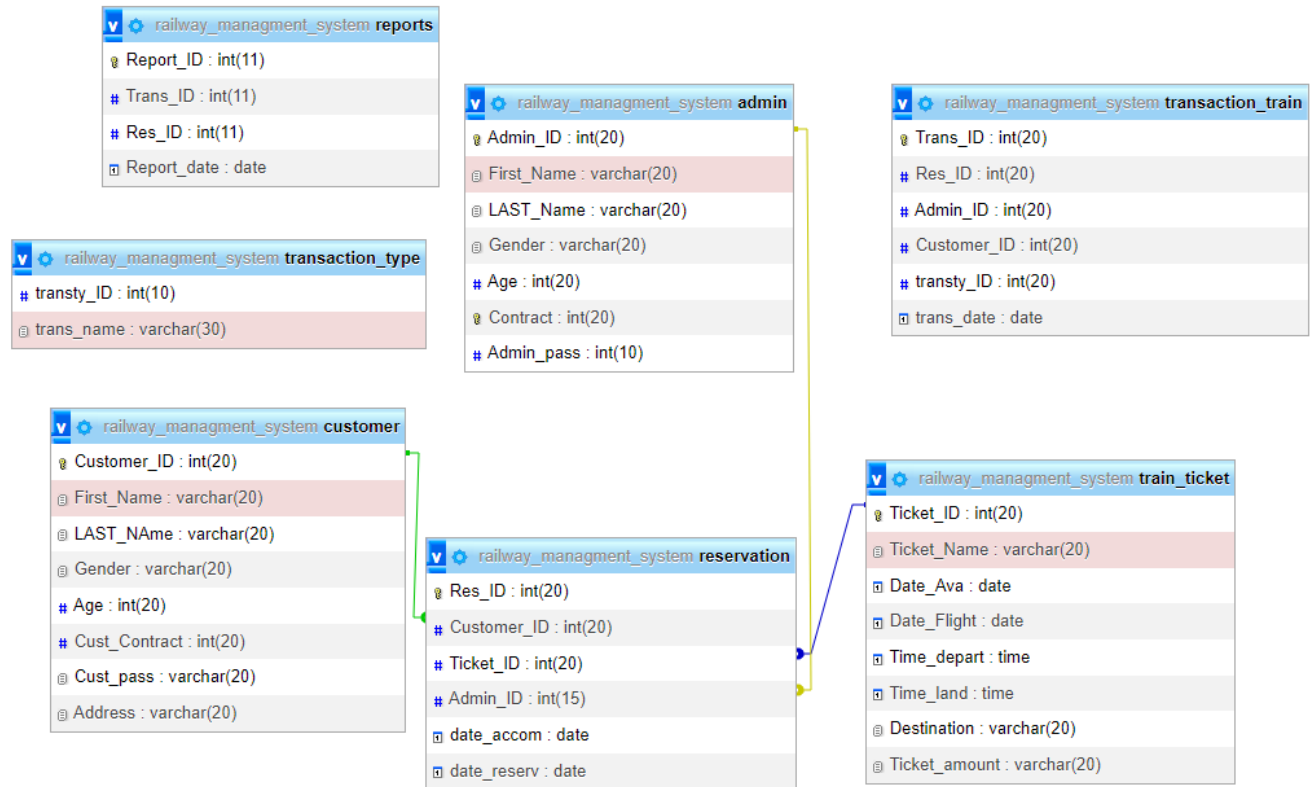
