**Experiment No: 01**

**Title: Write TEST scenario for GMAIL login page and test it.**

**Test Scenario for Gmail Login Page**

The login page of Gmail consists of multiple test scenarios that you need to verify before moving on to testing the inbox and compose functionalities. Similar to any other login feature, the Gmail login function includes a username field, a password field, a forgot password option, and a *Submit* button. Here are some of the important test scenarios for Gmail login:

* **Test Scenario: Valid Login**

**Objective:** To verify that valid user credentials grant access to the Gmail account.

**Steps:**

a. Open the Gmail login page.

b. Enter a valid email address.

c. Enter a valid password.

d. Click the “Sign In” button.

**Expected Result: The user successfully logs into the Gmail account.**

* **Test Scenario: Invalid Login**

**Objective:** To ensure that entering invalid user credentials results in login failure.

**Steps:**

a. Open the Gmail login page.

b. Enter an invalid email address.

c. Enter an invalid password.

d. Click the “Sign In” button.

**Expected Result:** The user fails to log in, and an error message is displayed.

* **Test Scenario: Forgotten Password**

**Objective:** To test the Forgot Password feature

**Steps:**

a. Open the Gmail login page.

b. Click the “Forgot Password” link.

c. Enter the registered recovery email.

d. Follow the password reset process.

**Expected Result:**The user receives instructions to reset the password via the recovery email.

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| **Test Case ID** | **Test Case Name** | **Description** | **Prerequisites** | **Steps** | **Expected Result** |
| TC01 | Verify UI Elements on Login Page | Ensure all necessary UI elements are present on the Gmail login page. | Navigate to the Gmail login page. | 1. Check the presence of the email/phone input field. 2. Check the presence of the 'Next' button. 3. Verify the presence of the 'Forgot email?' link. 4. Verify the 'Create account' link. 5. Check for the logo and footer links. | All UI elements are present and visible. |
| TC02 | Verify Login with Valid Credentials | Ensure the user can log in with valid credentials. | A Gmail account with valid credentials. | 1. Enter a valid email/phone number. 2. Click the 'Next' button. 3. Enter the correct password. 4. Click the 'Next' button. | The user is redirected to their Gmail inbox. |
| TC03 | Verify Login with Invalid Email | Test error handling for invalid email/phone input. | None. | 1. Enter an invalid email/phone number. 2. Click the 'Next' button. | An appropriate error message is displayed, e.g., 'Couldn't find your Google Account.' |
| TC04 | Verify Login with Incorrect Password | Test error handling for incorrect password input. | A Gmail account. | 1. Enter a valid email/phone number. 2. Click the 'Next' button. 3. Enter an incorrect password. 4. Click the 'Next' button. | An appropriate error message is displayed, e.g., 'Wrong password. Try again.' |
| TC05 | Verify Forgot Email Link | Ensure the 'Forgot email?' link works as expected. | None. | 1. Click the 'Forgot email?' link. 2. Follow the instructions to retrieve the email. | The user is guided through steps to recover their email. |
| TC06 | Verify Forgot Password Functionality | Test the password recovery process. | A Gmail account. | 1. Enter a valid email/phone number. 2. Click the 'Next' button. 3. Click the 'Forgot password?' link. 4. Follow the steps to reset the password. | The password reset process is completed successfully. |
| TC07 | Verify Input Validations | Ensure input validations for email and password fields. | None. | 1. Leave the email/phone field empty and click 'Next.' 2. Leave the password field empty and click 'Next.' 3. Enter invalid characters in the email/phone field. | Appropriate error messages are displayed for each scenario. |
| TC08 | Verify Remember Me Functionality | Test if the 'Remember me' option works. | None. | 1. Check the 'Remember me' option. 2. Log in with valid credentials. 3. Log out and return to the login page. | The email/phone input is pre-filled. |
| TC09 | Verify Performance of Login Page | Ensure the login page loads within acceptable time limits. | None. | 1. Measure the time taken to load the login page. | The login page loads in less than 3 seconds. |
| TC10 | Verify Accessibility of Login Page | Ensure the login page meets accessibility standards. | None. | 1. Check for screen reader compatibility. 2. Verify proper contrast ratios. 3. Ensure all interactive elements are keyboard-navigable. | The login page adheres to accessibility guidelines. |

