

Hcl Bank App

Banking Application Using Spring MVC and Hibernate

In this application there are types of users with different responsibilities.

Those roles are:

- 1.Admin
- 2.Manager
- 3.clerk

1.Admin:

When a person logged in as an Admin means he can perform all the actions like add a new user, see all users, update the existing user, delete the user, create a new account, see all the accounts, update the account, delete the existing account, etc.

2.Manager:

Manager can also do some of the actions like he can transfer the money, deposit and withdraw and gives required approval also.

3.Clerk:

He is the person who can check all the transactions and get the transactions for individual account.

The modules in this Application:

1. welocme page: This is the starting page of the application which is redirecting to login page.

2.login page: Here the person need to login and that person role should be like Manager, Clerk and Admin. If credentials are correct means person will be entered into home page.

2. home page: Here based on the role of the person, the UI will be visible

4.add user: In this admin can add user with details like username, password, address, email and

phone number.

5. update user: Updating the existing user with details like username, password, email, phone and address.

6. delete user: deleting the existing user

7. Add new account: create a new account with the details like name, Aadhar Number, PANnumber, phone, email, address, balance, account type.

8. update account: An account can be updated with address only like we can change the address,phone and email of a particular account.

9. delete Account: deleting the existing account

10. show all accounts: This functionality will display all the accounts in the database

11. show all users: This will display all the users in the database including Admin, Clerk and Manager.

12. Deposit: Here money will be deposited into the account that specified in account id filed.

13. withdraw: Here money will be withdrawn from the account that specified in account id filed.

14. transfer: Here money will be transferred from the from Account that specified in from account id filed to the to account that is specified in to account id filed.

15. success page: When any Transaction completed means this success page will be returned and ask us to go to home page

Exception handlers:

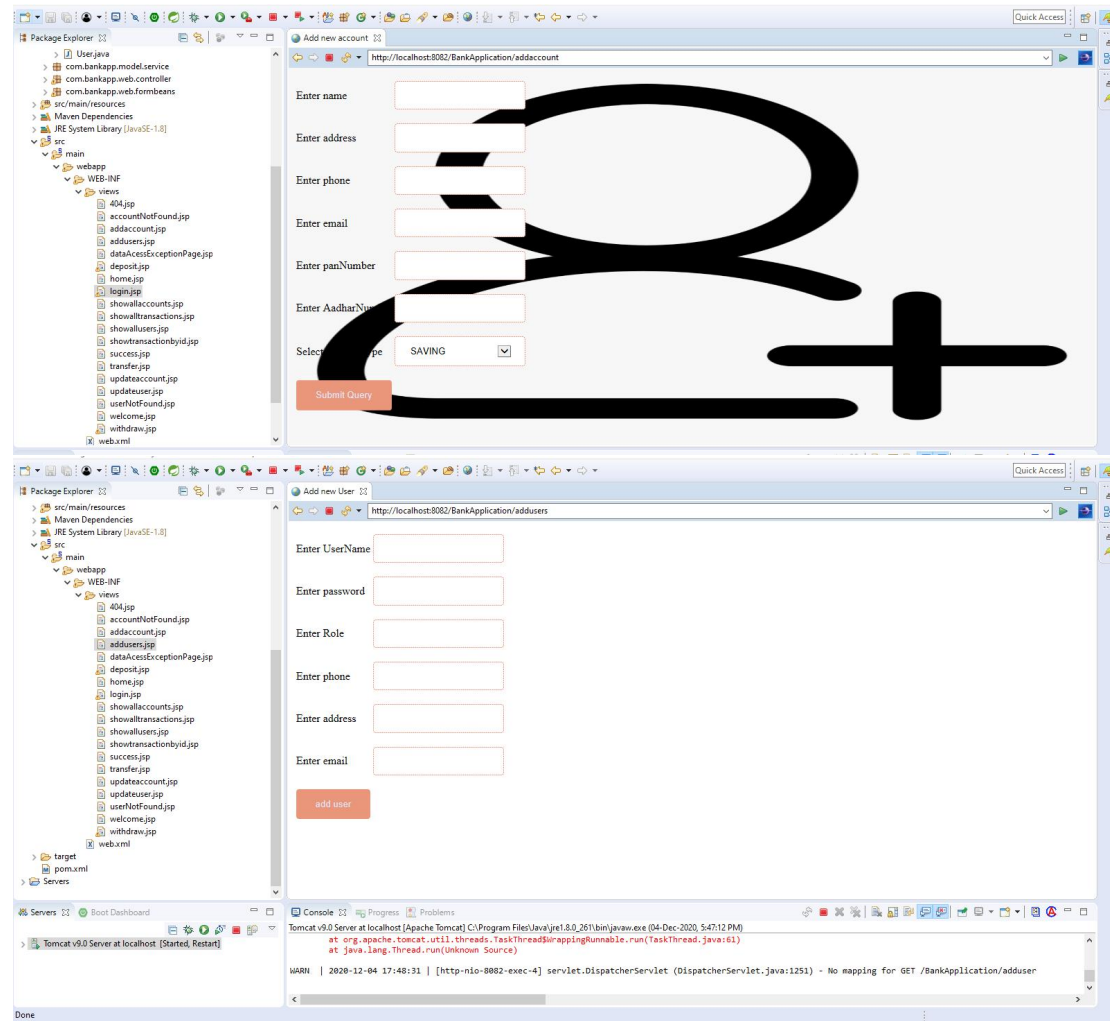
1.404 page not found: here 404 UI page will be returned by saying some information and ask us to go to home page.

