**Test Cases:**

* **Login page:**

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| --- | --- | --- | --- | --- | --- | --- |
| **Test case id** | **Test cases** | **Preconditions** | **Input test data** | **Steps to be executed** | **Expected results** | **Actual results** |
| 1 | Test if user is able to login successfully. | User must be registered already | correct username, correct password | 1)Enter input (correct) username and password on the respective fields 2) click submit/login | User must successfully login to the web page | (note down the results you have observed) |
| 2 | Test if unregistered users is not able to login to the site |  | incorrect username, incorrect password | 1)Enter input (incorrect) username and password on the respective fields 2) click submit/login | Proper error must be displayed and prompt to enter login again | (note down the results you have observed) |
| 3 | Test with valid username and empty password such that login must get failed | User must be registered already | valid username and empty password | 1)enter the valid username in the user id and enter no password in the password field | Proper error must be displayed and prompt to enter login again | (note down the results you have observed) |
| 4 | Test with empty username and valid password such that login must get failed | registered user's password | empty username and valid password | 1)leave the username empty in the user id and enter a valid user's password in the password field | Proper error must be displayed and prompt to enter login again | (note down the results you have observed) |
| 5 | Test with empty username and empty password and check if login fails | - | - | 1)Enter nothing in the mail id and password field 2) click submit button | Proper error must be displayed and prompt to enter login again |  |
| 6 | Check of the password is masked on the screen i.e., password must be in bullets or asterisks |  | some password (can be a registered/unregistered) | 1) Enter the password field with some characters | The password field should display the characters in asterisks or bullets such that the password is not visible on the screen |  |
| 7 | Check if the login function handles case sensitivity | registered user's password which is originally in lower case changed to upper case or vice versa | case changed username /password | 1)Enter the case changed username /password in the respective field and 2) click login button | Login must fail saying incorrect username/password |  |
| 8 | After logging in try to copy/cut the password and paste it on another screen (passwords are usually in such that it’s not visible on the screen) |  | Registered user's login id and password | 1)Enter username and password in the respective fields. Copy the password field's content (which is in) 3) paste the content on another screen | password shouldn’t get pasted / password should not be visible on the screen |  |
| 9 | Verify account lock |  | Registered user's login id and incorrect password | 1)Try to login with a registered user name and incorrect password for more than 3 times | Account should be locked and access should be granted only after getting certain assurance from the user |  |
| 10 | Check if on selecting back button (after logging out) if the user is not signed in |  | Registered username and password | 1)Login with registered username and password 2) once you’re logged in, sign out of the site 3) now press back button | User shouldn’t be signed in to his account rather a general webpage must be visible |  |
| 11 | Verify the url without logging into to the site |  | Registered username and password | 1) Login to the site using registered username and password 2) copy and save the url of the logged in page 3) logout of the site 4) now paste the copied url on the browser | the url should not redirect to a logged in page but to a logged out page of the site |  |
| 12 | Automatic logout of the site when pressing backspace button | User must be registered already | Registered username and password | 1) Login to the site using registered username and password 2) now press backspace | User must logout of the site properly |  |

* **Bank of America**

**Test Scenario:** Checking the functionalities of Login system in the Bank of America Website

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| --- | --- | --- |
| **Steps** | **Procedures / Actions** | **Expected Results** |
|  | Go to https://www.bankofamerica.com/ | Bank of America website will appear with a login screen on the top left corner of the screen under the website logo. |
|  | Examine for the following item in the login screen: | -A text box with label ‘Enter your Online ID’  -On the right side of the text box  there will be a button with label  ‘Sign In’  -On the right side of that button  there will be a icon image of a  Padlock  -Just underneath the text box there  Will be a check box with label  ‘Save this Online ID’  -Underneath that there will be a link  of ‘Help/options’  -On the far right side of the above  link in the left bottom corner of the  Log in section there will be another  link ‘Enroll’  -The background color of the login  section will be dark red |
|  | Type a valid Online ID and press Sign In button | It will direct you to the member’s home page. |
|  | Type a valid Online ID and check the Save this Online ID check box. | -It will directs you to the member’s  Page  -When you click on Sign off button,  Sign off successful page will be  appeared.  and the text  box with label ‘Enter your Online  ID’ will become a editable drop  Down list box that will contain the  Previous ID and another option  Called ‘’ |
|  | Again go to https://www.bankofamerica.com/ | -Login screen options will be slightly  modified.  -The text box with label ‘Enter your  Online ID’ will be changed into a  editable drop down list box  -Previously entered Online ID will  Appear on the drop down box with  4 of the character displayed and  Remaining characters as asterisk.  -The check box with label ‘Save this  Online ID’ will not appear. |
|  | Click on the ‘Enter your Online ID’ drop down box | -The dropdown list box will be  Expanded where in the list  Previously entered ID will be  Displayed with 4 of the characters  Visible and the remaining  Characters visible as asterisk.  -There will be another list item as ‘Add or use another Online ID’ |
|  | Click on the Help/Options | A section will popped up where various link of help will be displayed. |
|  | Click on the Enroll link | Enroll in Online Banking page will be appeared. |
|  | Go to https://www.bankofamerica.com/ and Type an invalid Online ID in the text box | A page will appear with a message heading ‘We can’t process your request’ |

**Coffee Vending Machine:**

* **Validate the look and feel of coffee vending machine:**

TC1\_To check the dimensions of coffee vending machine meets the specifications.