**Gmail Sign-Up Test Cases**

* Verify a user can successfully create a new Gmail account.
* Ensure the system rejects duplicate email addresses during sign-up.
* Validate that Gmail enforces password strength requirements.
* Confirm that usernames are unique across the Gmail platform.
* Verify a valid mobile number can be associated with a Gmail account.
* Ensure users must pass a CAPTCHA test during the sign-up process.
* Verify that a valid birthdate is required during sign-up.
* Ensure users can upload a profile picture during sign-up.
* Verify users must accept Gmail’s *Terms of Service and Privacy Policy* during sign-up.
* Ensure users can customize their Gmail email address.
* Verify users receive a verification code on their mobile number.
* Confirm that two-factor authentication can be enabled during sign-up.
* Ensure users can set up security questions for account recovery.
* Verify users can provide optional profile information during sign-up.
* Ensure users can select their preferred language during sign-up.
* Verify the sign-up process complies with accessibility standards for users with disabilities.
* Verify that the sign-up process provides clear error messages for incomplete or incorrect information.
* Ensure the system enforces email address uniqueness even for variations like capitalization (e.g., “example@gmail.com” and “Example@gmail.com”).
* Verify that the Gmail sign-up process supports multiple international phone number formats, ensuring users can register with different country codes seamlessly.

**Test Case for Gmail – Inbox Functionality**

* Confirm emails sent to the Gmail address appear in the inbox.
* Verify the Gmail inbox correctly organizes and displays received emails.
* Ensure that unread emails are highlighted in the inbox.
* Verify that the Gmail inbox updates in real time to display new emails.
* Confirm the inbox allows the user to search for specific emails using keywords.
* Ensure that the inbox supports advanced search filters and operators.
* Verify that the user can move emails to different folders or labels.
* Confirm that emails with attachments display attachment icons in the inbox.
* Verify that starred or flagged emails are visually marked in the inbox.
* Ensure that archived emails are moved out of the inbox.
* Verify the inbox’s functionality to mark emails as read or unread.
* Ensure the inbox supports bulk actions like deleting, archiving, or moving multiple emails.
* Verify the functionality of the “Primary,” “Social,” “Promotions,” and other categorized tabs.
* Confirm that the inbox supports a conversation view for email threads.
* Ensure that the “Important” label highlights critical emails in the inbox.
* Verify that users can customize inbox display settings.
* Confirm the functionality of the “Snooze” feature for emails.
* Ensure that the “Mark as Spam” option effectively moves unwanted emails to the spam folder.
* Verify the inbox’s responsiveness to various screen sizes and devices.
* Check if the user can delete the email from the inbox, which is then moved to the Spam folder.
* Verify that the correct pagination option exists.

**Test Cases for Gmail – Compose Mail Functionality**

* Check if the *Compose*button is available and clickable.
* Ensure users can create and send a new email successfully.
* Verify that the email’s subject, body, and recipient fields function as expected.
* Confirm that users can add multiple recipients to an email.
* Verify that Gmail supports CC (carbon copy) and BCC (blind carbon copy) functionality.
* Ensure that attachments can be added to an email and are received correctly.
* Confirm that Gmail provides a rich text editor for email formatting.
* Verify the functionality of inserting hyperlinks in the email’s body.
* Ensure that users can add and format bullet points and numbered lists in emails.
* Verify the email’s draft-saving functionality for unfinished emails.
* Confirm that users can schedule email delivery at a specific time.
* Ensure that the “Undo” feature works for recent email actions.
* Verify the ability to customize the sender’s email address and name.
* Confirm that Gmail accurately counts characters and words in the email.
* Ensure that the email’s “Send” button functions reliably.
* Verify the compatibility of the email composer across different web browsers.
* Confirm that Gmail’s “Formatting Options” provide various text formatting features.

Ensure that the “Drafts” folder correctly stores unfinished email compositions.

**Negative Test Cases For Gmail**

Individually, different functions of Gmail have their own test cases. And all of those functions also have a set of negative test cases. Here, we list some of the negative test cases for Gmail functions:

* Attempt to log in with an empty email address field.
* Try logging in with an empty password field.
* Use an email address that does not have the “@” symbol.
* Enter a password with fewer than the required characters.
* Provide an incorrect email format, such as “username@domain.”
* Use an email address that does not exist.
* Enter an incorrect password for a valid email address.
* Try to log in with a deactivated or suspended account.
* Use special characters in the email address or password.
* Exceed the maximum character limit for the email address or password.
* Enter spaces before or after the email address or password.
* Use different capitalization in the email address (e.g., “example@gmail.com” and “Example@gmail.com”).
* Attempt to send an email without any recipient.
* Attach a file with an unsupported format for emails.
* Attempt to schedule an email for delivery in the past.

**Conclusion**

Gmail is a widely used email facility by billions of people around the world. Clearly, a proper testing process in place is a necessity; it is likely that even one defect can turn into a huge disaster when the client base is vast and spread worldwide. The many features of Gmail have multiple test scenarios and test cases, which we have tried to list in this blog. Take your reference from the mentioned test cases for Gmail before you begin verifying the functions for your corporate use. Many automated test tools, such as Testsigma, support automating these test cases with ease. You can perform automated web testing along with mobile and API without writing any code.