**ICIN Bank Source Code**

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Github link:

<https://github.com/VijayMoirangthem/ICIN-Bank.git>

**Project Code:**

**Front End:**

**User Portal:**

**Index.html:**

<!doctype html>

<html lang="en" class="full-height">

<head>

<meta charset="utf-8">

<title>DreamApp</title>

<base href="/">

<meta name="viewport" content="width=device-width, initial-scale=1">

<link rel="icon" type="image/x-icon" href="favicon.ico">

<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.0/umd/popper.min.js"></script>

</head>

<body>

<app-root></app-root>

</body>

</html>

**Main.ts**

import { enableProdMode } from '@angular/core';

import { platformBrowserDynamic } from '@angular/platform-browser-dynamic';

import { AppModule } from './app/app.module';

import { environment } from './environments/environment';

if (environment.production) { enableProdMode();

}

platformBrowserDynamic().bootstrapModule(AppModule)

.catch(err => console.error(err));

**Test.ts**

// This file is required by karma.conf.js and loads recursively all the .spec and framework files

import 'zone.js/dist/zone-testing';

import { getTestBed } from '@angular/core/testing'; import {

BrowserDynamicTestingModule, platformBrowserDynamicTesting

} from '@angular/platform-browser-dynamic/testing';

declare const require: {

context(path: string, deep?: boolean, filter?: RegExp): { keys(): string[];

<T>(id: string): T;

};

};

// First, initialize the Angular testing environment. getTestBed().initTestEnvironment(

BrowserDynamicTestingModule, platformBrowserDynamicTesting()

);

// Then we find all the tests.

const context = require.context('./', true, /\.spec\.ts$/);

// And load the modules. context.keys().map(context);

**login.service.ts**

import { Injectable } from '@angular/core';

import { HttpClient } from '@angular/common/http';

@Injectable({ providedIn: 'root'

})

export class LoginService {

readonly rootUrl = 'http://localhost:8080';

constructor(private http: HttpClient) { } loginUser(userName: string, password: string) {

var body = { username: userName, password: password

}

return this.http.post(this.rootUrl + '/login', body);

}

}

**Register.service.ts**

import { Injectable } from '@angular/core';

import { HttpClient } from '@angular/common/http';

@Injectable({ providedIn: 'root'

})

export class RegisterService {

readonly rootUrl = 'http://localhost:8080'; constructor(private http: HttpClient) { }

insertUser(firstName: string, lastName: string,userName: string, password: string, dob:Date, phone: number, address: string, identityType: string,identity:string, email: string) {

var body = {

fname : firstName, lname : lastName,

username: userName, password: password, dob:dob,

phone : phone, address : address,

identityType:identityType, identity:identity,

email : email,

}

return this.http.post(this.rootUrl + '/register', body);

}

}

**Request.service.ts**

import { Injectable } from '@angular/core';

import { HttpClient } from '@angular/common/http';

import {ChequebookResponse} from './\_models/chequebookresponse'

@Injectable({ providedIn: 'root'

})

export class RequestService {

readonly rootUrl = 'http://localhost:8080';

constructor(private http: HttpClient) { } insertRequest(accNo: number,pages:number=20) {

var body = { account: accNo,

no\_of\_pages: pages,

}

console.log(body);

return this.http.post<ChequebookResponse>(this.rootUrl + '/cheque/request', body);

}

}

**Transaction.service.ts**

import { Injectable } from '@angular/core';

import { HttpClient } from '@angular/common/http'; import { Transaction } from './\_models/transaction' import { SavingAccount } from './\_models/savingaccount' import { Observable } from 'rxjs';

@Injectable({ providedIn: 'root'

})

export class TransactionService {

private url:String; constructor(private http:HttpClient) {

this.url="http://localhost:8080"

}

public getTransactions(accNo):Observable<Transaction[]>{

return this.http.get<Transaction[]>(this.url+"/account/getHistory/"+accNo);

}

public getSavingAccount(username):Observable<SavingAccount>{

return this.http.get<SavingAccount>(this.url+"/account/getsaving/"+username);

}

}

**Transfer.service.ts**

import { Injectable } from '@angular/core';

import { HttpClient } from '@angular/common/http';

@Injectable({ providedIn: 'root'

})

export class TransferService {

readonly rootUrl = 'http://localhost:8080'; constructor(private http: HttpClient) { }

insertEntry(username:string, saccount:string,ifscNo:string,raccount:string,amount:number) { var body = {

username:username, saccount: saccount, ifsc: ifscNo, raccount:raccount, amount:amount

}

console.log(body);

return this.http.post(this.rootUrl + '/account/transfer', body);

}

}

**transferhistory.service.ts**

import { Injectable } from '@angular/core';

import {TransferHistory} from './\_models/transferhistory'; import { HttpClient } from '@angular/common/http';

import { Observable } from 'rxjs';

@Injectable({ providedIn: 'root'

})

export class TransferhistoryService { private url:String;

constructor(private http:HttpClient) { this.url="http://localhost:8080"

}

public getTransferHistory(accNo):Observable<TransferHistory[]>{

return this.http.get<TransferHistory[]>(this.url+"/account/getTransfers/"+accNo);

}

// public getSavingAccount(username):Observable<SavingAccount>{

// return this.http.get<SavingAccount>(this.url+"/account/getsaving/"+username);

// }

}

**Update.service.ts**

import { Injectable } from '@angular/core';

import { HttpClient } from '@angular/common/http';

@Injectable({ providedIn: 'root'

})

export class UpdateService {

readonly rootUrl = 'http://localhost:8080'; constructor(private http: HttpClient) { } update(username:string,phone: number,email: string,address:

string,prevpassword:string,newpassword:string) { var body = {

username:username, phone : phone, email: email, address : address,

password: prevpassword, newpassword:newpassword

}

console.log(body);

return this.http.put(this.rootUrl + '/profile/update', body);

}

}

**User.service.ts**

import { Injectable } from '@angular/core';

import { UserDisplay } from './\_models/userdisplay'; import { HttpClient } from '@angular/common/http'; import { Observable } from 'rxjs';

@Injectable({ providedIn: 'root'

})

export class UserService { private url:string;

constructor(private http:HttpClient) { this.url="http://localhost:8080"

}

public getUser(username):Observable<UserDisplay>{

return this.http.get<UserDisplay>(this.url+"/home/"+username);

