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HERALD
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Project and Professionalism (6CS020)

Art Gallery Management System Artefact Design and Test Plan

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Artifact design

1.FDD (Functional Decomposition Diagram)

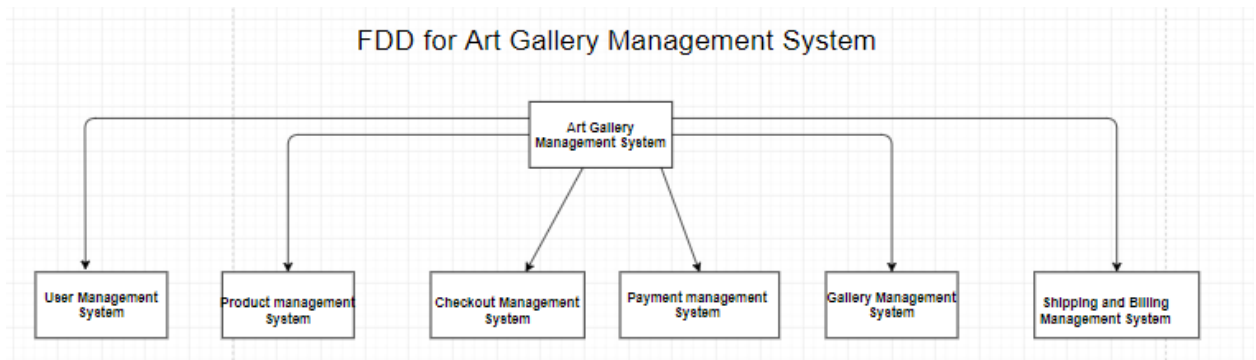
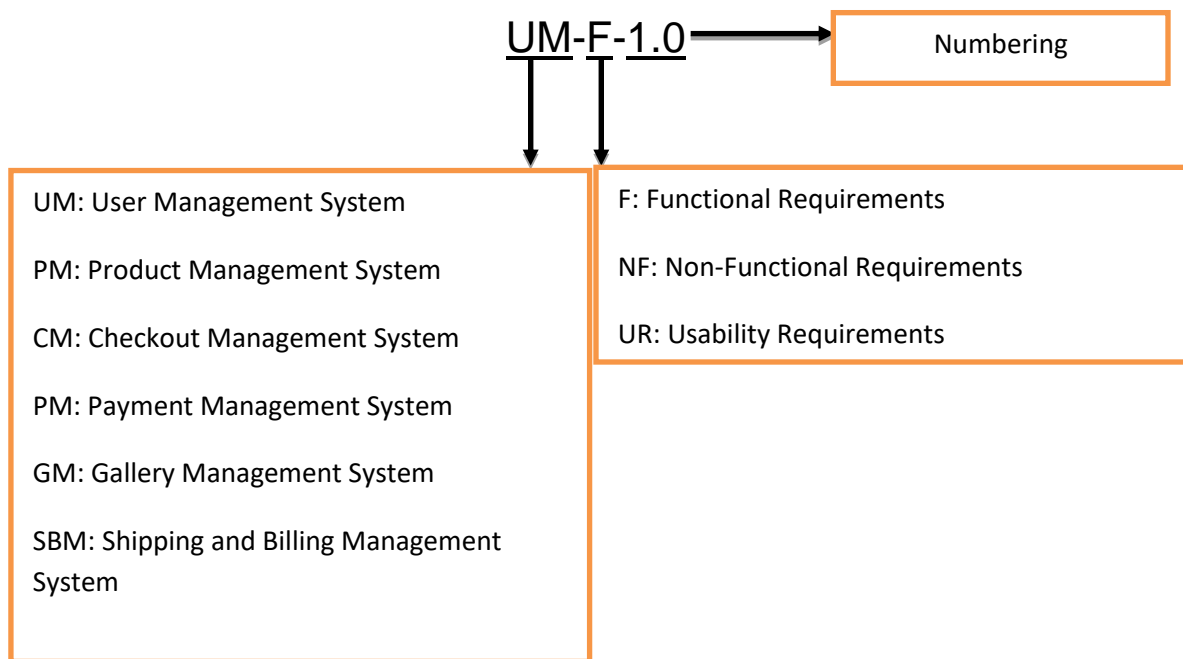


Figure 1FDD

2. System Requirement Specification (SRS)

SRS stands for System Requirement Specification which is the description of the general purpose surrounding for the software development. SRS defines how the application will function and manipulate with the system, their hardware and other components. It is based upon the business requirement, the system functionality are highlighted with table is given below:

Legend



2.1 SRS Table

2.1.1 User Management System

Requirement	Requirement Specification and justification	Moscow
-------------	---	--------

ID		
UM-F-1	Individual users should be provided a login and registering option.	Must have
UM-NF-1.1	Weak password is not allowed. Passwords must contain alphanumeric, symbols and at least 8 characters.	Must have
UM -UR-1.1	Show message in case a login attempt fails.	Must have
UM -UR-1.3	Notification related to the credentials incorrect (i.e. either password or email) should be delivered to the user.	Should have
UM-F-2	The users should be provided with options to manage their account/ profile.	Must have
UM-NF-2.1	The management system should allow users and to sign-out if they are not interested.	Must have
UM-NF-2.2	The users should be provided with options to change their password.	Must have
UM-NF-2.3	The user's password reset code should be sent to the user's email account.	Must have
UM-UR-2.1	User must enter registered email and password.	Should
UM-F-3	Admin can manage, add or block any users from the system.	Must have
UM-NF-3.1	Admin can login and logout of the system to perform administrative tasks.	Must have
UM-NF-3.2	Admin should be able to view the list of users in the system.	Should have
UM-NF-3.3	Admin should be able to create new user, edit user's information, block any users and see the history of users from the system.	Should have

2.1.2 Product Management System

Requirement ID	Requirement Specification and Justification	Moscow
PM-F-1	Admin should be able to create a product or upload paintings and artworks in the web app.	Must have
PM-NF-1.1	The system would only allow the creation of product with the minimum resolution of 1024 X 760 and the file size should not exceed 20 MB.	Must have
PM-NF-1.2	The image could be upload using drag and drop feature so that process can be easy and time saving.	Could have
PM-UR-1.1	The paintings should be given unique bar codes.	Should have
PM-F-2	The system should allow admin to manage and categorize the products and add descriptions about the paintings.	Should have
PM-NF-2.1	The descriptions should not exceed 150 words.	Should have
PM-NF-2.1	The categorization can be done the basis of art types, styles, artist, mediums, subjects etc.	Should have

