Report: ELEC1005

Assignment 2

SID: 540740202, 540492459, 530634650, 540474857, 54082008, 540269194

Date: 19/05/2024

Development Outcome [4]

Verification & Validation [2] – Write 5-6 test cases based on the functions in your application

Test case 1: Login page test for valid user

- Test case ID: TC#01
- Test case title: Login field and button functionality test for valid users
  - Description: This test case is to examine and verify the login function (for valid users) of the application function, as intended. This test case is also an opportunity to test the back end capabilities of the web and mobile application of EventPortal AI.
- Test objective:
  - To verify the functionality of the login button, when valid user data is entered in the login input fields. This will also test the back end system of the login page.
- Pre-conditions:
  - There is a functioning and robust back end system for the login page
  - The user has access to the build of the system
  - User has already registered to the application or the webpage
- Test data:
  - Username (valid): PrimalPancake92
  - Password (valid): passwordisthebestpassword
- Test steps:
  1. Head to the login page
  2. Enter the valid set of usernames and passwords that were mentioned in the test data, in the username and password fields.
  3. Press the login button, that is indicated by the large arrow key in front of a white coloured button.
- Expected results:

- ○ Once the user has entered the valid set of username and password, the user will be led to a panel that shows the user has successfully logged in to the web or mobile application. This is indicated by a message 'Let's start editing' that is contained inside a pill shaped white container.
- Actual results:
  - ○ By following the instructions of test case, TC#01, the user was prompted to login. Once the user has entered the correct details that match the database system, the user will be greeted with the 'Let's start editing' message that is contained in a white pill shaped container. In summary, the TC#01's results, for valid username and password, have successfully replicated the expected results, as desired.
- Status: TC#01 completed
  - ○ Executed by: John Le, Jnr Software engineer.
  - ○ Execution date: 10/05/2024
- Notes:
  - ○ This proof of concept does have specific error messages, for example: a caps lock on message. This would be quite useful for the user to have this indicator to improve the user experience.
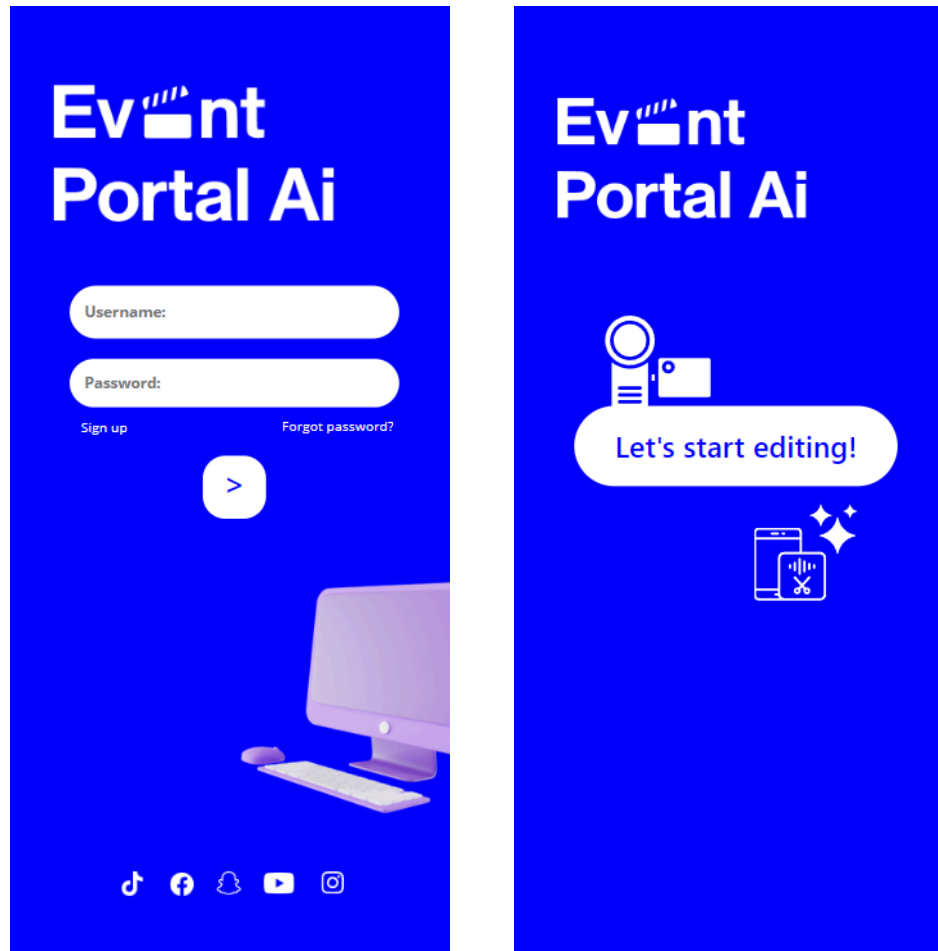 - ○
- Images:

Figure 1: These two figures show the login panel and the panel that indicates the user has successfully logged in. As depicted, the actual result of this test case replicated the expected results.

Test case 2: Invalid user login test

- Test case ID: TC#02
- Test case title: Login field and button functionality test for valid users
  - Description: This test is used to examine the functionality of the login input fields and the login button for invalid users. This test case also serves as an opportunity for testing the back end system, as it should be able to correctly verify the validity of the user's data.
- Test objective:

○ To verify the functionality of the login input fields and the login button when the user has entered the incorrect login details.

● Preconditions:
  ○ There is a robust back end system that is able to verify the validity of user data.
  ○ The user has access to a version of the application.

● Test data:
  ○ Invalid username: InvalidUsername
  ○ Invalid password: InvalidPassword

● Test steps:
  1. Head to the login page for EventPortal
  2. Enter the test data, which are the invalid username and password, in the application's login input fields.
  3. Press the login button, which is indicated by the large white squircle container with a blue arrow.

● Expected Results:
  ○ Once the user has entered an invalid set of username and password, the user will be led to a panel that tells the user has unsuccessfully logged in. This is indicated by a message 'Login failed. Please try again.' that is contained inside a white pill shaped container. The user will have to log in again by using the 'Back' button to re-enter their details that match the back end system of the EventPortal application.

● Actual Results:
  ○ Through replicating the instructions of TC#01, the user was prompted to login. When the user enters the incorrect login details (invalid username or password) into the username and password fields, they will be told 'Login failed. Please try again.' The user would have to press the back button and login again with the correct user details. Overall, the results for the invalid set of username and password have adhered to the expected results, as intended.

● Status: TC#02 completed

- ○ Executed by: John Le, Jnr Software Engineer
- ○ Execution date: 10/05/2024
- Notes:
  - ○ There are no error messages that would indicate whether the username or the password of the login was the cause of the invalid login.
  - ○ Instead of using a separate panel to indicate that the user has incorrectly logged in, an error message could be used.
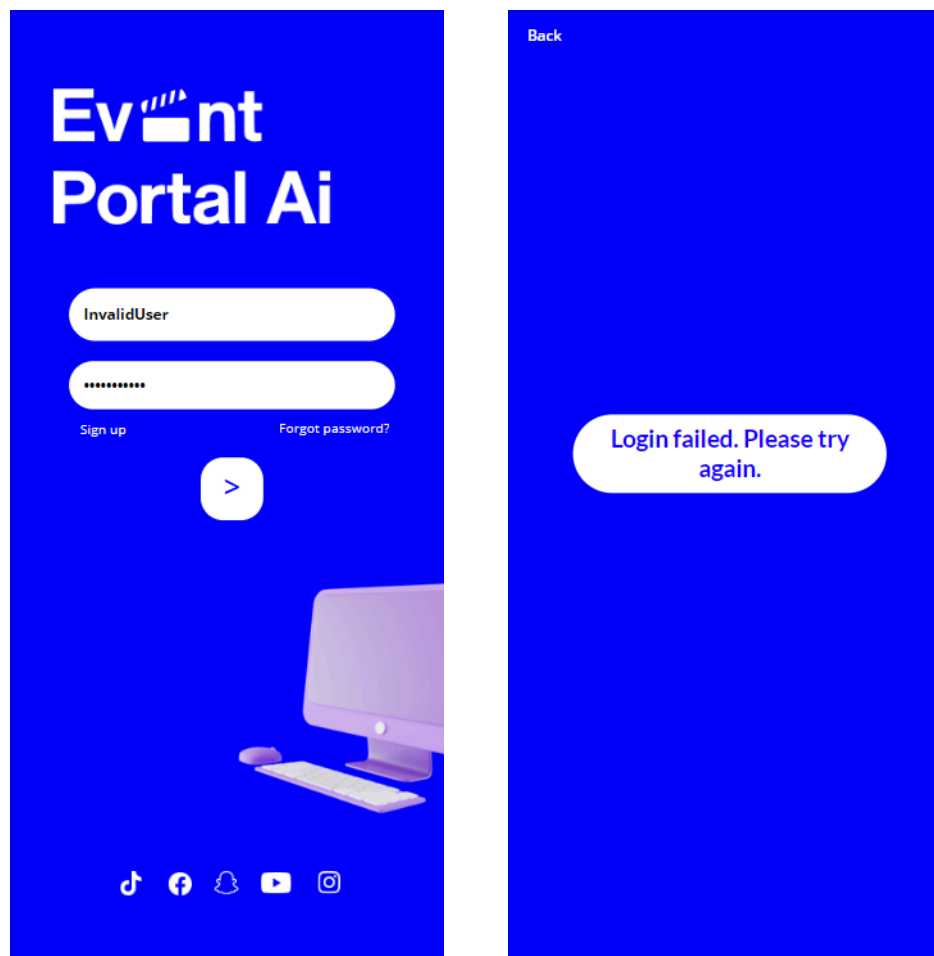- Images:

