**Gmail Tree Testing**

1. **Functional**
   1. **Sign up**
      1. **Sign up for personal use**
         1. Sign up valid personal name
         2. Sign up invalid personal name
            1. Too short personal name for sign up
         3. Family name (Optional)
         4. Date of birth
            1. Valid date
            2. Invalid date

Too old to sign up

Too young to sign up

Sign up with future date

* + - 1. Select gender in sign up page
         1. Male
         2. Female
      2. Username in sign up page
         1. Valid username
         2. Invalid username

Too short

Already taken

Contains illegal characters

* + - 1. Password in sign up page
         1. Valid password
         2. Invalid password

Too short

Start/End with space

* + - * 1. Password confirmation

Same password in both fields

Different password in each field

* + - 1. Confirmation message via phone number
         1. Valid phone number
         2. Invalid phone number

Phone number not related to the country

Not existent phone number

* + 1. **Sign up for business**
       1. Make a new Gmail account for one person
          1. Valid personal name
          2. Invalid personal name

Too short personal name for sign up

* + - * 1. Family name (Optional)
        2. Date of birth

Valid date

Invalid date

Too old to sign up

Too young to sign up

Future date

* + - * 1. Select gender to sign up

Male

Female

* + - * 1. Username in sign up page

Valid username

Invalid username

* + - * 1. Password in sign up page

Valid password

Invalid password

Too short

Start/End with space

Password confirmation

Same password in both fields

Different password in each field

* + - * 1. Confirmation message via phone number

Valid phone number

Invalid phone number

Phone number not related to the country

Not existent phone number

* + - 1. **Google workspaces sign up page**
         1. "Business name" field
         2. Number of employees
         3. Country
         4. Contact information page

Personal name

Valid personal name

Invalid personal name

Empty field

Family name

Valid family name

Invalid family name

Empty field

* 1. **Sign in**
     1. Email or phone page
        1. Valid email
        2. Valid phone number
        3. Invalid email
           1. Nonexistent email
           2. Empty field
        4. Invalid phone number
           1. Nonexistent phone number
           2. Empty field
     2. Forgot email feature
     3. "Learn more" button
     4. "Next" button
     5. Enter password page
        1. Valid password
        2. Invalid password
           1. Wrong password
           2. Empty field
        3. "Show password" button
        4. Forgot password feature
     6. Sign out
        1. “Sign out” button
  2. **UI**
     1. Gmail logo
     2. Search bar
     3. Website buttons
     4. Message colors
     5. Scrollbar
     6. Main menu button
     7. Open message
  3. **Compose (send message)**
     1. "To" input field
     2. "Subject" input field
     3. Message content
        1. Text
           1. Undo
           2. Redo
           3. Font
           4. Size
           5. Bold
           6. Italic
           7. Underline
           8. Text color
           9. Align
           10. Numbered list
           11. Bulleted list
           12. Indent less
           13. Indent more
           14. Quote
           15. Right to left
           16. Strikethrough
           17. Remove formatting
        2. Upload an attachment
        3. Insert link
        4. Insert emoji
        5. Insert files using drive
        6. Insert photo
        7. Toggle confidential mode
        8. Insert signature
        9. More options
           1. Default to full screen
           2. Label

Search label

Social

Updates

Forums

Promotions

Add star

Create new

Manage labels

* + - * 1. Plain text mode
        2. Print
        3. Check spelling
        4. Set up a time to meet

Set up a time to meet and offer times you're free

Set up a time to meet and create an event

* + - * 1. Discard a draft (delete)
      1. Pop-up control buttons
         1. Minimize
         2. Resize pop-up
         3. Close pop-up

“Save and close” feature

* 1. **Inbox page** 
     1. Message buttons
        1. General message buttons
           1. "Select" button
           2. Refresh
           3. More options
        2. Select message
           1. "select" button
           2. "Archive" button
           3. Report
           4. Delete
           5. Mark as read
           6. Snooze
           7. Add to tasks
           8. "Move to" button
           9. "Labels" button
           10. More options

Mark as read

Mark as not important

Add star

Filter message like these

Mute

Forward as attachment

* + - 1. Star
      2. Important conversation button
      3. Archive
      4. Delete message
      5. Make as read
      6. Snooze
  1. **Sent page**
     1. Message buttons
        1. General message buttons
           1. "select" button
           2. Refresh
           3. More options
        2. Select message
           1. "Select" button
           2. "Archive" button
           3. Report message
           4. Delete message
           5. Mark as read
           6. Snooze message
           7. Add to tasks
           8. "Move to" button
           9. "Labels" button
           10. More options

Mark as read

Mark as not important

Add star

Filter message like these

Mute

Forward as attachment

* + - 1. Star the message
      2. Important conversation button
      3. Archive
      4. Delete message
      5. Make as read
      6. Snooze
  1. **message content**
     1. sent message
        1. **Top banner buttons**
           1. Back to inbox
           2. Archive
           3. Report spam
           4. Delete
           5. Mark as unread
           6. Snooze
           7. Add to tasks
           8. Move to
           9. Labels
           10. More options