2.1.3 Checkout Management System

Requirement ID	Requirement Specification and Justification	Moscow
CM-F-1	The users must be able to checkout their cart and confirm their shop before making payments.	Must have
CM-NF-1.1	Users must be logged in to the system.	Must have
CM-NF-1.2	Customers must be able to remove the products(paintings) from the cart they would not like to buy.	Should have

CM-NF-1.3	The checkout management system should display quantity, title and price of the product.	Should have
CM-UR-1.1	The system should be able to sum (and give discount if any) the amounts of products and display to the system.	Should have

2.1.4 Payment Management System

Requirement ID	Requirement Specification and Justification	Moscow
PM-F-1	Customers should be able to make payments through various international systems.	Should have
PM-NF-1.1	Customers could make payments through different means of payments such as Visa card, MasterCard, PayPal etc.	Should have

2.1.5 Gallery Management System

Requirement ID	Requirement Specification and Justification	Moscow
GM-F-1	Users should be provided with a feature to save paintings in their gallery.	Could have
GM-NF-1.1	Users must login to the system to access this feature to save artworks. They can also view the saved paintings in their profile after logging in to the system.	Must have

2.1.6 Shipping and Billing Management System

Requirement ID	Requirement Specification and Justification	Moscow
SBM-F-1	Users should be provided with service for the delivery of the purchased artworks from the system.	Should have
SBM-NF-1.1	Users must have added products to the cart, made checkout and completed payment before accessing the service for the delivery of the products.	Must have
SBM-NF-1.2	People should fill up the form for the shipping and billing details including their email and contact number.	Must have