TC2\_To check if the outer and inner body of the coffee vending machine meets the specifications

TC3\_To check if the coffee vending machine brand name is clearly visible to the customer

TC4\_To check the power and voltage requirements of the coffee vending machine

TC5\_ To Check if the coffee Vending Machine display displays the information correctly

TC6\_To check if each button has text/image to indicate what it performs.

* **Validate if the coffee vending machine is turning on properly:**

TC1\_To check if the coffee vending machine is turned ON when the power supply is proper and the machine is plugged in.

TC2\_To check if the coffee vending machine is turned OFF when the power supply is improper and the machine is plugged in.

TC3\_To check if the coffee vending machine all button is visible to the customer

TC4\_To check if each button of the coffee vending machine produces the correct output (tea, coffee, milk).

TC5\_ To Check Coffee Vending Machine Power is on before requesting for coffee

TC6\_To check the machine operation at the time power fluctuations.

* **Validate if the coffee vending machine is working properly without contents:**

TC1\_To Check the machine when there is no coffee powder.

TC2\_To Check the machine when there is no milk.

TC3\_To Check the machine when there is no sugar. Required

TC4\_To Check the machine operation when water quantity is less than its limit.

TC5\_To Check the machine operation when milk quantity is less than its capacity limit.

TC6\_To Check the machine operation when coffee powder is less than its capacity limit.

TC7\_To Check the machine operation when sugar available is less than its capacity limit.

TC8\_To Check that the machine displays error message when it runs out of ingredient.

* **Validate if the Coffee vending machine is giving the drink properly:**

TC1\_ To check that the machine pours coffee with appropriate mixture and taste when the coffee button is pressed.

TC2\_ To check that the machine pours tea with appropriate mixture and taste when the tea button is pressed.

TC3\_To check if the drink should fill up correctly and not overflowing.

TC4\_To check if the drink is comfortable hot to drink.

TC5\_To check if the quantity of water, coffee/tea, milk and sugar per serving is correct

TC6\_To check if the coffee should not leak while in operation

**Test cases for ATM:**

**Positive test cases:**

* Machine accepts card and PIN detail.
* Machine successfully takes out the money.
* Machine takes out the balance printout after the withdrawal.
* Machine logs out of the client session immediately after withdrawal successfully.
* Machine prints out balance inquiry standalone as part of menu operation.
* Machine generates invalid money error due to money asked larger than the savings account balance.
* Machine checks for the idle time in between the client session and wait period while active in account.
* Machine accepts both Visa and Mastercard credit and debit cards.

**Negative Test cases:**

* Machine does not accept card and PIN.
* Machine finds wrong PIN.
* Machine finds card insertion in wrong way.
* Machine takes 3 invalid PIN attempt.
* Invalid account type selected in the menu.
* Lack of money in the savings account.
* Expired card inserted in the machine.
* Money amount less than 100 entered in the machine.
* Machine does not take out the money.
* Machine can’t take out the balance after withdrawal.
* Machine can’t log out of client session after withdrawal.
* Machine doesn’t print the withdrawal amount.
* Machine does not accept either Visa or mastercard or both debit/credit cards.

**Test scenarios for sending emails:**

1. Email template should use standard CSS for all emails

2. Email addresses should be validated before sending emails

3. Special characters in email body template should be handled properly

4. Language specific characters (e.g. Russian, Chinese or German language characters) should be handled properly in email body template

5. Email subject should not be blank

6. Placeholder fields used in email template should be replaced with actual values e.g. {Firstname} {Lastname} should be replaced with individuals first and last name properly for all recipients

7. If reports with dynamic values are included in email body, report data should be calculated correctly

8. Email sender name should not be blank

9. Emails should be checked in different email clients like Outlook, Gmail, Hotmail, Yahoo! mail etc.

10. Check send email functionality using TO, CC and BCC fields

11. Check plain text emails

12. Check HTML format emails

13. Check email header and footer for company logo, privacy policy and other links

14. Check emails with attachments

15. Check send email functionality to single, multiple or distribution list recipients

16. Check if reply to email address is correct

17. Check sending high volume of emails