}

}

**Frontend Admin Portal: Autorhizationservice.ts**

import { Injectable } from '@angular/core';

import { HttpClient } from '@angular/common/http'; import { Observable } from 'rxjs';

import { AuthorizeUser } from './model/authorizeUser';

@Injectable({ providedIn: 'root'

})

export class AuthorizationService {

readonly rootUrl = 'http://localhost:8084/user/'; constructor(private http: HttpClient) { } getRequestData(){

return this.http.get<AuthorizeUser[]>(this.rootUrl + '/unauthorized/all');

}

authorizeAccount(username){

return this.http.get(this.rootUrl + username + '/authorize');

}

rejectRequest(username){

return this.http.get(this.rootUrl + username + '/authorize/cancel' );

}

}

**Checkbookservice.ts**

import { Injectable } from '@angular/core';

import { HttpClient } from '@angular/common/http'; import { Observable } from 'rxjs';

import { CheckbookRequest } from './model/checkbookRequest';

@Injectable({ providedIn: 'root'

})

export class CheckbookService {

//readonly rootUrl = 'localhost:<port>/user/{username}/chequebook/request/confirm'; readonly rootUrl = 'http://localhost:8084/user/';

//readonly dataUrl= 'localhost:<port>/chequebook/request/all'; readonly dataUrl= 'http://localhost:8084/chequebook/request/all'; private data:any=[]

constructor(private http: HttpClient) { }

confirmCheckbookService(account){

return this.http.get(this.rootUrl + account + '/chequebook/request/confirm');

}

getRequestsData():Observable<CheckbookRequest[]> { return this.http.get<CheckbookRequest[]>(this.dataUrl);

}

}

**Disableservice.ts**

import { Injectable } from '@angular/core';

import { HttpClient } from '@angular/common/http';

@Injectable({ providedIn: 'root'

})

export class DisableService {

readonly rootUrl = 'http://localhost:8084/user/'; constructor(private http: HttpClient) {

}

disableLoginService(username){

return this.http.get(this.rootUrl + username + '/disable');

}

}

**Enableservice.ts**

import { Injectable } from '@angular/core';

import { HttpClient } from '@angular/common/http';

@Injectable({ providedIn: 'root'

})

export class EnableService {

readonly rootUrl = 'http://localhost:8084/user/'; constructor(private http: HttpClient) {

}

enableLoginService(username){

return this.http.get(this.rootUrl + username + '/enable');

}

}

**Feature.service.ts**

import { Injectable } from '@angular/core';

import { HttpClient } from '@angular/common/http';

@Injectable({ providedIn: 'root'

})

export class FeaturesService {

id : number

readonly rootUrl = 'http://localhost:8084/user/'; constructor(private http: HttpClient) {

}

setFeatures(username,value){ this.id=value console.log(this.id)

return this.http.get(this.rootUrl + username + '/features/' + value);

}

}

**User.service.ts**

import { Injectable } from '@angular/core';

import { HttpClient } from '@angular/common/http'; import { UserData } from './model/userData'; import { Observable } from 'rxjs';

@Injectable({ providedIn: 'root'

})

export class UsersService {

readonly url = 'http://localhost:8084/'; constructor(private http:HttpClient) {

}

public getAllUsers(){

return this.http.get<any[]>(this.url+"user/all");

}

}

**Backend Amin Portal: Pom.xml**

<?xml version="1.0" encoding="UTF-8"?>

<project xmlns=["http://maven.apache.org/POM/4.0.0"](http://maven.apache.org/POM/4.0.0) xmlns:xsi=["http://www.w3.org/2001/XMLSchema](http://www.w3.org/2001/XMLSchema-)- instance"

xsi:schemaLocation=["http://maven.apache.org/POM](http://maven.apache.org/POM/4.0.0)/[4.0.0](http://maven.apache.org/POM/4.0.0) https://maven.apache.org/xsd/maven- 4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<parent>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-parent</artifactId>

<version>2.3.2.RELEASE</version>

<relativePath/> <!-- lookup parent from repository -->

</parent>

<groupId>com.admin</groupId>

<artifactId>admin\_service</artifactId>

<version>0.0.1-SNAPSHOT</version>

<name>admin\_service</name>

<description>Admin service for icin bank</description>

<properties>

<java.version>1.8</java.version>

</properties>

<dependencies>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-data-jpa</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-web</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-test</artifactId>

<scope>test</scope>

<exclusions>

<exclusion>

<groupId>org.junit.vintage</groupId>

<artifactId>junit-vintage-engine</artifactId>

</exclusion>

</exclusions>

</dependency>

<dependency>

<groupId>mysql</groupId>

<artifactId>mysql-connector-java</artifactId>

</dependency>

<dependency>

<groupId>org.apache.commons</groupId>

<artifactId>commons-email</artifactId>

<version>1.5</version>

</dependency>

</dependencies>

<build>

<plugins>

<plugin>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-maven-plugin</artifactId>

</plugin>

</plugins>

</build>

</project>

**Admin.controller.java**

package com.admin.controller; import java.util.List;

import org.apache.commons.mail.EmailException;

import org.springframework.beans.factory.annotation.Autowired; import org.springframework.web.bind.annotation.CrossOrigin; import org.springframework.web.bind.annotation.GetMapping; import org.springframework.web.bind.annotation.PathVariable; import org.springframework.web.bind.annotation.RestController;

import com.admin.model.ChequebookRequest; import com.admin.model.User;

import com.admin.model.UserDisplay;

import com.admin.service.impl.AdminServiceImpl; import com.admin.service.impl.MailServiceImpl;

@RestController @CrossOrigin

public class AdminController {

@Autowired

private AdminServiceImpl service;

@Autowired

private MailServiceImpl mailService;

@GetMapping("user/{username}/features/{featureId}")

public void setUserFeatures(@PathVariable("username") String username, @PathVariable("featureId") int featureId) {

service.setUserFeatures(username, featureId);

}

@GetMapping("user/{username}/authorize")

public void authorizeUser(@PathVariable("username") String username) { try {

service.authorizeUser(username); mailService.sendAuthorizedEmail(username);

} catch (EmailException e) {

// TODO Auto-generated catch block e.printStackTrace();

}

}

@GetMapping("user/{username}/authorize/cancel")

public void cancelAuthorization(@PathVariable("username") String username) { try {

mailService.sendAuthorizeCancelEmail(username);