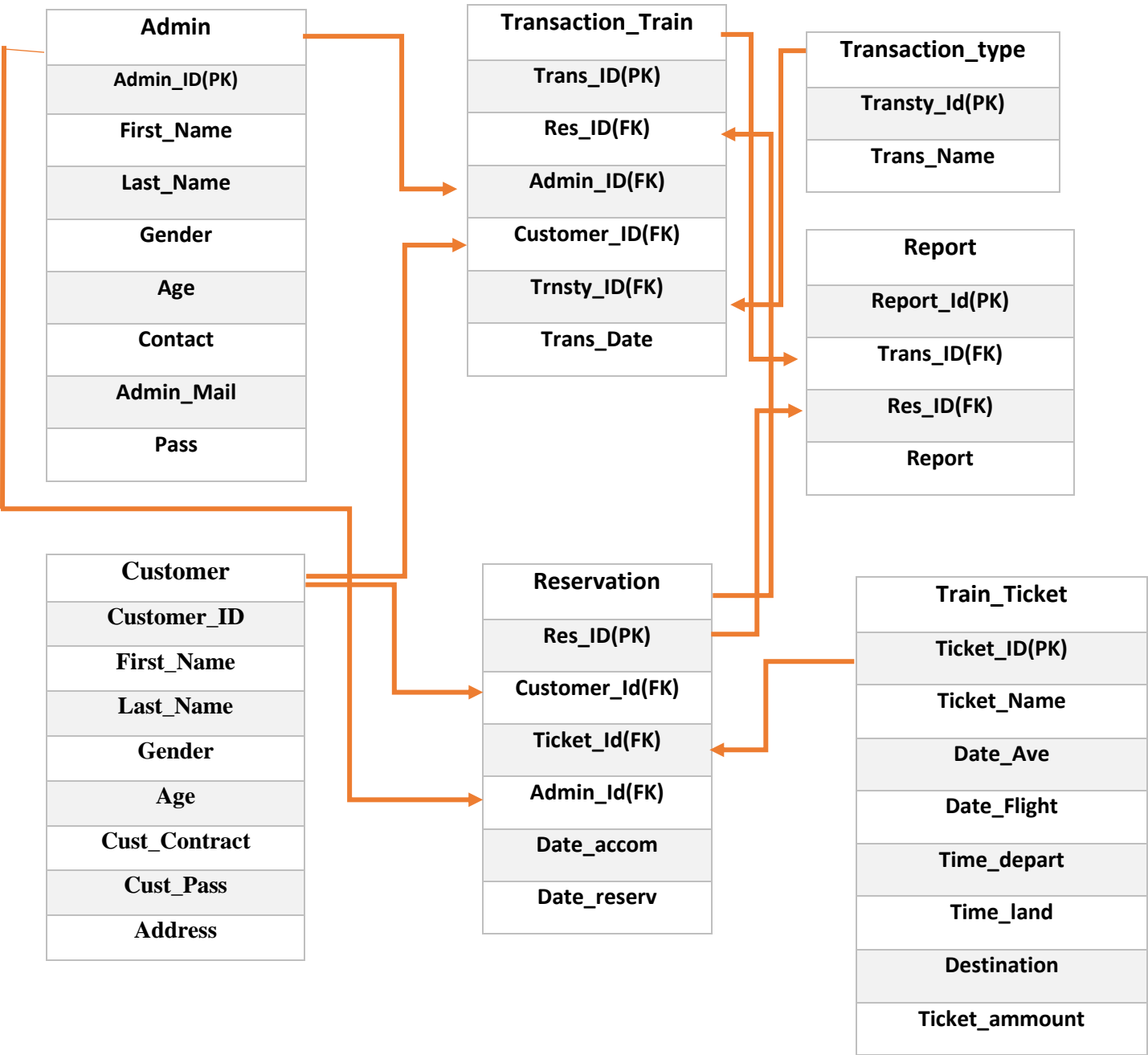