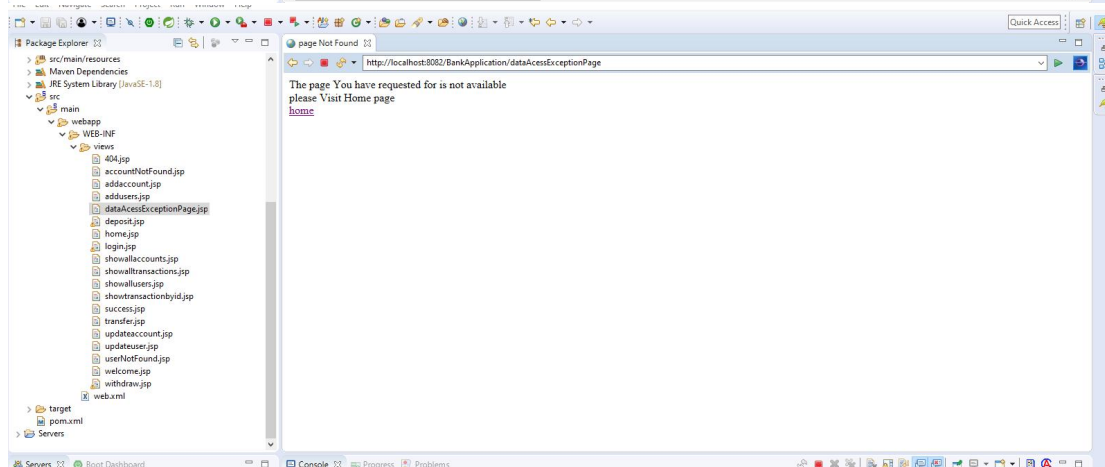
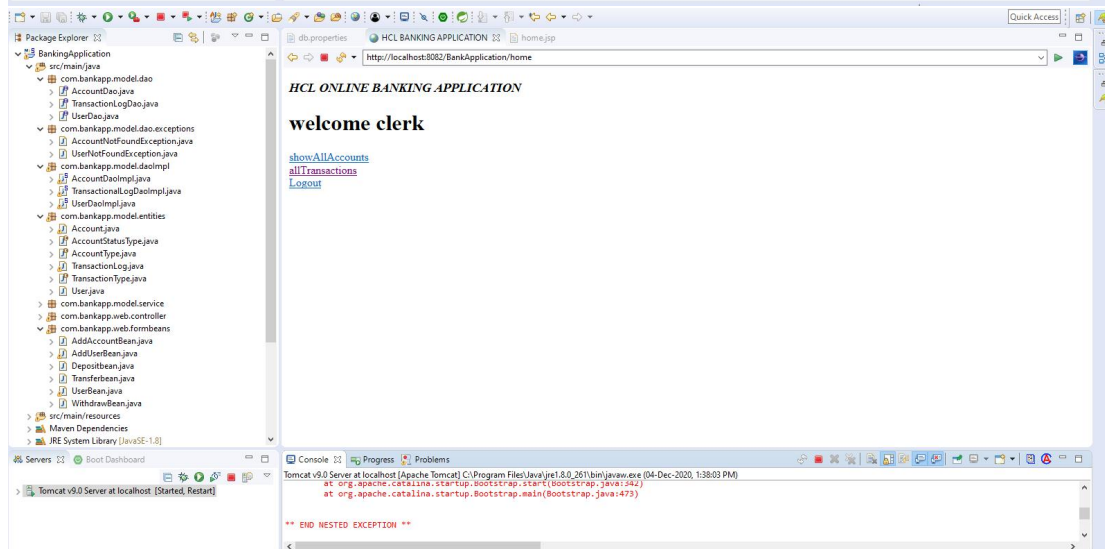
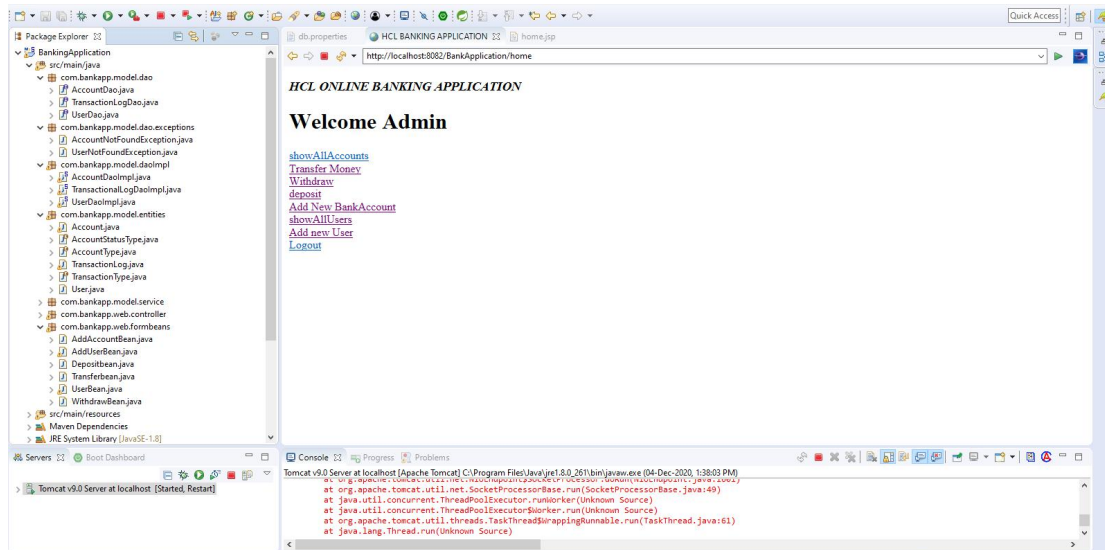
2.DataAccessException: In this page when any dataAccessException occurred means this page will return some information