} catch (EmailException e) {

// TODO Auto-generated catch block e.printStackTrace();

}

service.cancelAuthorization(username);

}

@GetMapping("user/unauthorized/all") public List<User> getAllUnauthorizedUsers()

{

return service.getAllUnauthorizedUsers();

}

@GetMapping("/user/all")

public List<UserDisplay> getAllUsers()

{

return service.getAllUsers();

}

// @GetMapping("/user/transfers/{account}")

// public List<Transfer> getTransactionList(@PathVariable("account") int account)

// {

// return service.getAllTransactions(account);

// }

@GetMapping("/chequebook/request/all")

public List<ChequebookRequest> getAllChequeBookRequests()

{

return service.getAllChequebookRequests();

}

@GetMapping("/user/{accNo}/chequebook/request/confirm")

public void confirmChequeBookRequest(@PathVariable("accNo") long accNo)

{

service.acceptChequebookRequest(accNo);

}

@GetMapping("/user/{username}/enable")

public void enableUser(@PathVariable("username") String username)

{

service.enableUser(username);

}

@GetMapping("/user/{username}/disable")

public void disableUser(@PathVariable("username") String username)

{

service.disableUser(username);

}

@GetMapping("search/user/{userDetail}")

public UserDisplay searchUser(@PathVariable("userDetail") String userDetail) { return service.searchUser(userDetail);

}

}

**Account repository.java**

package com.admin.dao;

import org.springframework.data.repository.CrudRepository; import org.springframework.stereotype.Repository;

import com.admin.model.Account;

@Repository

public interface AccountRepository extends CrudRepository<Account, Integer>{

public Account findByUsername(String username); public Account findByAccno(long accno);

}

**Checkbookrequestrepository.java**

package com.admin.dao; import java.util.List;

import org.springframework.data.jpa.repository.Modifying; import org.springframework.transaction.annotation.Transactional; import org.springframework.data.jpa.repository.Query;

import org.springframework.data.repository.CrudRepository; import org.springframework.stereotype.Repository;

import com.admin.model.ChequebookRequest; @Repository

public interface ChequeBookRequestsRepository extends CrudRepository<ChequebookRequest,

Integer>{

@Modifying @Transactional

@Query("update ChequebookRequest c set c.requestStatus=1 where c.account = ?1") void setChequebookInfoByAccount(long accNo);

@Query("FROM ChequebookRequest c where c.requestStatus=FALSE") public List<ChequebookRequest> findAllChequebookRequests();

}

**Saccountrepository.java**

package com.admin.dao;

import org.springframework.data.jpa.repository.JpaRepository; import org.springframework.stereotype.Repository;

import com.admin.model.Saccount; @Repository

public interface SaccountRepository extends JpaRepository<Saccount, Integer>{

public Saccount findByAccno(long accNo);

}

**Transferrepository.java**

package com.admin.dao; import java.util.List;

import org.springframework.data.repository.CrudRepository; import org.springframework.stereotype.Repository;

import com.admin.model.Transfer; @Repository

public interface TransferRepository extends CrudRepository<Transfer, Integer> {

public List<Transfer> findBySaccount(long saccount); public List<Transfer> findByRaccount(long racoount);

}

**UserDisplayRepository.java**

package com.admin.dao; import java.util.List;

import org.springframework.data.jpa.repository.JpaRepository; import org.springframework.data.jpa.repository.Query;

import com.admin.model.User; import com.admin.model.UserDisplay;

public interface UserDisplayRepository extends JpaRepository<User, Integer>{ @Query("SELECT new

com.admin.model.UserDisplay(u.fname,u.lname,u.phone,u.username,u.status,u.featureStatus,a.accno,

a.balance,s.accno,s.balance)" + "FROM User u ,Account a,Saccount s WHERE u.username=a.username and u.username=s.username")

public List<UserDisplay> getAllUsers();

@Query("SELECT new com.admin.model.UserDisplay(u.fname,u.lname,u.phone,u.username,u.status,u.featureStatus,a.accno, a.balance,s.accno,s.balance)" + "FROM User u ,Account a,Saccount s WHERE u.username=?1 and u.username=a.username and u.username=s.username")

public UserDisplay getUserDetailsByUsername(String userDetail);

@Query("SELECT new com.admin.model.UserDisplay(u.fname,u.lname,u.phone,u.username,u.status,u.featureStatus,a.accno, a.balance,s.accno,s.balance)" + "FROM User u ,Account a,Saccount s WHERE s.accno=?1 and u.username=a.username and u.username=s.username")

public UserDisplay getUserDetailsByAccountNo(long accNo);

}

**Userrepository.java**

package com.admin.dao;

import org.springframework.data.repository.CrudRepository; import org.springframework.stereotype.Repository;

import org.springframework.transaction.annotation.Transactional;

import com.admin.model.User;

import java.util.List;

import org.springframework.data.jpa.repository.Modifying; import org.springframework.data.jpa.repository.Query;

@Repository

public interface UserRepository extends CrudRepository<User, Integer> {

@Query("FROM User u WHERE u.username=?1") public User findByUsername(String username);

@Modifying @Transactional

@Query("update User u set u.status=1 where u.username = ?1") void disableUser(String username);

@Modifying @Transactional

@Query("update User u set u.status=0 where u.username = ?1") void enableUser(String username);

@Modifying @Transactional

@Query("update User u set u.authorizationStatus=1 where u.username = ?1") void authorizeUser(String username);

@Modifying @Transactional

@Query("delete from User u where u.username = ?1") void cancelAuthorization(String username);

@Query("FROM User u where u.authorizationStatus=FALSE") public List<User> findAllUnauthorizedAccounts();

@Modifying @Transactional

@Query("update User u set u.featureStatus=?2 where u.username = ?1") void setUserFeatureStatus(String username, int featureId);

}

**Account.java**

package com.admin.model;

import javax.persistence.Column; import javax.persistence.Entity; import javax.persistence.FetchType;

import javax.persistence.GeneratedValue; import javax.persistence.GenerationType; import javax.persistence.Id;

import javax.persistence.JoinColumn; import javax.persistence.OneToOne; import javax.persistence.Table;

