Exercise 1: Calculator Task

Test Cases for the online factorial calculator website.

1. Verify the user is able to Launch the website: http://qainterview.pythonanywhere.com/
2. Verify the user is able to click on "Calculate"
3. Verify the user is presented with the error message when no input is given

4. Verify the user is able to enter a valid input (eg. 10)
5. Verify the user is able to click on "Calculate" after entering a valid input
6. Verify the user is presented with the right answer when they enter a valid input

7. Verify the user is able to enter an invalid input (eg. Num)
8. Verify the user is able to click on "Calculate" after entering an invalid input
9. Verify the user is presented with the error message when they enter an invalid input

10. Verify the user is able to click on "Terms and Condition" link
11. Verify the user is navigated to "Terms and Condition" page on clicking the "Terms and Condition" link

12. Verify the user is able to click on "Privacy" link
13. Verify the user is navigated to "Privacy" page on clicking the "Privacy" link

14. Verify the user is able to click on "Qxf2 Services" link
15. Verify the user is navigated to "Services" page on clicking the ""Qxf2 Services" link

Bugs found during testing

Bug 1:

Summary: No result is displayed for values above "989"

Description:

When user tries to calculate the factorial of any digit above "989", it is observed that there is no result displayed.

Steps to reproduce:

1. Launch the website.
2. Type a value above "989"
3. Click on "Calculate" and observe

Actual result: No result displayed.

Expected result: The user is presented with an appropriate messaged when user tries to calculate a digit above "989"

Bug 2:

Summary: User is directed to wrong pages upon clicking on any hyperlinks in the website

Description:

When a user clicks on any hyperlinks on the website then the user is directed to wrong pages. Hyperlinks in the website are: "Terms and Condition", "Privacy" and "Qxf2 Services" links.

Steps to reproduce:

1. Launch the website.
2. Click on "Terms and Condition" or "Privacy" or "Qxf2 Services" hyperlinks.
3. Observe the corresponding title you are navigated to.

Actual result: User is navigated to wrong pages upon clicking on any hyperlinks.

Expected result: User is navigated to the right pages upon clicking on any hyperlink in the website

Program to verify the correctness of the calculator for integer number in range (10,100) is provided added in the Git folder. Please read the README file for valuable information.

Exercise 2: Acceptance Criteria

To ensure a bug free application in the production build, I would follow these methods:

1. Analyse the **Software Requirements** thoroughly.
2. Perform **Regression Testing** frequently (before every feature release).
3. Consider **Continuous Integration/Continuous Delivery** which are highly effective practices that can improve the software quality through iterative releases and deployments.

Having said that, it is impossible to achieve 100% bug free application (in our production build). The production build might still contain some extremely low priority bugs that are not blockers.

Related scenarios between the Community app and https://pro.coinbase.com/ that could be verified are listed below:

1. User should be able to Sign up
2. User should be able to Sign in
3. User should be able to select any article and get the related information

Additional Scenarios present in the Community app are:

1. User is able to Search for an information
2. User should be able to submit a request
3. User should be able to view information about different products

Some Scenarios and its corresponding **Acceptance Criteria** for the Community app are listed below:

Scenario 1: User should be able to Sign up

a. *Given* that the user wants to Sign up
   when user clicks on **Sign In** button

then user should be presented with a Sign In pop-up

b. *Given* that the user wants to Sign up
when the user is on the pop-up dialog
and clicks on the **Sign-up** text
then a pop up should appear asking the user to fill out the form

c. Given that the user is in the Sign-up pop-up dialog
when the user enters invalid credentials
and clicks on **Sign-Up** button
then the user is prompted that with the error message

d. *Given* that the user is in the Sign-up pop-up dialog
when the user enters valid credentials
and clicks on **Sign-Up** button
then a 'Sign-up complete' pop-up appears

Scenario 2: User should be able to Sign in

a. *Given* that the user wants to Sing in
when user clicks on **Sign In** button
then a pop up should appear with options to Sign in with various options.
(Options include signing in with email and through Social Media accounts like Twitter, Facebook, Google and Microsoft)

b. *Given* that the user wants to sign in with valid email id
when user is on the **Sign In** pop-up dialog
and the user enters valid email id and password
and clicks on **Sign in** button
then the Sign in button is changed to "Username" indicating successful Sign In

c. *Given* that the user wants to sign in with invalid email id
when user is on the **Sign In** pop-up dialog
then the user enters invalid email id or password
and clicks on **Sign in** button
then the user is prompted with an error message

d. *Given* that the user wants to sign in through the social media options
when the user selects one of the four options
then the user is navigated to the respective social media page to Sign-in

Scenario 3: User should be able to select any article and get the related information

a. *Given* that the user wants to select an article from **Articles in this section** portion
when clicks on an article under this section
then the user is presented with the corresponding article information.

b. *Given* that the user wants to select an article under **Related articles**
   when clicks on any article under this section
   then the user is presented with the corresponding article information.

c. *Given* that the user wants to select an article under **Recently viewed articles**
   when clicks on an article under this section
   then the user is presented with the corresponding article information.

Scenario 4: User should be able to submit a request

a. *Given* that a user wants to Submit a request
   when the user clicks on the **Submit a request** button from the header
   then the user is directed to **Submit a request** page.

b. *Given* that the user wants to Submit a request
   and is in **Submit a request** page
   when the user adds a valid email id
   and fills all the required fields
   and clicks on **Submit** button
   then the user is confirmed with a pop message that their request was successfully submitted
   and the user is navigated to SwissBorg dashboard page

c. *Given* that the user wants to Submit a request
   and is in **Submit a request** page
   when the user adds an invalid email id
   and fills all the required fields
   and clicks on **Submit** button
   then the user is prompted with an error message to enter a valid email id

d. *Given* that the user wants to submit a blank request
   and is in **Submit a request** page
   when the clicks on **Submit** button without adding any input in the required fields
   then the user is prompted that the required fields cannot be blank.

Scenario 5: User is able to Search for an information

a. *Given* that the user wants to search for an information
   when the user clicks on the **Search** field
   and enters the "necessary text"
   and the data is available
   then the user is presented with the related search result.

b. *Given* that the user wants to search for an information
   when the user clicks on the **Search** field
   and enters a description
   and the data is not available

then the user is informed that there is no such result.

Scenario 6: User should be able to view their activity \ Profile \ Sign out

   a.   *Given* that the user is signed in
        and when the user clicks on their "Username"
        then the user is presented with a dropdown menu

   b.   *Given* that the user is presented with a dropdown menu
        when user clicks on their "Username"
        and clicks on "My activities"
        then the user is navigated to "My requests" page

   c.   *Given* that the user is presented with a dropdown menu
        when user clicks on their "Username"
        and clicks on "My profiles"
        then the user is navigated to "My profiles" page

   d.   *Given* that the user is presented with a dropdown menu
        when user clicks on their "Username"
        and clicks on "Sign out"
        then the user is navigated to SwissBorg dashboard page

Scenario 7: User should be able to view information about different products

   a.   *Given* that the user wants to view the options under **Products**
        when the user hovers over **Products** button
        then the user is presented with a drop-down with 4 options. (Options are "Swissborg",
        "Wealth app", "Community app" and "DAO Program")

   b.   *Given* that the use wants to choose one of the drop-down options
        when the user hovers over **Products** button
        and clicks on one of the drop-down options
        then the user is navigated to the respective page.