Name: Sanjay Khanna S

Emp Id: 12124

Manual Testing Lab Assessment

Perform the below activities for each Requirements

Note:

1. Perform W3H Analysis on the User Stories assigned.
2. **Create a** web-based application for the given scenario using **Three Tier Architecture.**
3. Use **React JS** as a Front End. Use **Spring Boot** as a Back End. And Use **REST API** as an Architecture Style.
4. Create a **Database design** as per the given scenario and use **MySQL** as Database.
5. Perform all the **CRUD** operations using **Hibernate JPA integrated with Spring Boot**
6. Make the application as user interactive. Apply style using **CSS / Bootstrap**. And perform the validations.
7. Maintain **Code Quality** and **Coding Standards**
8. Document Test Cases and Test Scenarios in **Test_Data_Template** sheet provided previously.

Perform **Manual Testing after developing** the Application & Test Cases & Test Scenarios

Q7) Bank management system

The Bank Management System (BMS) is a web-based application used for paying financial institutions for the services they provide to the Bureau of the Fiscal Service. BMS also provides analytical tools to review, and approve compensation, budgets, and outflows.

User Stories to be Developed:

1) As a user, I want to add a payee in the application, so that I can transfer the money to the payee

(Assume the account details are added and the money transfer can be done only within the bank)

2) As a user, I want to transfer money to the payee after adding, so that my transaction is recorded.

In this User Stories:

I'm provide three table :

Payee Table:

- payeeId - PK
- payeeName
- payeeMobileNumber
- accountId - FK

Account Table:

- accountId - PK
- accountNumber
- balance

Transaction Table:

- TransactionId - Pk
- transactionDate
- PayeeId - FK
- amount
- Status

W3H Analysis

What	How
Who are the Actors involving in this management System? **Ans** User Payee **What an Actor can perform in Management System?** **Ans** Add Payee Edit Payee Delete Payee Transfer Money **What are the fields required for adding payee?** **Ans** Basics Details: Payee name Payee Number Account Number IFSC Code **What are the fields required for doing money transfer?** **Ans** Account Number IFSC Code Amount **What happen after the transaction process?** **Ans** It should get recorded in the transaction table with status of money transaction whether completed or Failed	**How can user do the add/delete/update of payee?** **Ans:** By using their id By using their name By using their number **How can user select the payee for executing transaction process?** **Ans** By using their id By using their name By using their number **How can user transfer money to payee?** **Ans** By selecting payee account details By entering payee number By selecting payee profile **How can we update the transaction status in the transaction table?** **Ans** By checking the credentials of payee By Checking the account balance of user By doing both the option
Why	**WhyNot**

How can user do the add/delete/update of payee?
Ans:
<mark>By using their id</mark>
Because payee id is unique and primary key such that doing crud operation can be simpler.

How can user select the payee for executing transaction process?
Ans
<mark>By using their name</mark>
Because user cannot have the knowledge of payee id, so via name user can choose payee.

How can user transfer money to payee?
Ans
<mark>By selecting payee profile</mark>
Because payee profile will be visible to the user

How can we update the transaction status in the transaction table?
Ans
<mark>By doing both the option</mark>
Because these two are the necessary condition should verify before the transaction process

How can user do the add/delete/update of payee?
Ans:
Because other fields are not unique such that doing crud operation can be ambiguous.

How can user select the payee for executing transaction process?
Ans
Because user cannot have the knowledge of payee id, so via name user can choose payee.

How can user transfer money to payee?
Ans
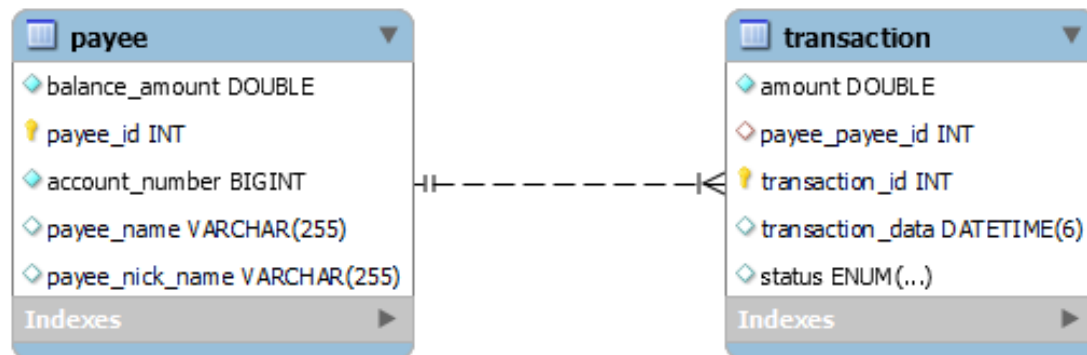**Because payee profile will be visible to the user such that user will face difficulties**

How can we update the transaction status in the transaction table?
Ans
Because these two are the necessary thing should be verified such that We can't decide by either one.

Database Design:

payee
- ◇ balance_amount DOUBLE
- 🔑 payee_id INT
- ◇ account_number BIGINT
- ◇ payee_name VARCHAR(255)
- ◇ payee_nick_name VARCHAR(255)
- Indexes ▶

transaction
- ◇ amount DOUBLE
- ◇ payee_payee_id INT
- 🔑 transaction_id INT
- ◇ transaction_data DATETIME(6)
- ◇ status ENUM(...)
- Indexes ▶

Output:

Enter details to Transfer Money

Select Payee's Nick Name ▼

amount *

←BACK   TRANSFER

---

tbl_user   account   payee   account   transaction ✕

Limit to 1000 rows ▼

```
1 • SELECT * FROM bms_db.transaction;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

amount	payee_payee_id	transaction_id	transaction_date	status
1290	1	1	2024-04-25 17:47:43.474000	COMPLETED
NULL	NULL	NULL	NULL	NULL

Limit to 1000 rows ▼

```
1 • SELECT * FROM bms_db.payee;
2
3 • use bms_db;
4
5 • insert into payee values (2,2,"sanjay","sanjay");
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

balance_amount	payee_id	account_number	nick_name	payee_name
1290	1	2323456789	sanjay	Sanjay Khanna
NULL	NULL	NULL	NULL	NULL