@Entity @Table(name="account") public class Account {

@Id

@GeneratedValue(strategy = GenerationType.AUTO) @Column(name = "id")

private int id;

private long accno;

private int balance;

private String username;

@OneToOne(fetch = FetchType.LAZY) @JoinColumn(name = "user\_id") private User user;

public String getUsername() { return username;

}

public void setUsername(String username) { this.username = username;

}

public int getId() { return id;

}

public void setId(int id) { this.id = id;

}

public long getAccno() { return accno;

}

public void setAccno(long accno) { this.accno = accno;

}

public int getBalance() { return balance;

}

public void setBalance(int balance) { this.balance = balance;

}

public User getUser() { return user;

}

public void setUser(User user) { this.user = user;

}

}

**Checkbookrequest.java**

package com.admin.model; import java.time.LocalDate;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue; import javax.persistence.GenerationType; import javax.persistence.Id;

import javax.persistence.Table;

@Entity @Table

public class ChequebookRequest { @Id

@GeneratedValue(strategy = GenerationType.AUTO) private int id;

private long account; private String accType;

private boolean requestStatus; private LocalDate date; private int no\_of\_pages;

public long getAccount() { return account;

}

public void setAccount(long account) { this.account = account;

}

public LocalDate getDate() { return date;

}

public void setDate(LocalDate date) { this.date = date;

}

public int getNo\_of\_pages() { return no\_of\_pages;

}

public void setNo\_of\_pages(int no\_of\_pages) { this.no\_of\_pages = no\_of\_pages;

}

public String getAccType() { return accType;

}

public void setAccType(String accType) {

this.accType = accType;

}

public boolean getRequestStatus() { return requestStatus;

}

public void setRequestStatus(boolean requestStatus) { this.requestStatus = requestStatus;

}

public int getId() { return id;

}

public void setId(int id) { this.id = id;

}

}

**Saccount.java**

package com.admin.model;

import javax.persistence.Entity; import javax.persistence.FetchType;

import javax.persistence.GeneratedValue; import javax.persistence.GenerationType; import javax.persistence.Id;

import javax.persistence.JoinColumn; import javax.persistence.OneToOne; import javax.persistence.Table;

@Entity @Table

public class Saccount {

@Id

@GeneratedValue(strategy = GenerationType.AUTO) private int id;

private long accno; private int balance; private String username;

@OneToOne(fetch = FetchType.LAZY) @JoinColumn(name="user\_id") private User user;

public User getUser() { return user;

}

public void setUser(User user) { this.user = user;

}

public String getUsername() { return username;

}

public void setUsername(String username) { this.username = username;

}

public int getId() { return id;

}

public void setId(int id) { this.id = id;

}

public long getAccno() { return accno;

}

public void setAccno(long accno) { this.accno = accno;

}

public int getBalance() { return balance;

}

public void setBalance(int balance) { this.balance = balance;

}

}

**Transfer.java**

package com.admin.model; import java.time.LocalDate;

import javax.persistence.Entity;

import javax.persistence.GeneratedValue; import javax.persistence.GenerationType; import javax.persistence.Id;

import javax.persistence.Table;

@Entity @Table

public class Transfer implements Comparable<Transfer>{

@Id

@GeneratedValue(strategy = GenerationType.AUTO) private int id;

private long saccount; private long raccount; private int amount; private LocalDate date;

public int getId() { return id;

}

public void setId(int id) { this.id = id;

}

public long getSaccount() { return saccount;

}

public void setSaccount(long saccount) { this.saccount = saccount;

}

public long getRaccount() { return raccount;

}

public void setRaccount(long raccount) { this.raccount = raccount;

}

public int getAmount() { return amount;

}

public void setAmount(int amount) { this.amount = amount;

}

public LocalDate getDate() { return date;

}

public void setDate(LocalDate date) { this.date = date;

}

@Override

public int compareTo(Transfer o) { Integer i1=this.id;

Integer i2=o.id;

return i2.compareTo(i1);

}

}

**User.java**

package com.admin.model; import java.sql.Date;

import javax.persistence.Column; import javax.persistence.Entity; import javax.persistence.FetchType;

import javax.persistence.GeneratedValue; import javax.persistence.GenerationType; import javax.persistence.Id;

import javax.persistence.OneToOne; import javax.persistence.Table;

import com.fasterxml.jackson.annotation.JsonFormat; @Entity

@Table(name="user")

public class User{

@Id

@GeneratedValue(strategy = GenerationType.AUTO) @Column(name = "id")

private int id; private String fname; private String lname; private long phone; private String address; private String email;

private String username; private String password;

@JsonFormat(shape=JsonFormat.Shape.STRING, pattern="dd-MM-yyyy") private Date dob;

private String identityType; private String identity;

@Column(columnDefinition = "boolean default false") private boolean status;

@Column(columnDefinition = "boolean default false") private boolean authorizationStatus;

@Column(columnDefinition = "integer default 3",nullable=false) private int featureStatus=3;

@OneToOne(targetEntity = Account.class,mappedBy = "user",orphanRemoval = false, fetch = FetchType.LAZY)

private Account account;

@OneToOne(targetEntity = Saccount.class,mappedBy = "user",orphanRemoval = false, fetch = FetchType.LAZY)

private Saccount sAccount;

public Date getDob() { return dob;

}

public void setDob(Date dob) { this.dob = dob;

}

public String getIdentityType() { return identityType;

}

public void setIdentityType(String identityType) { this.identityType = identityType;

}

public String getIdentity() { return identity;

}

public void setIdentity(String identity) { this.identity = identity;

}

public int getFeatureStatus() { return featureStatus;

}

public void setFeatureStatus(int featureStatus) { this.featureStatus = featureStatus;

}

public boolean isStatus() { return status;

}

public boolean isAuthorizationStatus() { return authorizationStatus;

}

public void setAuthorizationStatus(boolean authorizationStatus) { this.authorizationStatus = authorizationStatus;

}

public void setId(int id) { this.id = id;

}

public void setStatus(boolean status) { this.status = status;

}

public Integer getId() { return id;

}

public void setId(Integer id) { this.id = id;

}

public String getFname() { return fname;

}

public void setFname(String fname) { this.fname = fname;

}

public String getLname() { return lname;

}

public void setLname(String lname) { this.lname = lname;

}

public long getPhone() { return phone;

}

public void setPhone(long phone) { this.phone = phone;