3. AccountNotFoundException: If the account which is requested by the user is not exists, then this error is handled by this page and suggest us to visit home page.

4.UserNotFoundException: If the User is not existing, then this error is handled by this page and suggest us to visit home page.

Below are the some images of hcl bank app project:





Package Explorer

- com.bankapp.model.dao
 - AccountDao.java
 - TransactionLogDao.java
 - UserDao.java
- com.bankapp.model.dao.exceptions
 - AccountNotFoundException.java
 - TransactionNotFoundException.java
 - UserNotFoundException.java
- com.bankapp.model.entities
 - Account.java
 - AccountStatusType.java
 - AccountType.java
 - TransactionLog.java
 - TransactionType.java
 - User.java
- com.bankapp.model.service
 - AddAccountBean.java
 - AddUserBean.java
 - DepositBean.java
 - TransferBean.java
 - UserBean.java
 - WithdrawBean.java
- com.bankapp.web.controller
 - AccountController.java
 - TransactionController.java
 - UserController.java
- com.bankapp.web.formbeans
 - AddAccountFormBean.java
 - AddUserFormBean.java
 - DepositFormBean.java
 - TransferFormBean.java
 - UserFormBean.java
 - WithdrawFormBean.java
- src/main/resources
 - db.properties
 - insert_title_here.jsp
 - welcome.jsp
 - login.jsp
 - withdraw.jsp
- Maven Dependencies
- IRE System Library [JavaSE-1.8]
- src
 - main
 - webapp
 - WEB-INF
- target
- pom.xml
- Servers

Servers

- Tomcat v9.0 Server at localhost [Started, Synchronized]