3. Activity Diagram

3.1 Activity Diagram of sign up and Login

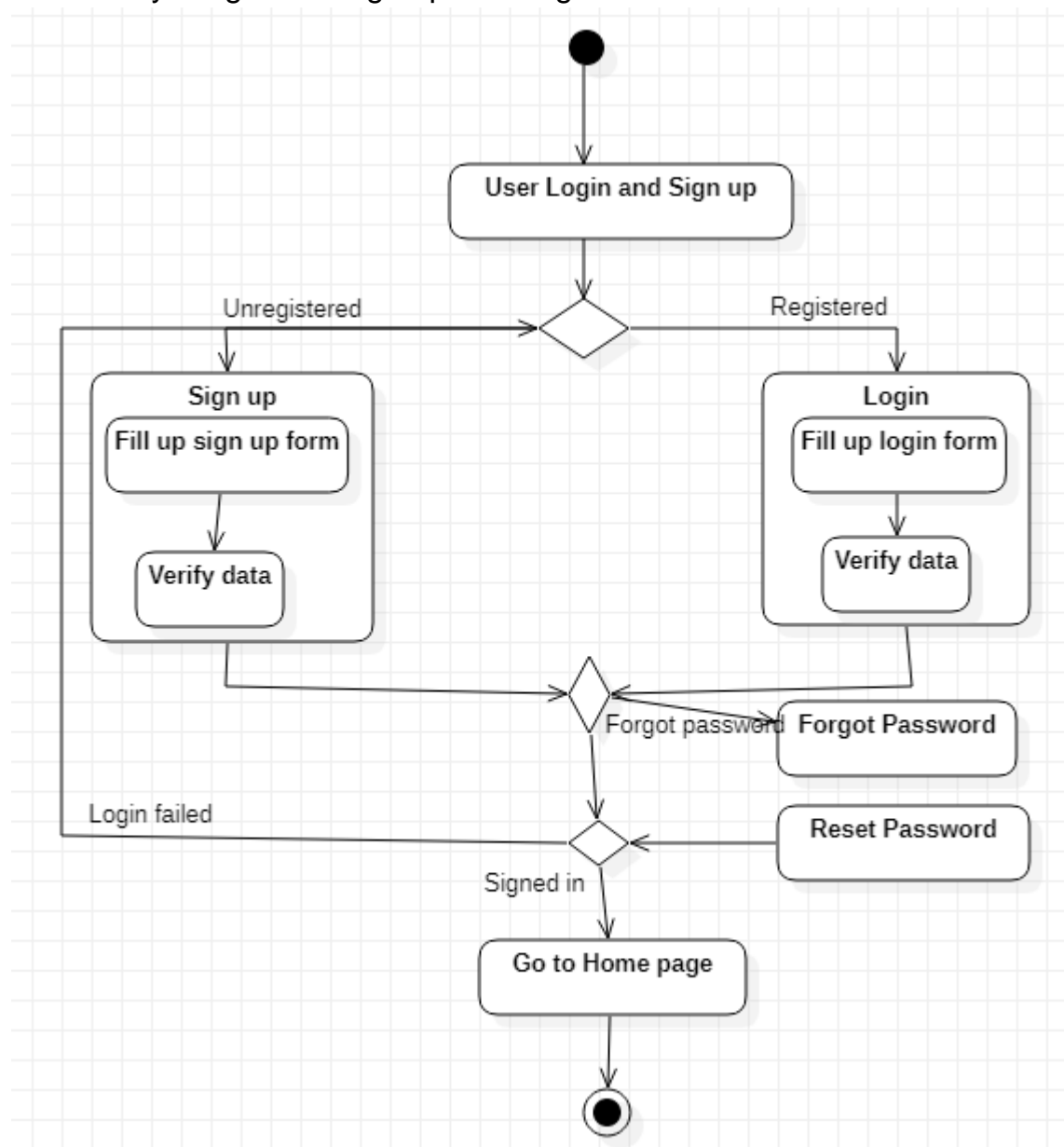


Figure 2Activity Diagram of sign up and Login

3.2 Activity diagram showing adding and editing user by admin

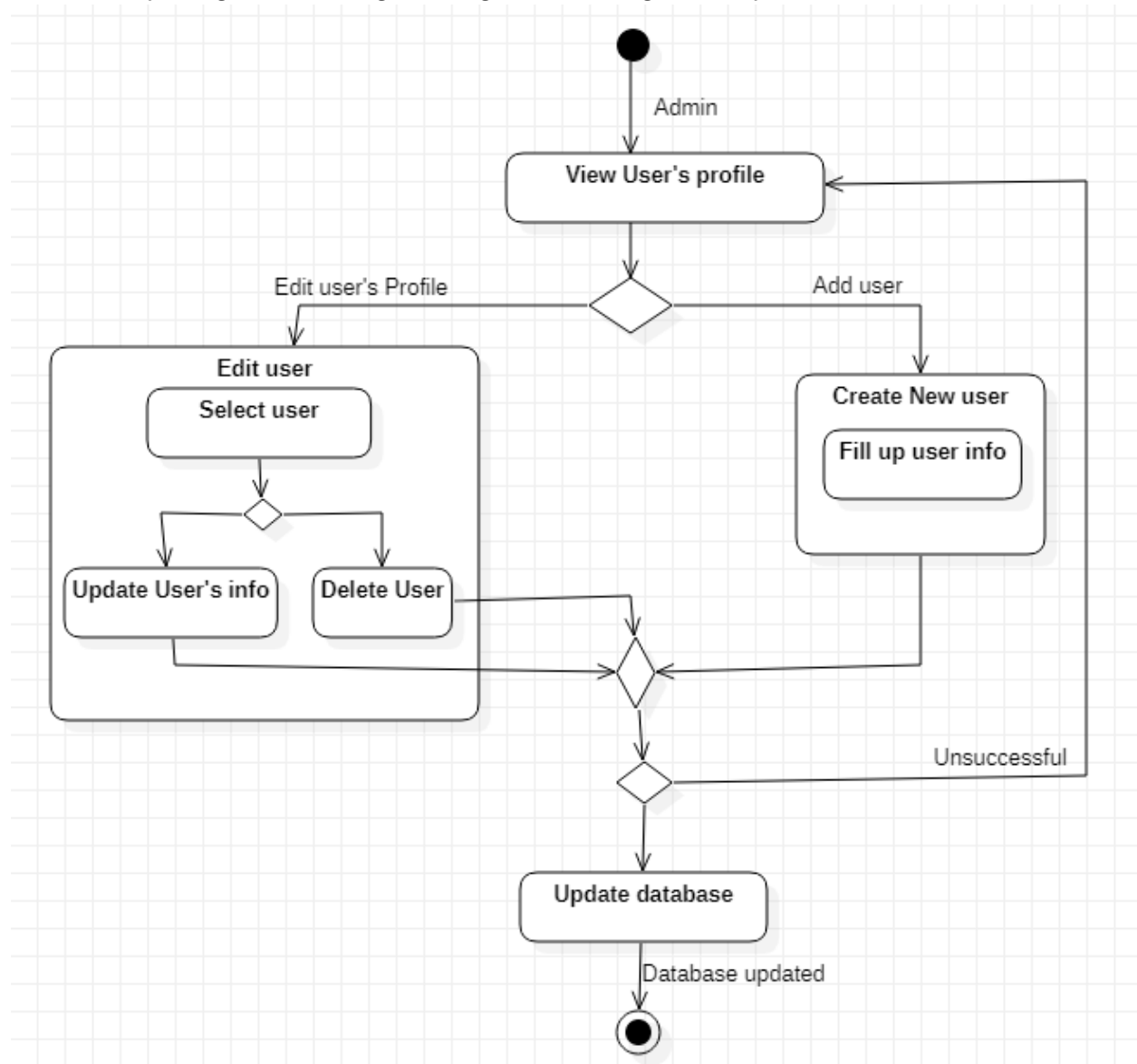


Figure 3 Activity diagram showing adding and editing user by admin

4. Use Case Diagram

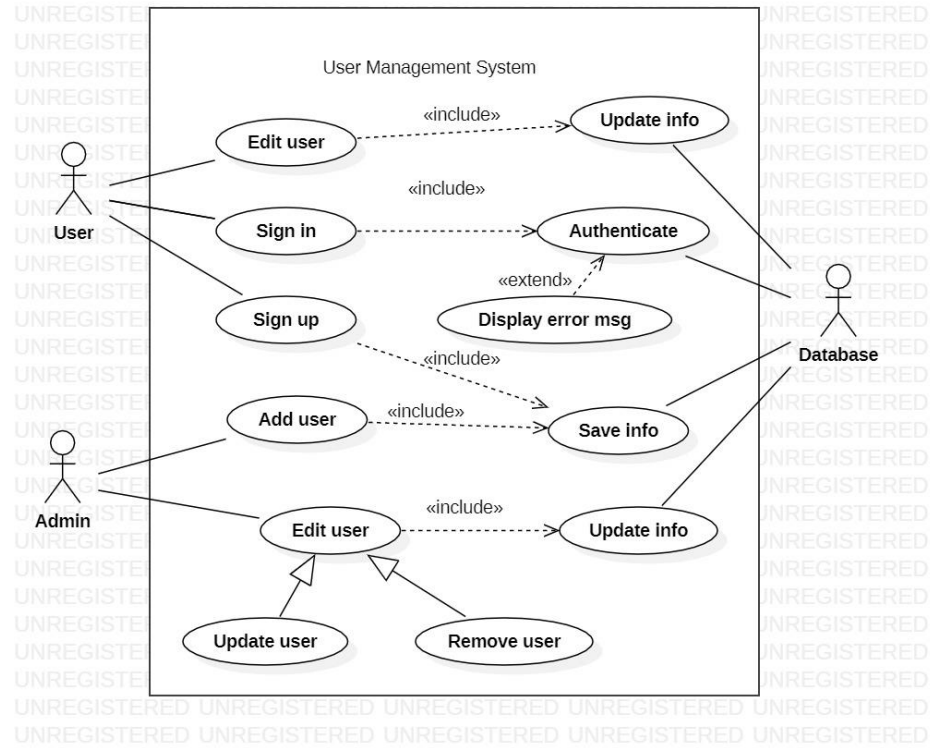
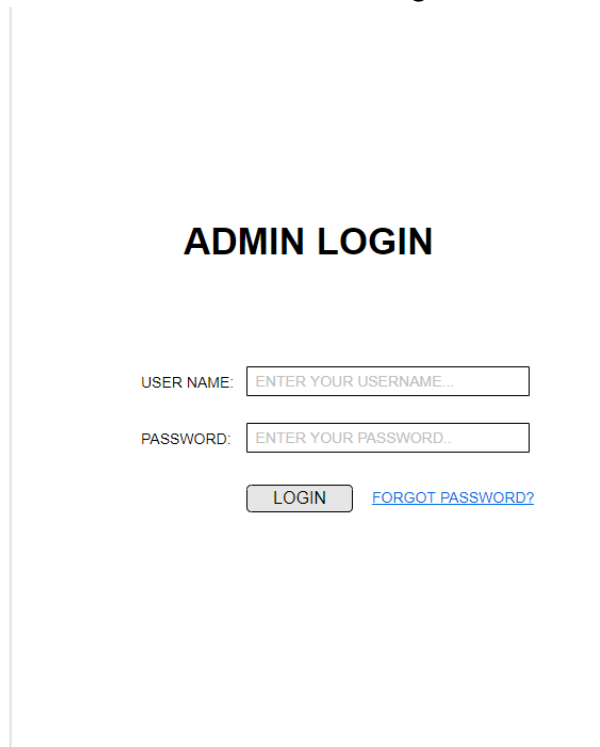