}

public String getAddress() { return address;

}

public void setAddress(String address) { this.address = address;

}

public String getEmail() { return email;

}

public void setEmail(String email) { this.email = email;

}

public String getUsername() { return username;

}

public void setUsername(String username) { this.username = username;

}

public String getPassword() { return password;

}

public void setPassword(String password) { this.password = password;

}

}

**UserDisplay.java**

package com.admin.model;

public class UserDisplay {

private String fname; private String lname; private long phone; private String username; private boolean status; private int featureStatus; private long primaryAccno; private int primaryBalance; private long savingsAccno; private int savingsBalance;

public UserDisplay() {

}

public UserDisplay(String fname, String lname, long phone, String username, boolean status, int featureStatus, long primaryAccno,

int primaryBalance, long savingsAccno, int savingsBalance) { super();

this.fname = fname; this.lname = lname; this.phone = phone; this.username = username; this.status = status;

this.featureStatus = featureStatus; this.primaryAccno = primaryAccno; this.primaryBalance = primaryBalance; this.savingsAccno = savingsAccno; this.savingsBalance = savingsBalance;

}

public String getFname() { return fname;

}

public void setFname(String fname) { this.fname = fname;

}

public String getLname() { return lname;

}

public void setLname(String lname) { this.lname = lname;

}

public long getPhone() { return phone;

}

public void setPhone(long phone) { this.phone = phone;

}

public String getUsername() { return username;

}

public void setUsername(String username) { this.username = username;

}

public boolean isStatus() { return status;

}

public void setStatus(boolean status) { this.status = status;

}

public long getPrimaryAccno() { return primaryAccno;

}

public void setPrimaryAccno(long primaryAccno) { this.primaryAccno = primaryAccno;

}

public int getPrimaryBalance() { return primaryBalance;

}

public void setPrimaryBalance(int primaryBalance) { this.primaryBalance = primaryBalance;

}

public long getSavingsAccno() { return savingsAccno;

}

public void setSavingsAccno(long savingsAccno) { this.savingsAccno = savingsAccno;

}

public int getSavingsBalance() { return savingsBalance;

}

public void setSavingsBalance(int savingsBalance) { this.savingsBalance = savingsBalance;

}

public int getFeatureStatus() { return featureStatus;

}

public void setFeatureStatus(int featureStatus) { this.featureStatus = featureStatus;

}

}

**Adminserviceapplication.java**

package com.admin;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class AdminServiceApplication {

public static void main(String[] args) { SpringApplication.run(AdminServiceApplication.class, args);

}

}

**Selenium Testing: Admin automation.class**

package firsttestngpackage;

import java.util.concurrent.TimeUnit; import org.openqa.selenium.\*;

import org.openqa.selenium.By.ByClassName;

import org.openqa.selenium.firefox.FirefoxDriver; import org.openqa.selenium.interactions.Actions;

import org.openqa.selenium.support.ui.ExpectedConditions; import org.openqa.selenium.support.ui.Select;

import org.openqa.selenium.support.ui.WebDriverWait; import org.testng.Assert;

import org.testng.annotations.\*;

public class AdminAutomation {

public String baseUrl = "http://localhost:4201";

//String driverPath = "C:\\Users\\Nagaraj\\Downloads\\firefoxDriver\\geckodriver.exe"; String driverPath = "D:\\geckodriver\\geckodriver.exe";

public WebDriver driver ;

@BeforeTest

public void launchBrowser() {

System.out.println("Launching Firefox Browser"); System.setProperty("webdriver.gecko.driver", driverPath); driver = new FirefoxDriver();

driver.get(baseUrl); driver.manage().timeouts().implicitlyWait(20, TimeUnit.SECONDS);

}

@Test(priority=0) public void login\_Pass() { driver.manage().timeouts().implicitlyWait(20, TimeUnit.SECONDS); driver.findElement(By.name("inputUserName")).sendKeys("madhuri"); driver.findElement(By.name("password")).sendKeys("mad12345");

//Login Button

driver.findElement(By.xpath("/html/body/app-root/app-login/div/form/button")).click(); String actualUrl="http://localhost:4200/user-account";

String expectedUrl= driver.getCurrentUrl(); if(actualUrl.equalsIgnoreCase(expectedUrl)) { System.out.println("Login Successful"); } driver.manage().window().maximize();

}

@Test(priority=1) public void useraccount\_login\_enabling(){

//User Account Hyperlink

driver.findElement(By.xpath("/html/body/app-root/div/nav/div/ul/li[1]/a")).click();

//Enable Button driver.findElement(By.xpath("/html/body/app-root/app-user-

account/table/tbody/tr[1]/td[6]/button")).click(); System.out.println("Enabled Login Feature");

//Disable Button driver.findElement(By.xpath("/html/body/app-root/app-user-

account/table/tbody/tr[2]/td[7]/button")).click(); System.out.println("Disabled Login Feature");

}

@Test(priority=2) public void useraccount\_features(){

//Click on the dropdown driver.findElement(By.xpath("/html/body/app-root/app-user-

account/table/tbody/tr/td[9]/select")).click();

//Select the first option driver.findElement(By.xpath("/html/body/app-root/app-user-

account/table/tbody/tr/td[9]/select/option[1]")).click();

//Set button

driver.findElement(By.xpath("/html/body/app-root/app-user- account/table/tbody/tr/td[9]/button")).click();

System.out.println("User Roles Changed");

}

@Test(priority=4) public void checkbookRequests() {

//Checkbook Request Hyperlink

driver.findElement(By.xpath("/html/body/app-root/div/nav/div/ul/li[2]/a")).click();

//Confirm Request Button driver.findElement(By.xpath("/html/body/app-root/app-checkbook-

requests/table/tbody/tr[1]/td[7]/button")).click(); System.out.println("Request Confirmed");

}

@Test(priority=3) public void authorization() {

//Authorization link

driver.findElement(By.xpath("/html/body/app-root/div/nav/div/ul/li[3]/a")).click();

//Create Account Button driver.findElement(By.xpath("/html/body/app-root/app-authorize-

registration/table/tbody/tr/td[9]/button")).click(); System.out.println("Authorized");

//Cancel Button

driver.findElement(By.xpath("/html/body/app-root/app-authorize- registration/table/tbody/tr[2]/td[10]/button")).click();

System.out.println(" Not Authorized");