Mark as unread

Mark as not important

Add star

Create event

Filter messages like these

Mute

* + - * 1. “Newer” button
        2. “Older” button
      1. **Mail related buttons**
         1. Expand all
         2. Collapse all
         3. Print
         4. In new window
         5. Star

Starred

Not starred

* + - * 1. Add reaction
        2. Reply to message
        3. More options

Reply

Forward

Filter message like this

Print

Delete this message

Block

Report spam

Report

* + - 1. **Mail content**
         1. Subject
         2. From
         3. Content

Text

Attachment

Download Attachment

Add to drive

Edit attachment

Link

* + - * 1. To me button

From (Sender)

To (Receiver)

Date sent

Subject

Security

Important icon

* + - * 1. Reply button
        2. Forward button
        3. Add reaction
        4. Add all to drive
        5. Time when message sent
    1. **Received message**
       1. **Top banner buttons**
          1. Back to inbox
          2. Archive
          3. Report spam
          4. Delete
          5. Mark as unread
          6. Snooze
          7. Add to tasks
          8. Move to
          9. Labels
          10. More options

Mark as unread

Mark as not important

Add star

Create event

Filter messages like these

Mute

* + - * 1. “Newer” button
        2. “Older” button
      1. **Mail related buttons**
         1. Expand all
         2. Collapse all
         3. Print
         4. In new window
         5. Star

Starred

Not starred

* + - * 1. Add reaction
        2. Reply to message
        3. More options

Reply

Forward

Filter message like this

Print

Delete this message

Block

Report spam

Report

* + - 1. **Mail content**
         1. Subject
         2. From
         3. Content

Text

Attachment

Download Attachment

Add to drive

Edit attachment

Link

* + - * 1. To me button

From (Sender)

To (Receiver)

Date sent

Subject

Security

Important icon

* + - * 1. Reply button
        2. Forward button
        3. Add reaction
        4. Add all to drive
        5. Time when message sent
  1. **Search bar**
     1. Previously searched
     2. Auto complete feature functionality
     3. Filters
        1. Has attachment
        2. Last 7 days
        3. From me
     4. "Show search options" button
        1. From
        2. To
        3. Subject
        4. Has the words
        5. Doesn't have
        6. Size
           1. Greater than
           2. Less than
        7. Date within
           1. Weekdays
           2. Date
        8. Search category
        9. Has attachment
        10. Don't include chats
     5. Search button
     6. Create filter button
  2. **Settings**
     1. See all settings
        1. General
        2. Labels
        3. Inbox
        4. Accounts and import
        5. Filters and blocked addresses
        6. Forwarding and POP/IMAP
        7. Add-ons
        8. Chat and Meet
        9. Advanced
        10. Offline
        11. Themes
     2. Apps in Gmail
     3. Density
     4. Theme
     5. Inbox type
     6. Reading pane
     7. Email threading
  3. **End-to-End**
     1. Sending/receiving an email
        1. Empty title
        2. Empty content
        3. Contains a text
        4. Contains a file
        5. Contains a website link
     2. Pressing on an ad that is connected to a website
     3. Downloading an attachment

1. **Non-functional**
   1. **Performance**
      1. Load tests
         1. Maximum users using the app at the same time
         2. Maximum messages sent at the same time
         3. Responsiveness of interface during heavy usage
      2. Stress tests
         1. More than maximum users using the app at the same time
         2. More than maximum messages sent at the same time
      3. Volume tests
      4. Response time for sending mail
      5. Response time to receive mail
      6. Scalability
      7. Stability under varying network conditions.
      8. Load time for inbox and individual emails
   2. **Security**
      1. Security of each user password
      2. Security of each user email account
      3. Security of each user messages
      4. Virus scanning for attachments before downloading
      5. Password authentication
      6. Messages and files encryption
      7. Handling of sensitive information
      8. Data protection measures
   3. **Localization and globalization**
      1. Country’s locations
         1. Location time
         2. Location date
      2. Languages
         1. Support for different input languages
         2. Support for multiple languages
         3. Support for multiple search languages
   4. **Recovery** 
      1. Data backup when connected with the same account
      2. Account data recovery
      3. Transitioning to a new Email account
   5. **Usability**
      1. Ease of sending a message
      2. Ease of attaching a file in a message
      3. Ease of searching a message
      4. Accuracy of search results
      5. Verify all email operations work correctly and efficiently.
      6. Clarity of inbox organization
   6. **Compatibility**
      1. Compatibility based on the screen resolution
      2. Compatibility when adjusting (resizing) the Gmail window
      3. Support for different operating systems
      4. Browser compatibility
         1. Chrome
            1. Different versions
         2. Microsoft edge
            1. Different versions
         3. Firefox
            1. Different versions
   7. **GUI**
      1. Inbox page
      2. Starred page
      3. Sent page
      4. Compose pop-up window
      5. Settings page
      6. Mail content page