Figure 4 Use Case diagram of User Management System

5. Wireframes

5.1 Wireframe of Admin login



The wireframe shows a login page with a light gray background. At the top center is the title "ADMIN LOGIN" in bold black text. Below the title are two input fields: "USER NAME:" followed by a text box containing "ENTER YOUR USERNAME...", and "PASSWORD:" followed by a text box containing "ENTER YOUR PASSWORD..". Below the password field is a gray "LOGIN" button and a blue link "FORGOT PASSWORD?".

ADMIN LOGIN

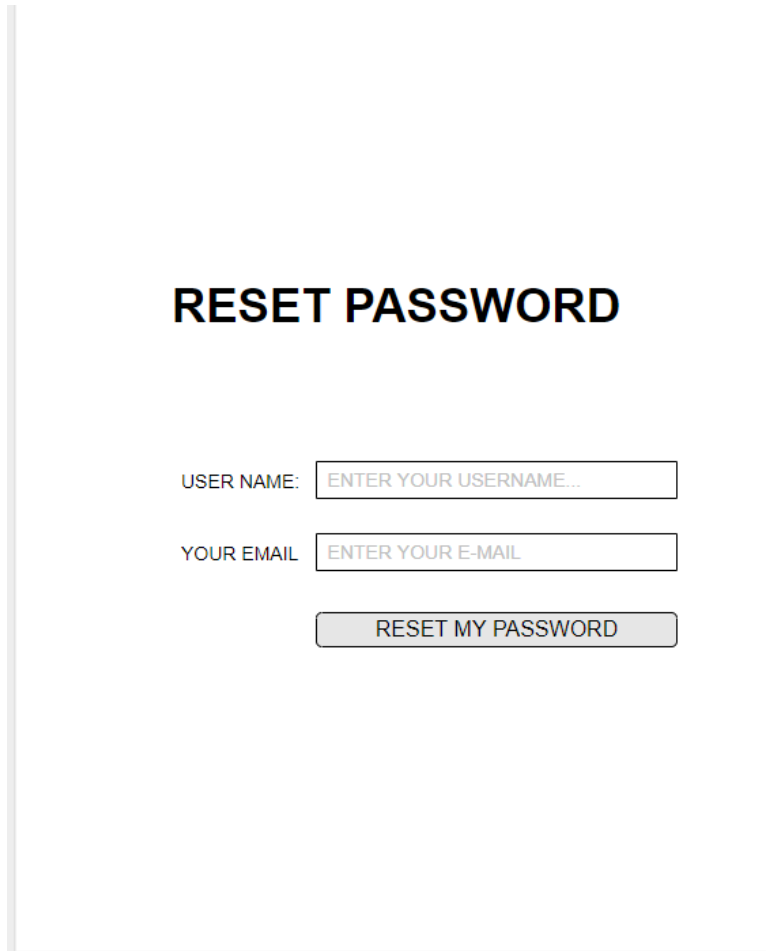
USER NAME:

PASSWORD:

[FORGOT PASSWORD?](#)

Figure 5 Wireframe of Admin login

5.2 Wireframe of Admin Password Reset



The wireframe shows a password reset interface. It features a title 'RESET PASSWORD' in bold. Below the title are two input fields: one for 'USER NAME' with a placeholder 'ENTER YOUR USERNAME...' and one for 'YOUR EMAIL' with a placeholder 'ENTER YOUR E-MAIL'. A 'RESET MY PASSWORD' button is positioned below the email field. The entire form is enclosed in a light gray border.

RESET PASSWORD

USER NAME:

YOUR EMAIL

Figure 6 Wireframe of Admin Password Reset

5.3 Wireframe of Admin Dashboard

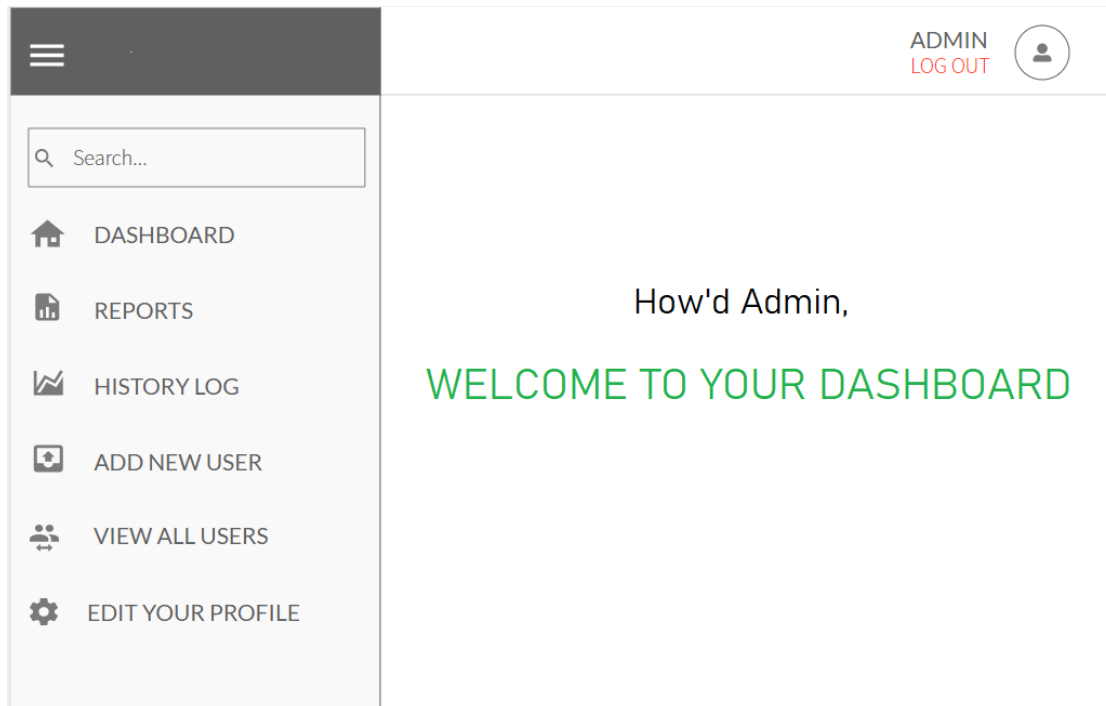


Figure 7 Wireframe of Admin Dashboard

5.4 Wireframe of New user adding section

☰

🔍

🏠

🗄️

📈

🔄

👥

⚙️

ADMIN
LOG OUT

👤

New User Details

Username

Email

First Name

Last Name

Password

▼

☒ Send email confirmation

Add User

Cancel

Profile Picture

Select Image

🏠 Your Company Details

Figure 8 Wireframe of New user adding section

5.5 Wireframe of User Login

☐ Remember me

[Recover Password](#)

