Gmail

1. User Registration and Login

- **Positive Test Cases:**
    - Successfully create a Gmail account with valid details.
    - Log in with correct email and password.
    - Log in using Google authentication on third-party websites.
    - Enable two-factor authentication for secure login.
    - Reset password using email or phone verification.
    - Sign out from all devices remotely.
- **Negative Test Cases:**
    - Fail to create an account due to an invalid email format.
    - Incorrect or mismatched passwords during registration.
    - Fail to log in due to incorrect email or password.
    - Failed two-factor authentication code delivery.
    - Login with an expired password reset link.

o   Log in attempt with a deactivated account.

2. Email Composition and Sending

- **Positive Test Cases:**
    - o   Compose a new email and send it to a valid email address.
    - o   Send an email with CC/BCC recipients.
    - o   Send an email with an attachment (PDF, image, document).
    - o   Save a draft automatically while composing.
    - o   Use email formatting tools (bold, italic, underline, fonts).
    - o   Send emails with priority (important/starred).
- **Negative Test Cases:**
    - o   Fail to send an email due to an invalid recipient address.
    - o   Email not sent due to attachment size exceeding the limit.
    - o   Fail to save a draft due to network issues.
    - o   Incorrect formatting or broken text after sending.
    - o   Attachments corrupted or missing after sending.
    - o   CC/BCC recipients not receiving the email.

3. Receiving Emails

- **Positive Test Cases:**
    - o   Receive an email in the inbox from a valid sender.
    - o   View, download, and open attachments in received emails.
    - o   Display images from trusted senders.
    - o   View received email in conversation view (grouped).
    - o   Star/mark important received emails.
    - o   Receive emails in categorized tabs (Primary, Social, Promotions).
- **Negative Test Cases:**
    - o   Fail to receive an email due to server downtime.
    - o   Email landing in the wrong tab/category.
    - o   Email marked as spam by mistake.
    - o   Attachments not loading or corrupted in the received email.
    - o   Broken or missing images in the email body.
    - o   Incorrect grouping of emails in conversation view.

4. Email Attachments

- **Positive Test Cases:**
    - o   Attach a document (PDF, DOCX, etc.) to an outgoing email.
    - o   Upload and send image attachments.
    - o   Download attachments from received emails.
    - o   Attach multiple files and send in one email.
    - o   Preview attachments before sending or receiving.
- **Negative Test Cases:**
    - o   Fail to attach files due to size limitations (over 25 MB).
    - o   Attachments failing to upload due to network errors.
    - o   Corrupt file after attachment upload.
    - o   Fail to download or open received attachments.
    - o   Previewing unsupported file types before sending.
    - o   Loss of attachment during the sending process.

5. Drafts and Autosave

- **Positive Test Cases:**
  - Email drafts autosaved during composition.
  - Retrieve and edit saved drafts from the "Drafts" folder.
  - Discard drafts manually from the "Drafts" folder.
  - Draft updated and saved after making changes.
- **Negative Test Cases:**
  - Draft not saved due to a network error.
  - Fail to retrieve drafts from the "Drafts" folder.
  - Discarded drafts still showing up after deletion.
  - Failure to autosave when composing emails offline.

6. Spam and Junk Filters

- **Positive Test Cases:**
  - Receive suspicious emails in the "Spam" folder.
  - Automatically block emails marked as spam.
  - Manually mark an email as spam and move it to the spam folder.
  - Receive notifications for spam emails (optional).
  - Unmark non-spam emails and move them to the inbox.
- **Negative Test Cases:**
  - Legitimate emails marked as spam incorrectly.
  - Spam emails not being flagged and reaching the inbox.
  - Unable to mark an email as spam manually.
  - Spam folder not updating with new junk emails.
  - Unmarking emails as spam fails to move them back to the inbox.

7. Search and Filters

- **Positive Test Cases:**
  - Search emails by sender, subject, or keywords.
  - Use advanced filters to find specific emails (has

    , before, after).

  - Filter emails by unread, starred, or categorized.
  - Apply custom filters for incoming emails (move to folder, apply label).
- **Negative Test Cases:**
  - Search function fails to retrieve relevant emails.
  - Advanced search filters returning incorrect or no results.
  - Failure to apply or save email filters.
  - Incorrect results displayed after applying custom filters.
  - Unable to search attachments within emails.