}

@Test(priority=5) public void logout() {

//LogOut Button

driver.findElement(By.xpath("/html/body/app-root/div/nav/div/ul/li[4]/a")). click(); System.out.println("Logged Out");

}

@Test(priority=6) public void login\_Fail() { driver.manage().timeouts().implicitlyWait(20, TimeUnit.SECONDS); driver.findElement(By.name("inputUserName")).sendKeys("madhuri"); driver.findElement(By.name("password")).sendKeys("mad");

//Login Button

driver.findElement(By.xpath("/html/body/app-root/app-login/div/form/button")).click(); Alert alert = driver.switchTo().alert();

alert.accept();

String actualUrl="http://localhost:4200/user-account"; String expectedUrl= driver.getCurrentUrl(); if(!actualUrl.equalsIgnoreCase(expectedUrl)) { System.out.println("Login UnSuccessful"); } driver.manage().window().maximize();

}

}

**Login.java**

package Authentication; import org.openqa.selenium.\*;

import org.openqa.selenium.chrome.\*;

import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.support.ui.ExpectedConditions; import org.openqa.selenium.support.ui.WebDriverWait;

import java.util.concurrent.TimeUnit; import org.junit.Test;

public class Login { @Test

public void LoginTest() throws InterruptedException {

System.setProperty("webdriver.gecko.driver", "C:\\Users\\Nagaraj\\Downloads\\firefoxDriver\\geckodriver.exe");

WebDriver driver = new FirefoxDriver();

driver.get("http://localhost:4200/login");

Thread.sleep(5000);

driver.manage().timeouts().implicitlyWait(14, TimeUnit.SECONDS); driver.findElement(By.xpath("/html/body/app-root/app-

login/div/form/div[1]/input")).sendKeys("Novina"); driver.findElement(By.xpath("/html/body/app-root/app-

login/div/form/div[2]/input")).sendKeys("Novina123"); driver.findElement(By.xpath("/html/body/app-root/app-

login/div/form/div[3]/button")).click(); try

{

WebDriverWait wait=new WebDriverWait(driver, 14);

wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("http://localhost:4200/home"))

);

System.out.println("Login Successfull");

//

//

driver.findElement(By.xpath("/html/body/app-root/nav/ul/li[5]/div/a[2]")).click();

wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("/html/body/app-

root/app-login/div/form/h3")));

// System.out.println("Signed Out");

}

catch(Exception e)

{

System.out.println("Error in browser!!\nPlease have a look");

}

Thread.sleep(5000); driver.quit();

}

}

**Checkbookrequest.java**

package UserActions;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By; import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver; import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.support.ui.ExpectedConditions; import org.openqa.selenium.support.ui.Select;

import org.openqa.selenium.support.ui.WebDriverWait; import org.testng.annotations.Test;

public class ChequeBookRequest { @Test

public void chequeBookRequest() throws InterruptedException {

System.setProperty("webdriver.gecko.driver", "C:\\Users\\Nagaraj\\Downloads\\firefoxDriver\\geckodriver.exe");

WebDriver driver = new FirefoxDriver();

driver.get("http://localhost:4200/login"); Thread.sleep(5000);

driver.manage().timeouts().implicitlyWait(14, TimeUnit.SECONDS);

driver.findElement(By.xpath(

"/html/body/app-root/app-login/div/form/div[1]/input")).sendKeys("Novina"); driver.findElement(By.xpath(

"/html/body/app-root/app-login/div/form/div[2]/input")).sendKeys("Novina123")

;

driver.findElement(By.xpath(

"/html/body/app-root/app-login/div/form/div[3]/button")).click();

try

{

WebDriverWait wait=new WebDriverWait(driver, 14); wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath( "/html/body/app-root/app-home/div[1]/h2"))); System.out.println("Login Successfull");

driver.findElement(By.xpath("/html/body/app-root/nav/ul/li[4]/a")).click();

driver.findElement(By.xpath("/html/body/app-root/app-cheque-book- request/div/div[2]/select")).click();

driver.findElement(By.xpath("/html/body/app-root/app-cheque-book- request/div/div[2]/select/option[1]")).click();

driver.findElement(By.xpath("/html/body/app-root/app-cheque-book- request/div/form/button")).click();

System.out.println("Cheque Book Issued Successfully!!");

//

//

driver.findElement(By.xpath("/html/body/app-root/nav/ul/li[5]/div/a[2]")).click();

wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("/html/body/app-

root/app-login/div/form/h3")));

// System.out.println("Signed Out");

}

catch(Exception e)

{

System.out.println("Error in browser!!\nPlease have a look");

}

Thread.sleep(5000); driver.quit();

}

}

**Editprofile.java**

package UserActions;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By; import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver; import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.support.ui.ExpectedConditions;

import org.openqa.selenium.support.ui.Select;

import org.openqa.selenium.support.ui.WebDriverWait; import org.testng.annotations.Test;

public class EditProfile {

@Test

public void EditPorfile() throws InterruptedException {

System.setProperty("webdriver.gecko.driver", "C:\\Users\\Nagaraj\\Downloads\\firefoxDriver\\geckodriver.exe"); WebDriver driver = new FirefoxDriver();

driver.get("http://localhost:4200/home");

/\*

* System.setProperty(
* "webdriver.chrome.driver","D:\\Novina\_BNP\\Simplilearn\_Projects\\Project 4\\Chrome Driver\\chromedriver.exe"
* ); WebDriver driver = new ChromeDriver();

\*

* driver.get("http://localhost:4200/login");

\*/

Thread.sleep(5000);

try

{

/\*

* + WebDriverWait wait=new WebDriverWait(driver, 14);
  + wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath(
  + "/html/body/app-root/app-home/div[1]/h2")));
  + System.out.println("Login Successfull");

