

## **Test Scenarios**

### **UI Tests**

#### **Sign Up Feature**

##### **Positive:**

1. Verify successful user registration with valid inputs

##### **Negative:**

2. Verify error message when using an already registered email
3. Verify validation errors for invalid email formats
4. Verify validation errors for weak passwords
5. Verify First Name and Last Name field restrictions (only alphabets allowed)
6. Verify error message when submitting an empty form

#### **Log In Feature**

##### **Positive:**

1. Verify successful login with valid email and password

##### **Negative:**

2. Verify error message when entering an invalid email format
3. Verify error message when logging in with an incorrect password
4. Verify error message when logging in with an unregistered email
5. Verify error message when submitting the form with empty fields

## **Log Out Feature**

### **Positive:**

1. Verify that the Logout button is visible after a user logs in
2. Verify that clicking the Logout button successfully logs the user out

## **New Contact Feature**

### **Positive**

1. Verify that the "Add New Contact" button is visible and clickable on the Landing Page
2. Verify that clicking "Add New Contact" navigates to the Create Contact page
3. Verify that all input fields (First Name, Last Name, etc.) are displayed and editable
4. Verify successful contact creation with valid inputs in all fields
5. Verify that the Date of Birth field accepts a valid date format
6. Verify that the form allows submission with only the required fields filled

### **Negative**

7. Verify error message when trying to submit an empty form
8. Verify validation error when entering numbers in the First Name or Last Name fields
9. Verify validation error when entering an invalid email format
10. Verify validation error when entering an invalid phone number format
11. Verify that the Date of Birth field does not accept future dates

## **View Contact Feature**

### **Positive**

1. Verify that the table loads and displays all existing contacts correctly
2. Verify that each row in the table includes essential contact details (First Name, Last Name, Email, Phone, etc.)
3. Verify that newly added contacts appear in the table after creation

4. Verify that edited contacts show updated information in the table after modification
5. Verify that clicking a contact in the table navigates to the Contact Details page

#### **Negative**

6. Verify system behavior when there are no contacts

### **Edit Contact Feature**

#### **Positive**

1. Verify that clicking the "Edit Contact" button navigates to the Edit Contact page
2. Verify that updating one or more fields and clicking "Submit" successfully updates the contact
3. Verify that clicking the "Cancel" button on the Edit Contact page returns the user to the Contact Details page without saving changes

#### **Negative**

4. Verify error message when submitting the form without the required fields
5. Verify validation error when entering an invalid email format
6. Verify validation error when entering an invalid phone number format
7. Verify error message when entering special characters or numbers in First Name and Last Name fields
8. Verify that clicking "Cancel" does not save any changes

### **Delete Contact Feature**

#### **Positive**

Verify that clicking the "Delete" button deletion of Contact

#### **E2E Test**

- **Verify Contact Management flow**

## API TESTS

### Add User

#### Positive:

1. Successful User Registration: Register with valid details.

#### Negative:

3. Missing Required Fields: Attempt registration without mandatory fields
4. Invalid Email Format: Register with an invalid email address.
5. Weak Password: Register with a weak password
6. Duplicate Email Registration: The system prevents registration with an email already in use.

### Log In User

#### Positive:

1. Successful Login: Log in with the correct credentials.

#### Negative:

2. Incorrect Password: Log in with a wrong password
3. Unregistered Email: Log In with an unregistered email
4. Invalid token: Log in with invalid bearer token

### Log Out User

#### Positive:

Successful Logout: Log Out successfully

#### Negative:

Invalid token: Log out with an invalid token

## **Update User**

### **Positive:**

1. Update Existing User with valid data

### **Negative:**

2. Update Existing User with Invalid Email

## **View User**

### **Positive**

1. Retrieve User Profile

### **Negative**

3. Retrieve User Profile without authentication

## **Delete User**

### **Positive:**

1. Delete Existing User

## **Add Contact**

### **Positive**

1. Create a new Contact with valid details
2. Create a new Contact with only the required fields

### **Negative**

3. Create a new Contact without mandatory fields
4. Create duplicate contact
5. Create a new contact with an invalid email address

## **View Contact**

### **Positive**

1. Retrieve Contact List
2. Retrieve Contact

### **Negative**

3. Retrieve Contact without authentication
4. Retrieve Contact List with an Invalid token

## **Update Contact**

### **Positive**

1. Update existing Contact (PUT)
2. Update existing Contact partially (PATCH)

### **Negative**

3. Update non-existing Contact
4. Update existing Contact with an invalid email address

## **Delete Contact**

### **Positive**

1. Delete existing Contact

### **Negative**

3. Delete already deleted Contact
4. Delete non-existing Contact

## **E2E Tests**

1. User Registration and Login Flow
2. Full Contact Management Flow