Figure 2: These two figures show the login panel and the panel that indicates the user has failed to login, due to credentials being incorrect. This figure shows that the actual results of this test case successfully replicated the expected results.

Test case 3: Registration page test for a new user

- Test case ID: TC#03
- Test case title: Registration fields and registration button functionality test
    - Description: This test case was made to test, examine and verify if the registration fields are adding data to the back end of the application, whether the fields detect a series of inputs that are required by the website to sign up, and the functionality of the registration button.
- Test objective: The objective of this test is to examine the functionality of the registration button and input fields.
- Preconditions:
    - There is a functional and robust back end system that automatically adds new user data.
    - The user has access to the application.
    - The user enters valid details
- Test data:
    - Username: WillyWonka
    - Email: WillyWonka@gmail.com
    - Password: Willywonkachocolatefactory
- Test steps:
    1. On the login page, press the 'sign up' button that is to the left and underneath the password field.
    2. Enter the test data to the relevant input fields for registration.
    3. As the user has entered all the fields and relevant data, the user can press sign up'.
- Expected results:
    - After the user has entered the username, email, and password that they are satisfied with, they will have to click the 'sign up' button. Once the user has done these things, they should be led to another screen that states 'Registration completed'. They will then be forced to login in order to complete the process.
- Actual results:

- ○ After the user has clicked or pressed the 'sign up' button, with the details that are required to be entered for registration, they are greeted with a panel that states 'Registration completed! Please login'. There was also a button that white, pill shaped button that was located underneath the text that was previously mentioned.
- Notes:
  - ○ This registration page does not have any password registration requirements, so this would need to be added in later iterations of this page.
  - ○ There is also no indicator telling the user has yet to enter any details about their account.
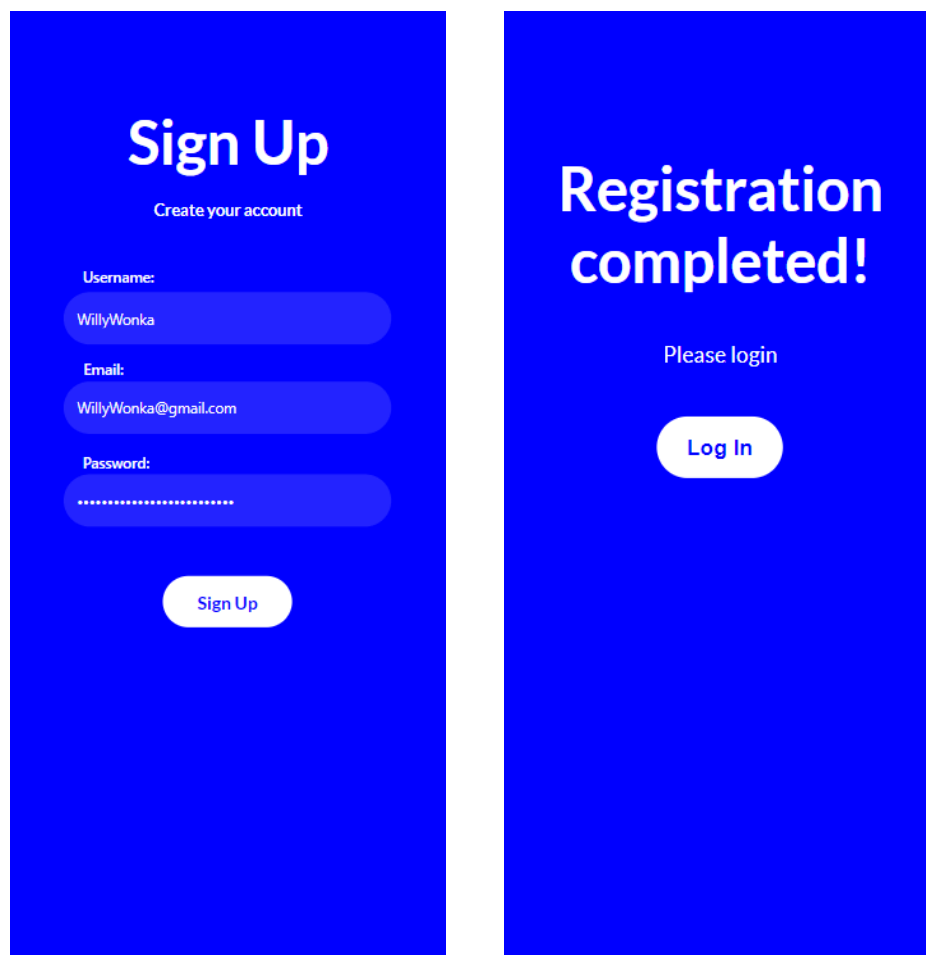- Images:

Figure 3: These two figures display the panels that are for registering

the user's details when registering a new account for EventPortalAI. The panel on the left shows the required details that need to be filled in order to proceed to the right panel. The right panel shows that the registration has been completed and a sequential login is required.

Test case 4: Registration of current or pre-existing users on the app.

- Test case ID: TC#04
- Test case title: Registration of current and pre-existing users on EventPortal
  - Description: This test case tests both the

Test case 5: Functionality of the "Log Out" button

- Test case ID: TC#05
- Test case title: Examination of the functionality of the logout button in the drop down menu, indicated by the settings icon.
  - Description: This is a fairly simple test that determines whether or not the application is able to remove the current user's data once they have pressed the log out button. The functionality of this function is highly critical and must perform correctly, in order for the user's data to not be compromised.
- Test objective: To observe the functionality of the logout button and how it will reset user data once the button has been pressed.
- Preconditions:
  - Majority of the application functions in order for the logout button to be present.
  - There is a valid username and password that is used to log into the app.
- Test data:
  - Test account:
    - Username: WillyWonka
    - Password: IhavenoideawhatIamdoing