\*/

driver.manage().timeouts().implicitlyWait(14, TimeUnit.SECONDS); driver.findElement(By.xpath("//\*[@id=\"dropdown04\"]")).click(); driver.findElement(By.xpath("/html/body/app-

root/nav/div/ul/li[5]/div/a[1]")).click();

driver.findElement(By.xpath("/html/body/app-root/app-edit- profile/div[1]/form/div/div[1]/input")).sendKeys("7666854389");

driver.findElement(By.xpath("/html/body/app-root/app-edit- profile/div[1]/form/div/div[2]/input")).sendKeys("Mumbai");

driver.findElement(By.xpath("/html/body/app-root/app-edit- profile/div[1]/form/div/div[2]/div[1]/input")).sendKeys(["novinarayudu.97@gmail.com"](mailto:novinarayudu.97@gmail.com));

driver.findElement(By.xpath("/html/body/app-root/app-edit- profile/div[1]/form/div/div[2]/div[2]/input")).sendKeys("123P1234");

driver.findElement(By.xpath("/html/body/app-root/app-edit- profile/div[1]/form/div/div[2]/div[3]/input")).sendKeys("123P1234");

//driver.findElement(By.xpath("/html/body/app-root/app-edit- profile/div[1]/form/div/div[3]/button")).click();

System.out.println("Profile edited"); driver.manage().timeouts().implicitlyWait(14, TimeUnit.SECONDS); driver.findElement(By.xpath("//\*[@id=\"dropdown04\"]")).click(); driver.findElement(By.xpath("/html/body/app-

root/nav/div/ul/li[5]/div/a[2]")).click();

//wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("/html/body/app- root/app-login/div/form/h3")));

System.out.println("Signed Out");

}

catch(Exception e)

{

System.out.println("Error in browser!!\nPlease have a look");

}

Thread.sleep(5000);

}

}

**Register.java**

package UserActions;

import org.openqa.selenium.By; import org.openqa.selenium.WebDriver;

import org.openqa.selenium.WebElement;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.support.ui.ExpectedConditions; import org.openqa.selenium.support.ui.Select;

import org.openqa.selenium.support.ui.WebDriverWait; import org.testng.annotations.Test;

public class Register {

@Test

public void register() throws InterruptedException { System.setProperty("webdriver.chrome.driver",

"D:\\Novina\_BNP\\Simplilearn\_Projects\\Project 4\\Chrome Driver\\chromedriver.exe"); WebDriver driver = new ChromeDriver();

driver.get("http://localhost:4200/login"); Thread.sleep(5000);

try {

//WebDriverWait wait=new WebDriverWait(driver, 14); driver.findElement(By.xpath("/html/body/app-root/app-

login/div/form/div[3]/a")).click();

driver.findElement(By.xpath("/html/body/app-root/app- register/div/form/div/div[1]/input")).sendKeys("Novina");

driver.findElement(By.xpath("/html/body/app-root/app- register/div/form/div/div[2]/input")).sendKeys("Rayudu");

driver.findElement(By.xpath("/html/body/app-root/app- register/div/form/div/div[3]/input")).sendKeys("Novina");

driver.findElement(By.xpath("/html/body/app-root/app- register/div/form/div/div[4]/input")).sendKeys("123456p");

driver.findElement(By.xpath("/html/body/app-root/app- register/div/form/div/div[5]/input")).sendKeys("17/08/2020");

driver.findElement(By.xpath("/html/body/app-root/app- register/div/form/div/div[6]/input")).sendKeys("7666854389");

driver.findElement(By.xpath("/html/body/app-root/app- register/div/form/div/div[7]/input")).sendKeys("Mumbai");

Select id=new Select(driver.findElement(By.xpath("/html/body/app-root/app- register/div/form/div/div[8]/select")));

id.selectByIndex(2);

WebElement fileInput = driver.findElement(By.xpath("/html/body/app-root/app- register/div/form/div/div[9]/input"));

fileInput.sendKeys("D:\\dinos.png"); driver.findElement(By.xpath("/html/body/app-root/app-

register/div/form/div/div[10]/input")).sendKeys("abcde1234"); driver.findElement(By.xpath("/html/body/app-root/app-

register/div/form/div/div[11]/input")).sendKeys("novinarayudu.97@gmail,com"); driver.findElement(By.xpath("/html/body/app-root/app-

register/div/form/div/div[12]/button")).click(); Thread.sleep(5000);

//wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("/html/body/app- root/app-login/div/form/h3")));

System.out.println("Registration Successfull");

}

catch(Exception e) {

System.out.println("Erro in web browser\nPlease have a look");

}

Thread.sleep(5000); driver.quit();

}

}

**Transactionhistory.java**

package UserActions;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By; import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver; import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.support.ui.ExpectedConditions; import org.openqa.selenium.support.ui.WebDriverWait; import org.testng.annotations.Test;

public class TransactionHistory { @Test

public void TransactionHistory() throws InterruptedException {

System.setProperty("webdriver.gecko.driver", "C:\\Users\\Nagaraj\\Downloads\\firefoxDriver\\geckodriver.exe");

WebDriver driver = new FirefoxDriver(); driver.get("http://localhost:4200/home");

/\*

* System.setProperty("webdriver.chrome.driver",
* "D:\\Novina\_BNP\\Simplilearn\_Projects\\Project 4\\Chrome Driver\\chromedriver.exe"
* ); WebDriver driver = new ChromeDriver();

\*

* driver.get("http://localhost:4200/login");

\*/ Thread.sleep(5000);

/\*

* driver.manage().timeouts().implicitlyWait(14, TimeUnit.SECONDS);
* driver.findElement(By.xpath(
* "/html/body/app-root/app-login/div/form/div[1]/input")).sendKeys("Novina");
* driver.findElement(By.xpath(
* "/html/body/app-root/app-login/div/form/div[2]/input")).sendKeys("Novina123")

\* ;

\*

* driver.findElement(By.xpath(
* "/html/body/app-root/app-login/div/form/div[3]/button")).click();

\*/ try

{

/\*

* + WebDriverWait wait=new WebDriverWait(driver, 14);
  + wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath(
  + "/html/body/app-root/app-home/div[1]/h2")));
  + System.out.println("Login Successfull");

\*/

driver.manage().timeouts().implicitlyWait(14, TimeUnit.SECONDS); driver.findElement(By.xpath("/html/body/app-root/nav/ul/li[1]/a")).click(); System.out.println("Transaction History Displayed");

driver.findElement(By.xpath("//\*[@id=\"navbardrop\"]")).click(); driver.findElement(By.xpath("/html/body/app-root/nav/ul/li[5]/div/a[2]")).click();

// wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("/html/body/app- root/app-login/div/form/h3")));

System.out.println("Signed Out");

}

catch(Exception e)

{

System.out.println("Error in browser!!\nPlease have a look");