Sign in

Request Account

Figure 9 Wireframe of User Login

6. ERD

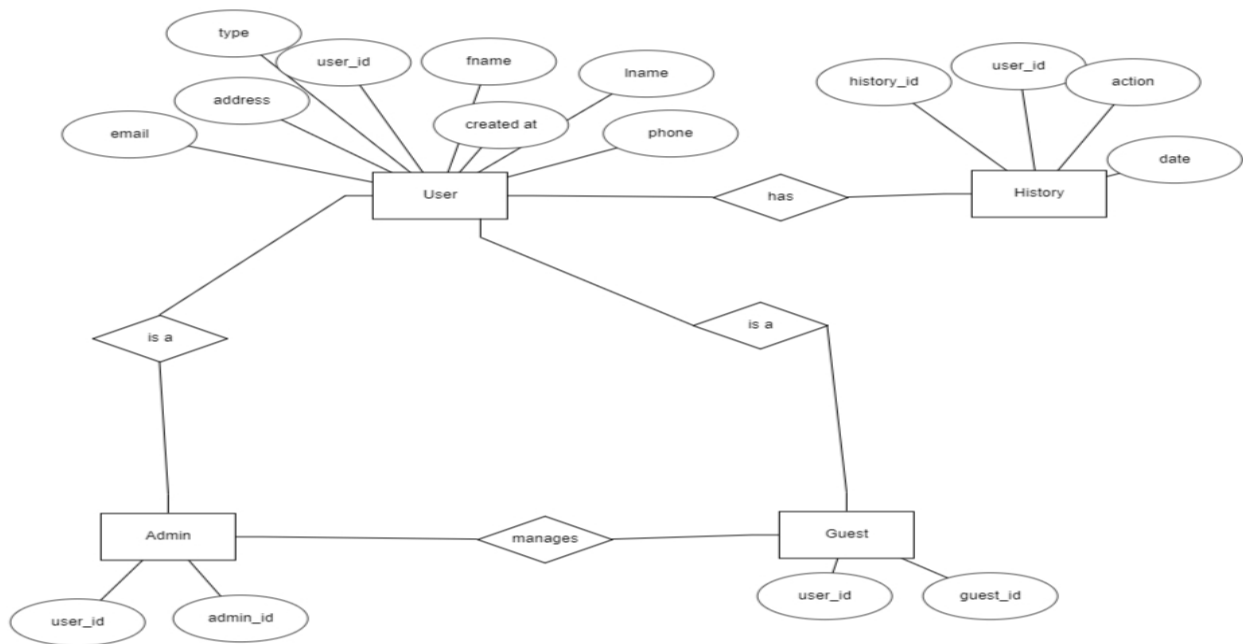


Figure 10 ERD

7. Class Diagram

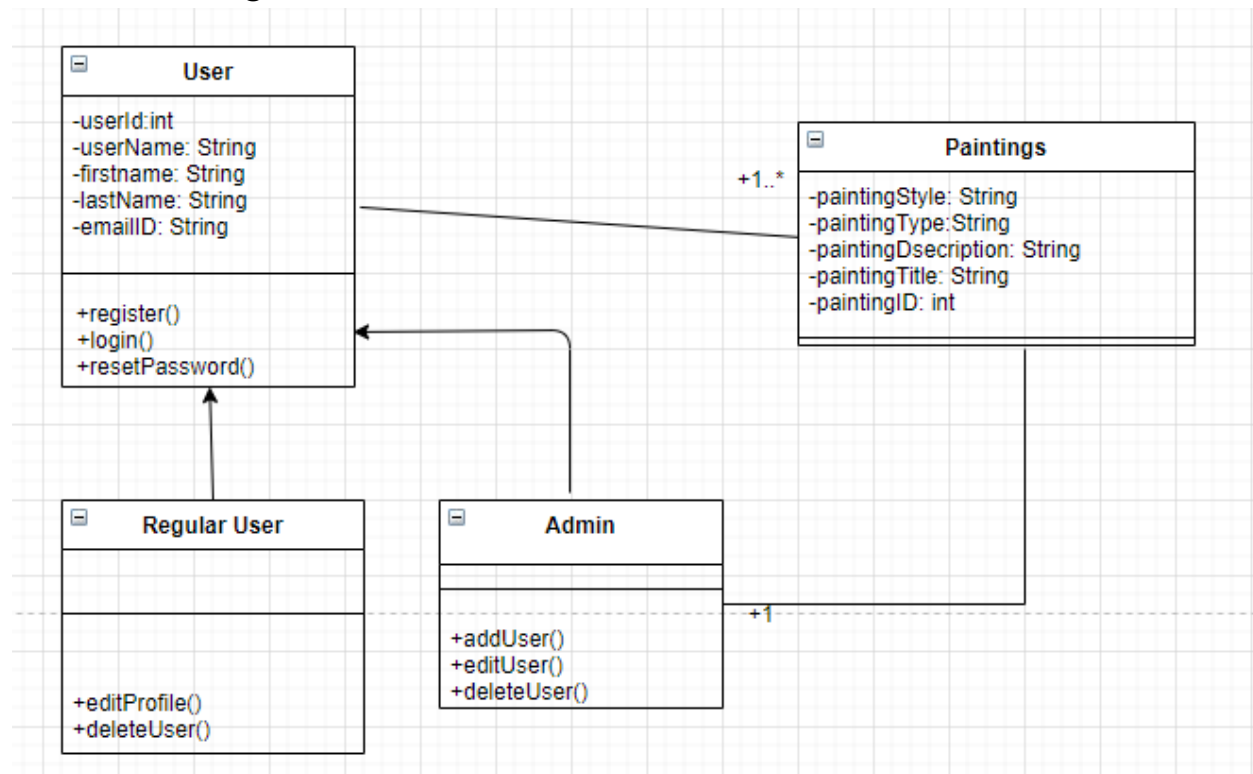


Figure 11 Class Diagram

8. Sequence Diagram

8.1 Sequence Diagram of sign up

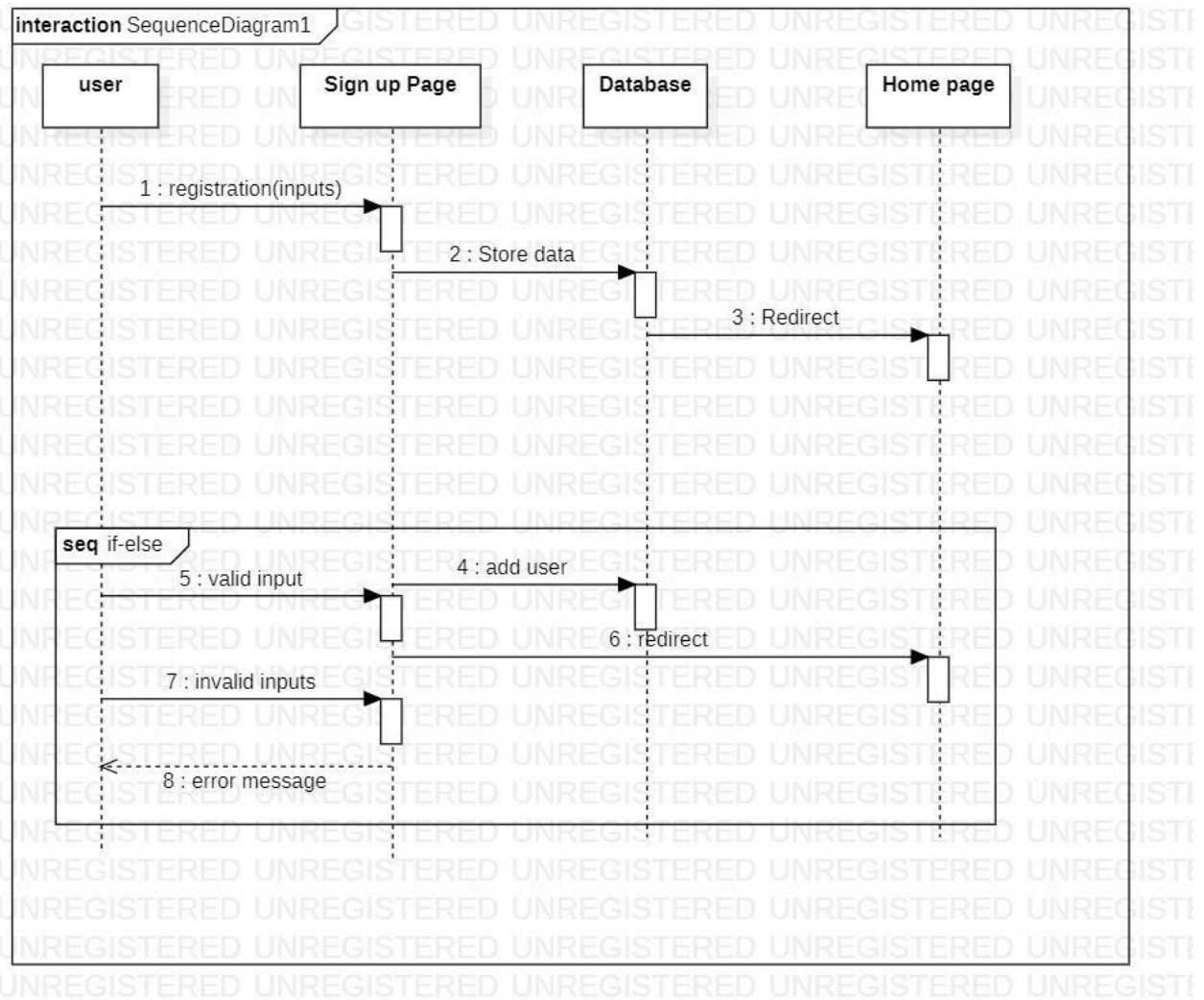


Figure 12Sequence Diagram of sign up

8.2 Sequence diagram of Sign in

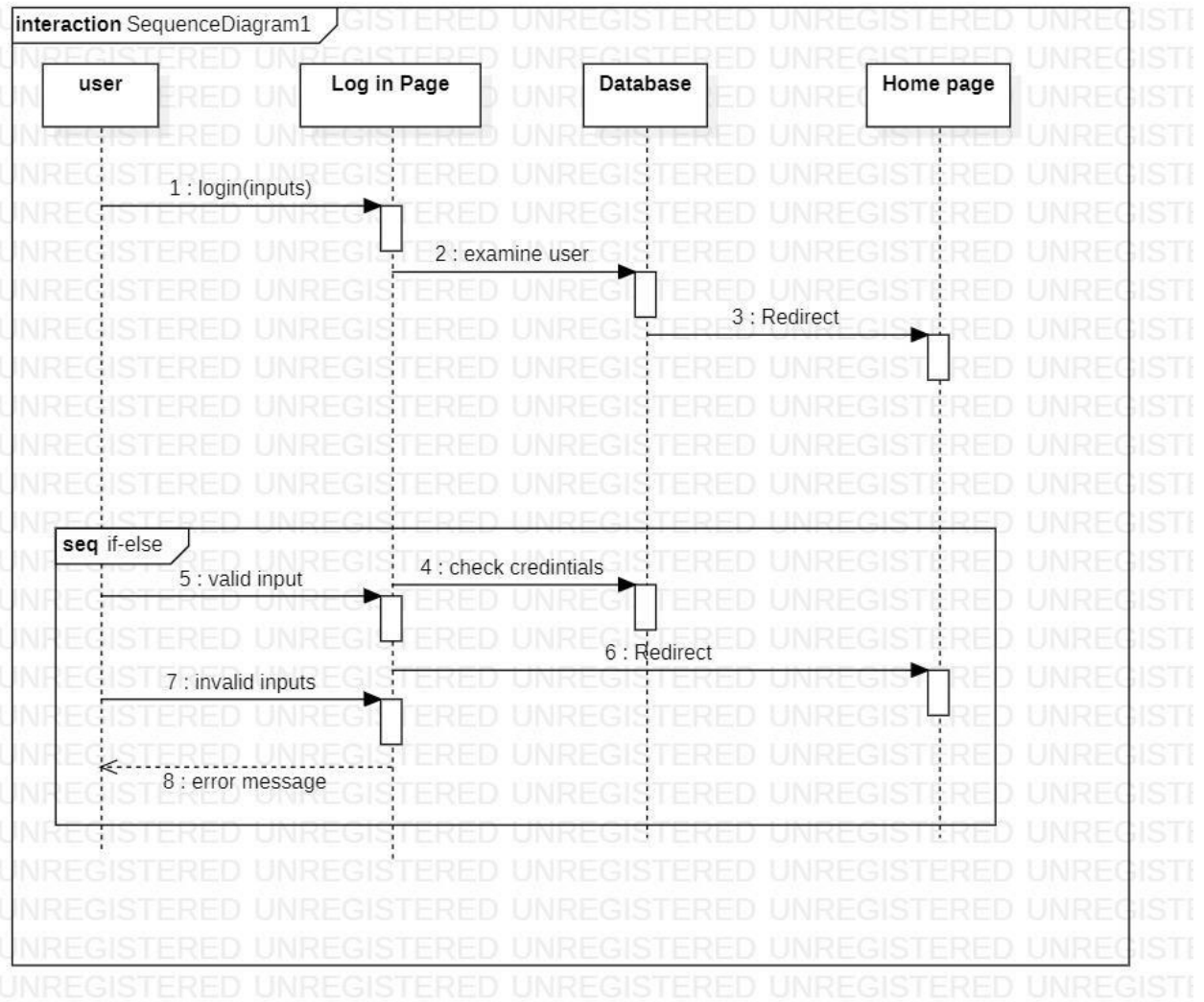


Figure 13Sequence diagram of Sign in

9. State Transition Diagram

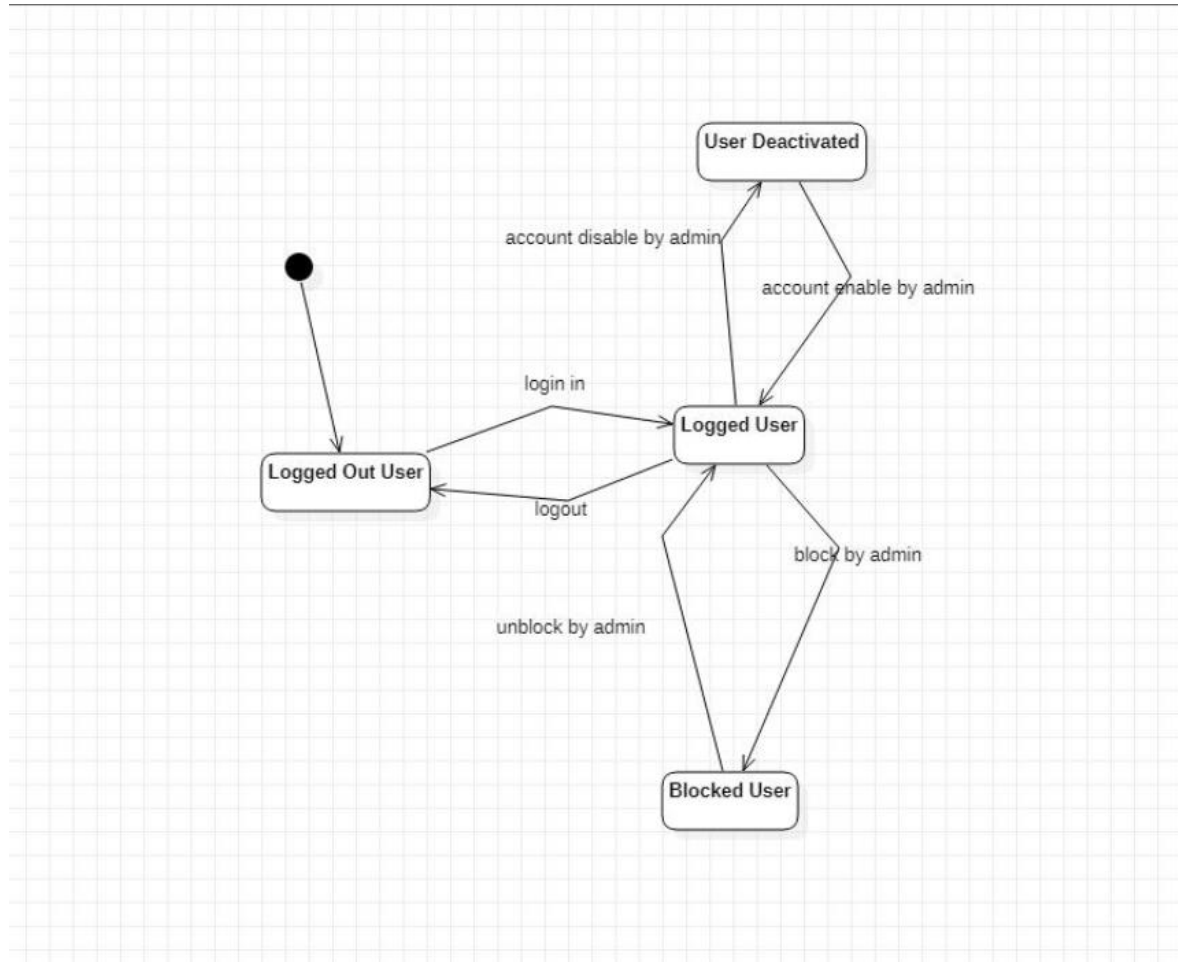


Figure 14 State Transition Diagram

10. Testing

ADMIN:										
User Story ID	Test Case ID	Title	Description	Pre Condition	TestStep	TestData		POSTCONDITION	Actual Result	Status
US001	TC001	Login	Test Admin Login	1:User must be on Admin Login Page 2:No User is currently logged in	1:Go to login page 2:Enter username and password on the respective input field 3:Press Login Button	Username="admin"	verify sql query:select * from user where username=admin and password=admin IF:username and password matches database values then redirect to dashboard	User Session is stored added action to admin history	pass	TRUE
						password="admin"	else: return to login page with error msg	N/A	pass	TRUE
US002	TC002	Logout	Test Admin Logout	1:Must Be Logged in as Admin	1:Press Logout Button on the nav bar	N/A	Delete Session data and redirect to login page	Clear Session data add action to admin history	pass	TRUE
US003	TC003	Reset Password	Test Reset Password	1:Must Be Logged in as admin 2:Must be on	1:Press on Change Password 2:Enter Old Password	password="admin" userId=101 username="admin"	sql:select password from user where userId=101 if password==db_password: send reset email else: redirect to profile page with error msg	Password reset mail is send to the user email	pass	TRUE