8. Labels and Folders

- **Positive Test Cases:**
  - Create and apply labels to organize emails.
  - Move emails to specific folders or apply multiple labels.
  - Access labeled emails in one view.

- o Archive emails with labels for organization.
- o Apply filters to automatically label incoming emails.
- **Negative Test Cases:**
  - o Failure to create or edit a label.
  - o Emails not appearing under the correct label.
  - o Incorrect labeling or mislabeling of emails.
  - o Archived labeled emails disappearing from inbox view.
  - o Filter not applying labels correctly to incoming emails.

9. Email Forwarding

- **Positive Test Cases:**
  - o Forward an email to another valid email address.
  - o Forward email with attachments intact.
  - o Set up automatic email forwarding to another account.
  - o Manually forward emails from different folders (Inbox, Sent).
- **Negative Test Cases:**
  - o Failure to forward emails due to attachment size issues.
  - o Broken or missing attachments after forwarding.
  - o Fail to set up email forwarding due to incorrect forwarding address.
  - o Email forwarding not functioning due to incorrect account settings.
  - o Email formatting breaking after forwarding.

10. Inbox Management and Sorting

- **Positive Test Cases:**
  - o Mark emails as read/unread.
  - o Archive or delete emails.
  - o Sort emails by date, sender, subject, etc.
  - o Organize emails using star or important markers.
  - o Move multiple emails to folders or apply labels in bulk.
- **Negative Test Cases:**
  - o Emails marked as read/unread not updating properly.
  - o Deleted emails reappearing in the inbox after refresh.
  - o Fail to sort emails by date or sender.
  - o Starred emails not appearing in the "Starred" folder.
  - o Unable to archive or delete multiple emails at once.

11. Notifications

- **Positive Test Cases:**
  - o Receive desktop notifications for new emails.
  - o Enable/disable email notifications from Gmail settings.
  - o Receive email notifications on mobile devices.
  - o Get notified for emails marked important/starred.
- **Negative Test Cases:**
  - o Failure to receive desktop notifications.
  - o Notifications not showing on mobile devices.
  - o Delayed or missing notifications for important emails.
  - o Notifications appearing for spam or unwanted emails.

12. Contacts and Groups

- **Positive Test Cases:**
  - Add new contacts to the Gmail contact list.
  - Edit and update existing contacts.
  - Create a contact group for mass emailing.
  - Import/export contacts from/to CSV or vCard files.
- **Negative Test Cases:**
  - Fail to save or update a new contact.
  - Contacts not syncing across devices.
  - Contact group failing to send emails to all recipients.
  - Importing contacts from a CSV file fails due to formatting issues.

13. Account Settings and Management

- **Positive Test Cases:**
  - Update account settings (name, signature, language).
  - Change Gmail password.
  - Set up a vacation responder.
  - Configure email signature.
  - Enable/disable keyboard shortcuts for faster navigation.
  - Manage account privacy and security settings.
- **Negative Test Cases:**
  - Fail to update account settings.
  - Password change not taking effect immediately.
  - Vacation responder not sending automated replies.
  - Email signature not appearing in sent emails.
  - Fail to enable/disable security settings like two-factor authentication.

14. Spam and Phishing Protection

- **Positive Test Cases:**
  - Identify and block phishing attempts using Gmail's built-in spam filter.
  - Report suspicious emails as phishing attempts.
  - Warn users about harmful attachments.
  - Block and unsubscribe from unwanted email senders.
- **Negative Test Cases:**
  - Fail to identify a phishing email as spam.
  - Unable to report an email as a phishing attempt.
  - Harmful attachments bypassing Gmail's filter.
  - Fail to block or unsubscribe from an email sender.

15. Mobile Gmail App

- **Positive Test Cases:**
  - Successfully log in and sync Gmail on the mobile app.
  - Compose and send emails via the mobile app.
  - Receive email notifications and push notifications.
  - View and download attachments on mobile.
  - Switch between multiple Gmail accounts on the mobile app.
- **Negative Test Cases:**

- Mobile app fails to sync new emails.
- Issues with composing emails due to touch input problems.
- Attachments not downloading on mobile.
- Notifications not appearing on mobile.
- App crashes when switching between accounts.