}

Thread.sleep(5000); driver.quit();

}

}

**Transferhistory.java**

package UserActions;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By; import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver; import org.openqa.selenium.firefox.FirefoxDriver;

import org.openqa.selenium.support.ui.ExpectedConditions; import org.openqa.selenium.support.ui.WebDriverWait; import org.testng.annotations.Test;

public class TransferHistory {

@Test

public void TransactionHistory() throws InterruptedException {

/\*

* System.setProperty("webdriver.chrome.driver",
* "D:\\Novina\_BNP\\Simplilearn\_Projects\\Project 4\\Chrome Driver\\chromedriver.exe"
* ); WebDriver driver = new ChromeDriver();

\*

* driver.get("http://localhost:4200/login");

\*/

System.setProperty("webdriver.gecko.driver", "C:\\Users\\Nagaraj\\Downloads\\firefoxDriver\\geckodriver.exe");

WebDriver driver = new FirefoxDriver();

driver.get("http://localhost:4200/home");

Thread.sleep(5000);

driver.manage().timeouts().implicitlyWait(14, TimeUnit.SECONDS);

/\*

* driver.findElement(By.xpath(
* "/html/body/app-root/app-login/div/form/div[1]/input")).sendKeys("Novina");
* driver.findElement(By.xpath(
* "/html/body/app-root/app-login/div/form/div[2]/input")).sendKeys("Novina123")

\* ;

\*

* driver.findElement(By.xpath(
* "/html/body/app-root/app-login/div/form/div[3]/button")).click();

\*/ try

{

/\*

* + WebDriverWait wait=new WebDriverWait(driver, 14);
  + wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath(
  + "/html/body/app-root/app-home/div[1]/h2")));
  + System.out.println("Login Successfull");

\*/

driver.manage().timeouts().implicitlyWait(14, TimeUnit.SECONDS); driver.findElement(By.xpath("/html/body/app-root/nav/ul/li[2]/a")).click(); System.out.println("Transfer History Displayed");

// driver.findElement(By.xpath("/html/body/app-root/nav/ul/li[5]/div/a[2]")).click();

// wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("/html/body/app- root/app-login/div/form/h3")));

// System.out.println("Signed Out");

}

catch(Exception e)

{

System.out.println("Error in browser!!\nPlease have a look");

}

Thread.sleep(5000); driver.quit();

}

}

**Transfermoney.java**

package UserActions;

import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By; import org.openqa.selenium.WebDriver;

import org.openqa.selenium.chrome.ChromeDriver;

import org.openqa.selenium.support.ui.ExpectedConditions; import org.openqa.selenium.support.ui.WebDriverWait; import org.testng.annotations.Test;

public class TransferMoney {

@Test

public void TransferMoney() throws InterruptedException{

System.setProperty("webdriver.chrome.driver", "D:\\Novina\_BNP\\Simplilearn\_Projects\\Project 4\\Chrome Driver\\chromedriver.exe");

WebDriver driver = new ChromeDriver();

driver.get("http://localhost:4200/login"); Thread.sleep(5000);

driver.manage().timeouts().implicitlyWait(14, TimeUnit.SECONDS); driver.findElement(By.xpath("/html/body/app-root/app-

login/div/form/div[1]/input")).sendKeys("Novina"); driver.findElement(By.xpath("/html/body/app-root/app-

login/div/form/div[2]/input")).sendKeys("Novina123");

driver.findElement(By.xpath("/html/body/app-root/app- login/div/form/div[3]/button")).click();

try

{

WebDriverWait wait=new WebDriverWait(driver, 14); wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("/html/body/app-

root/app-home/div[1]/h2")));

System.out.println("Login Successfull");

driver.manage().timeouts().implicitlyWait(14, TimeUnit.SECONDS); driver.findElement(By.xpath("/html/body/app-root/nav/ul/li[3]/a")).click();

driver.manage().timeouts().implicitlyWait(14, TimeUnit.SECONDS); driver.findElement(By.xpath("/html/body/app-root/app-transfer-between-

accounts/div/form/div[3]/input")).sendKeys("123456789"); driver.findElement(By.xpath("/html/body/app-root/app-transfer-between-

accounts/div/form/div[4]/input")).sendKeys("1234"); driver.findElement(By.xpath("/html/body/app-root/app-transfer-between-

accounts/div/form/div[5]/input")).sendKeys("1000");

Thread.sleep(5000); driver.manage().timeouts().implicitlyWait(14, TimeUnit.SECONDS);

driver.findElement(By.xpath("/html/body/app-root/app-transfer-between- accounts/div/form/div[6]/button")).click();

wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("/html/body/app- root/app-home/div[1]/h2")));

System.out.println("Transfer Money Successfull");

// driver.findElement(By.xpath("/html/body/app-root/nav/ul/li[5]/div/a[2]")).click();

//

wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("/html/body/app-

root/app-login/div/form/h3")));

// System.out.println("Signed Out");

}

catch(Exception e)

{

System.out.println("Error in browser!!\nPlease have a look");

}

Thread.sleep(5000); driver.quit();

}

}

**Pom.xml**

<project xmlns=["http://maven.apache.org/POM/4.0.0"](http://maven.apache.org/POM/4.0.0) xmlns:xsi=["http://www.w3.org/2001/XMLSchema](http://www.w3.org/2001/XMLSchema-)- instance" xsi:schemaLocation=["http://maven.apache.org/POM/4.0.0](http://maven.apache.org/POM/4.0.0) https://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>UserPortalTesting</groupId>

<artifactId>UserPortalTesting</artifactId>

<version>0.0.1-SNAPSHOT</version>

<name>UserPortalAuthentication</name>

<description>User portal testing</description>

<dependencies>

<dependency>

<groupId>org.seleniumhq.selenium</groupId>

<artifactId>selenium-java</artifactId>

<version>3.141.59</version>

</dependency>

<dependency>

<groupId>junit</groupId>

<artifactId>junit</artifactId>

<version>4.12</version>

<scope>test</scope>

</dependency>

<dependency>

<groupId>org.slf4j</groupId>

<artifactId>slf4j-api</artifactId>

<version>1.7.5</version>

</dependency>

<dependency>

<groupId>org.slf4j</groupId>

<artifactId>slf4j-log4j12</artifactId>

<version>1.7.5</version>

</dependency>

</dependencies>

</project>