Console

```
Tomcat v9.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jdk-8.0.261\bin\java.exe (04-Dec-2020, 5:37:09 PM)
Dec 04, 2020 5:37:36 PM org.apache.coyote.AbstractProtocol start
INFO: Starting ProtocolHandler ["http-nio-8082?"]
Dec 04, 2020 5:37:36 PM org.apache.catalina.startup.Catalina start
INFO: Server startup in [23669] milliseconds
```

BankingApplication

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Servers

- Tomcat v9.0 Server at localhost [Started, Restart]

Console

```
Tomcat v9.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jdk-8.0.261\bin\java.exe (04-Dec-2020, 1:38:03 PM)
at org.apache.catalina.core.StandardEngine.run(SocketProcessorBase.java:49)
at java.util.concurrent.ThreadPoolExecutor.runWorker(Unknown Source)
at java.util.concurrent.ThreadPoolExecutor$Worker.run(Unknown Source)
at org.apache.tomcat.util.threads.TaskThread$WrappingRunnable.run(TaskThread.java:61)
at java.lang.Thread.run(Unknown Source)
```

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Servers

- Tomcat v9.0 Server at localhost [Started, Restart]

Console

```
Tomcat v9.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jdk-8.0.261\bin\java.exe (04-Dec-2020, 1:38:03 PM)
(?, ?, ?, ?, ?, ?, ?, ?, ?)
WARN | 2020-12-04 14:21:01 | [http-nio-8082-exec-5] spi.SqlExceptionHandler (SqlExceptionHandler.java:129) - SQL Error: 1146, SQLState: 42S02
ERROR | 2020-12-04 14:21:01 | [http-nio-8082-exec-5] spi.SqlExceptionHandler (SqlExceptionHandler.java:131) - Table 'bankapp.account_table' doesn't exist
Fri Dec 04 14:21:01 IST 2020 WARN: Caught while disconnecting...
```

Package Explorer

- src/main/resources
 - WEB-INF
 - views
 - 404.jsp
 - accountNotFound.jsp
 - addAccount.jsp
 - addUsers.jsp
 - dataAccessExceptionHandler.jsp
 - deposit.jsp
 - home.jsp
 - login.jsp
 - showAllAccounts.jsp
 - showAllTransactions.jsp
 - showAllUsers.jsp
 - showTransactionById.jsp
 - success.jsp
 - transfer.jsp
 - updateAccount.jsp
 - updateUser.jsp
 - userNotFound.jsp
 - welcome.jsp
 - withdraw.jsp

db.properties

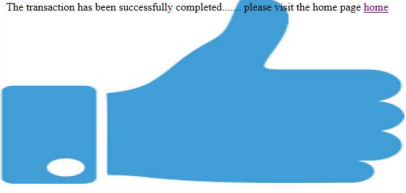
Insert title here

success.jsp

withdraw.jsp

http://localhost:8082/BankApplication/success

The transaction has been successfully completed..... please visit the home page [home](#)



Servers

Tomcat v9.0 Server at localhost (Started, Restart)

Console

```

Tomcat v9.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jdk-10.0.2\bin\java.exe (04-Dec-2020, 1:38:03 PM)
WARN | 2020-12-04 14:22:02 | [http-mio-8082-exec-5] api.SqlExceptionHandler [SqlExceptionHandler.java:229] ~ SQL-STATE: 42P0A
ERROR | 2020-12-04 14:22:01 | [http-mio-8082-exec-5] api.SqlExceptionHandler [SqlExceptionHandler.java:131] ~ Table 'bankapp.account_table' doesn't exist
Fri Dec 04 14:22:01 IST 2020 WARN: Caught while disconnecting...

EXCEPTION STACK TRACE:
  
```

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db.properties

HCL Internal Bank Application


http://localhost:8082/BankApplication/transfer

Hcl bankapp Transfer

Enter From Account:

Enter TO Account:

Enter Amount:



Servers

Tomcat v9.0 Server at localhost (Started, Restart)

Console

```

Tomcat v9.0 Server at localhost [Apache Tomcat] C:\Program Files\Java\jdk-10.0.2\bin\java.exe (04-Dec-2020, 1:38:02 PM)
at org.apache.catalina.startup.Bootstrap.start(Bootstrap.java:242)
at org.apache.catalina.startup.Bootstrap.main(Bootstrap.java:473)

** END NESTED EXCEPTION **
  
```