- Test steps:
  1. Enter the valid username and password in order to log into the application.
  2. Click on "Let's start editing!"
  3. On the projects panel, click on the settings icon (a cog) to expand options.
  4. Once expanded menu pops up, click on "Log out"
- Expected Results:
  - After the user has replicated the test steps, the expected outcome should be the user being forced back to the login screen where they are required to login again to use the application. It also resets the login and password fields so that an unauthorised user cannot access the contents of the previous user.
- Actual Results:
  - From the test conducted the user did logout successfully with all their user's data being reset, once they pressed logout. To verify that the user data was reset, we have also observed the account settings to see if the user's data has been altered. The name of the account altered, hence verifying that the logout button implemented is functional and highly secure.
- Notes:
  - Something to note is that the drop down menu, in its current implementation, is functional. However, an undesired property is its inability to disappear, once the user clicks outside of the additional settings container. Requires further investigation and development to further improve upon this.
- Images:
  - Current Account and logging out of current account:
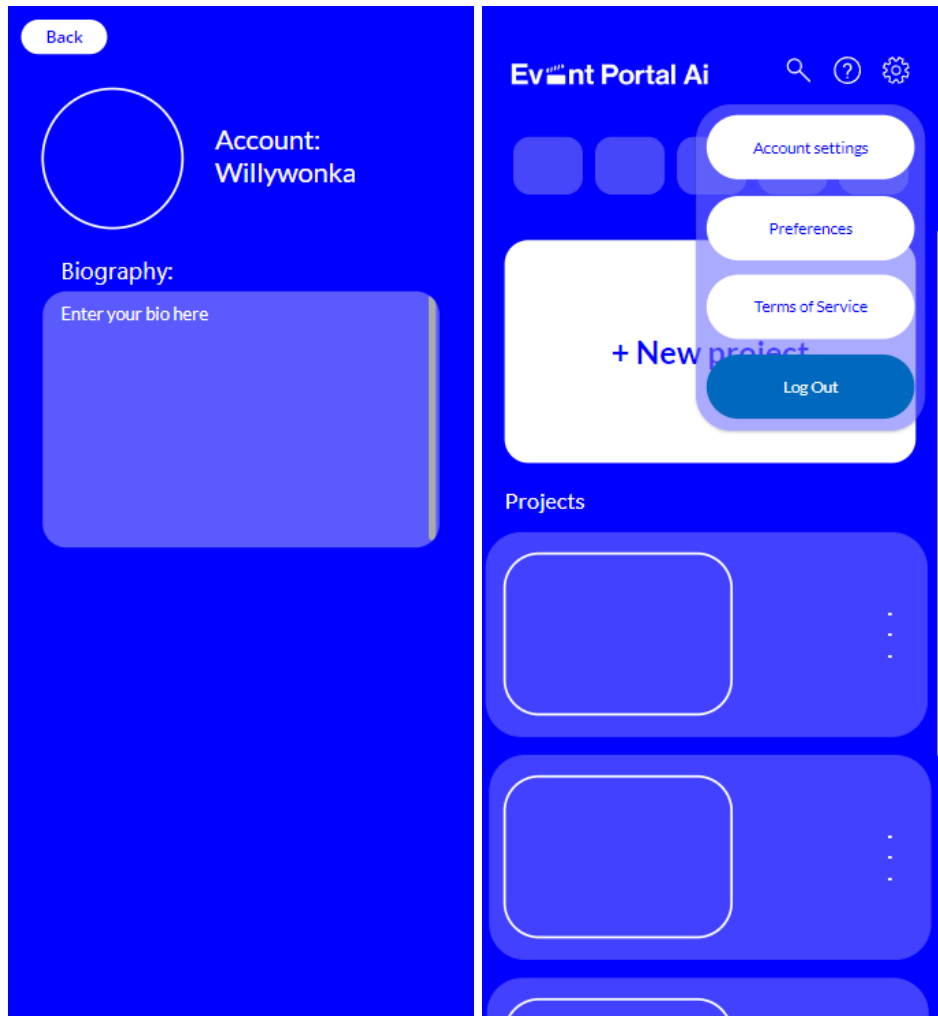
○ New user and the resetting of input fields:

○

Test case 6: Functionality of photo and video library

(Week 9 lec)

Verification: Verification of a test case for testing the conformance of protocol implementations against the formal description of the protocol involves verifying three

aspects of the test case: expected input/output test behavior, test verdicts, and the test purpose.

Validation: They verify that the software meets the specified requirements and functions as intended.

https://link.springer.com/article/10.1007/BF01384135

User manual [2]- In your guideline, we should be able to find a list of all functions you have implemented and comes with a description of how to use them

Team Collaboration [4]

Jira reports [2]- including Burnup Chart and Burndown Chart

GitHub [2] - commit record and history

Test Outcomes in PowerApps [4]

(Using the PowerApps Test Studio to test all the test cases you have designed.)