Figure 01: Schema Diagram

2.2 Entity Relational Diagram



E-R Diagram

Chapter 3

3.1 Result & Quires:

01..

```
SELECT train_ticket.Date_Ava,train_ticket.Ticket_ID,train_ticket.Time_depart,train_ticket.Time_land,train_ticket.Destination,train_ticket.Ticket_amount FROM train_ticket WHERE train_ticket.Ticket_Name = 'Salah';
```

		Date_Ava	Ticket_ID	Time_depart	Time_land	Destination	Ticket_amount
<input type="checkbox"/>	Edit Copy Delete	2021-03-22	201	-00:00:20	00:00:09	Rajshahi	2500

02..

```
SELECT customer.First_Name,reservation.date_reserv FROM reservation,customer WHERE reservation.Res_ID= 207 AND customer.LAST_Name = 'Newton';
```

First_Name	date_reserv
Issace	2022-02-19

03..

```
SELECT * FROM customer WHERE First_Name LIKE 'N__n';
```

▼ Customer_ID	First_Name	LAST_Name	Gender	Age	Cust_Contract	Cust_pass	Address
1002	Noyan	Mamud	Male	22	1876541689	54321	NULL

04..

```
SELECT * FROM transaction_train WHERE Customer_ID <= 1010 AND Admin_ID > 107;
```

Trans_ID	Res_ID	Admin_ID	Customer_ID	transty_ID	trans_date
508	208	108	1008	1008	2022-09-10
509	209	109	1009	1009	2022-09-11
510	210	110	1010	1010	2022-09-12

05..

```
SELECT * FROM transaction_train WHERE transty_ID BETWEEN 1005 AND 1010;
```

Trans_ID	Res_ID	Admin_ID	Customer_ID	transty_ID	trans_date
505	205	105	1005	1005	2022-09-07
506	206	106	1006	1006	2022-09-08
507	207	107	1007	1007	2022-09-09
508	208	108	1008	1008	2022-09-10
509	209	109	1009	1009	2022-09-11
510	210	110	1010	1010	2022-09-12

06..

```
ALTER TABLE admin DROP District;
```

Admin_ID	First_Name	LAST_Name	Gender	Age	Contract	Admin_pass	District
101	Ahmed	Jihan	Male	22	1635442987	12345	NULL
102	Pranto	Partho	Male	22	16398765	12345	NULL
103	Yean	Chowdhory	Male	22	1745581966	12345	NULL
104	Hasnine	Mamud	Male	22	1636442347	12345	NULL
105	Sifat	Rahman	Male	22	2147483647	12345	NULL
106	Mehedi	Mahi	Male	22	1635487987	12345	NULL

Admin_ID	First_Name	LAST_Name	Gender	Age	Contract	Admin_pass
101	Ahmed	Jihan	Male	22	1635442987	12345
102	Pranto	Partho	Male	22	16398765	12345
103	Yean	Chowdhory	Male	22	1745581966	12345
104	Hasnine	Mamud	Male	22	1636442347	12345

07..

```
SELECT * FROM train_ticket WHERE Ticket_amount <= 500;
```

Ticket_ID	Ticket_Name	Date_Ava	Date_Flight	Time_depart	Time_land	Destination	Ticket_amount
192	Hossain	2022-09-03	2022-09-03	09:30:00	11:00:00	Delhi	500
198	Farnandej	2019-09-22	2019-09-24	10:10:00	12:00:00	Khulna	300
199	Pedrej	2023-10-25	2023-10-26	-00:00:20	00:00:10	Jossre	400
200	Kante	2020-03-23	2020-03-28	-00:00:20	00:00:01	Bhola	100

08..SELECT * FROM customer WHERE Ticket_Name = 'Khan';

Error

SQL query: [Copy](#)

```

SELECT *
FROM customer
WHERE Ticket_Name = 'Khan' LIMIT 0, 25

```

MySQL said:

```

#1054 - Unknown column 'Ticket_Name' in 'where clause'

```

Chapter 4 Conclusion

4.1 Introduction

In our project railway system, we have all the information saved regarding the train, passengers, tracks, where and how The Train moves, station, schedules, routes and what it consists of. We had considered the most important requirements only many more features

and details can be added to our project in order to obtain even more user-friendly applications. These applications are already in progress and in future they can be upgraded and may become part of Amazing Technology.

4.2 Practical Implications

We have successfully finished our Railway management System. But we would like to improve our system in future. Our current system is website based. We want to turn this system into android application so that I will be more user friendly. Also now a days security is of major importance. So, we would like to tighten up the security of our system. Finally, we would like to add few options for editing the information that are already saved into our system. We sincerely hope that our System will help all to work effectively with their customer and admin for their easy.

4.3 Scope of Future Work

- Improvement in Security
- Convert Same as android mobile Application
- Edit Option for available for stored match and student details

References

<https://itsourcecode.com/uml/railway-management-system-er-diagram/>