				profile page						
	TC004		Test Forget Password Option	1:M must not be logged in 2:Selected Forget Password Option	1:Enter email or user_name on input field 2:Reset Password	username="admin"	sql:select password from user where username='admin' send reset email		password	TRUE
	TC005		Test Reset Password Page	1:M must be checked the email inbox	1:Press the email 2:Enter new password on the input field 3:Press Reset Password	new_password="admin123", user_token="token to identify user"	1:check that user token if its valid and get user 2: redirect to password reset page	User session is stored added action to admin history	password	TRUE
US004	TC006	check user list	Test List of User page	1:M must be logged in as admin 2:M must be on user page	1:Go to users page 2:SELECT a filter option, default all users 3:SELECT number_of_list, default 10	filter="ALL", number_of_list="10"	sql query:select * from user; All user in the data base filtered by the criteria		password	TRUE
US005	TC007	Create	Test User	1:M must	1:Enter all the user	username="bob"	sql query:INSERT INTO USER	added action	password	TRUE

		User creation page	be logged in as admin 2:M must be on user creation page	information ie username, password,email,phone,age,gender and so on 2:press create user button	email="bob@bob.com", password="bob123", phone="987654321", age=20 gender="Male"	VALUES(username ,email,password, phone,age,gender); return to user page with user creation message	admin history		U E	
					username="bob" email="", password="bob123", phone="987654321", age=20 gender="Male"			pass	T R U E	
US006	TC008	Edit User	Test User Info update page	1:M must be logged in as admin 2:M must be on list of user	1:Select a user from a list 2:Edit the user info 3:Press Save	username="bob" email="bob@bob.com", password="bob123", phone="987654321", age=20 gender="Male"	sql quer:UPDATE USER SET username="bob",email="bob@bob.com", phone="987456123",age=20,gender="male"; returnt to user edit page with user successfully edited	added action to admin history	pass	T R U E
US007	TC009	Block User	Test Block User	1:M must be logged in as admin 2:M	1:Press the block user button	user_status="block"	UPDATE USER SET user_staus="blocke d" the user will not be able to user the application	added action to admin history	pass	T R U E

				ust be on user edit pag e						
US008	TC010	View Profile	Test Admin Profile	1:M ust be logg ed in as adm in	1:Select the profile icon on the nav bar				pa ss	T R U E
US009	TC012	View History	Test History	1:M ust be logg ed in as adm in 2:G o to histo ry in nav bar	1:Select a User	user_id=101	sql query:SELECT * FROM HISTORY where user_id=101; List of users history		pa ss	T R U E
US010	TC013	Generate Report	Test Report generation	1:M ust be logg ed in as adm in 2:Be a Hist ory pag e	1:Select generate report 2:Select date , and user status 3:Press generate	date=2020/12/10 user_status ="blocked"	sql query:SELECT * FROM HISTORY where user_status="block ed" and date="2020/01/05"; the information in printed on a paper		pa ss	T R U E
GU EST :										
GS001	TC0014		Test Client	1:G uest	1:Go to Sign up page	Username="Guest" ,	verify sql query:select * from	Guest Session	pa ss	T R

			nt sign up Regi ster	are not allo wed to view any pag e 2:No Gue st is curr enty Regi ster	2:Enter username and password on the respective input field 3:Click Sign up Button	password=" " , Email=" " , Location=" " , Phone=" " "	user where username=guest and password=12345 IF:username and password matches database values then redirect to dashboard	n is stored and added to User history		U E
GS0 02	TC0 015		Test Clien t sign up Regi ster	1:M ust Be Regi ster as a gue st	1:Click Account Deactivate Button on the nav bar	Username=" " Guest" , password=" " 65984 " , Email="mad hav@gmail. com " , Location="k ailali " , Phone="112 346455 "	Delete Session data and redirect to register page	Clear Sessio n data add to admin history	pa ss	T R U E
US ER:										
US0 11	TC0 16	Regi ster	Test user regi ster	1. Clien t mus t not be regi ster ed. 2. Clien t sho uld be in login or Sign	1. Client enters the username 2.Client enters the email address 3.Client enters the Password and confirms the password	1. First Name: "Sujan" 2. Last Name: "Pyakurel" 3.Username : "SuzanCule" 4. Contact number: "986063738 7" 5.Email: "Suzan@gm ail.com" 6.Password: "12345678" 7.Confirm Password: "12345678"			pa ss	T R U E

				Up pag e 3.No any user is logg ed in curr ently						
US0 12	TC0 17	Logi n	Test user Logi n	1. User mus t be in user login pag e 2. No user is curr ently logg ed in	1:Go to login page 2:Enter username and password on the respective input field 3:Press Login In Button	1. Username: "SuzanCule" 2. Password: "12345678"	verify sql query:select * from user where username="SuzanC ule" and password="123456 78" IF:username and password matches database values then redirect to dashboard else: return to login page with error msg		pa ss	T R U E
US0 13	TC0 18	Log out	Test user Log out	1.Us er mus t be logg ed in to the syst em	1. Press logout button on the navbar	N/A	1.Delete Session data and redirect to login page		pa ss	T R U E
US0 14	TC0 19	Hist ory	Test User Hist ory	1. Clie nt mus t be logg ed in	1. Client clicks on dashboard 2.Clients clicks on history	user id =1	data is displayed from history table as per mock098 select * from history where user id= 1	Client is directe d to history page	pa ss	T R U E

US015	TC020	Dashboard	Test user dashboard	1. Client must be logged in	1. Client checks the dashboard 2. Client checks the functionality of dashboard 3. Client surfs the system easily	N/A	1. User is shown in the dashboard	pass	TRUE
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