



Formerly DA-IICT

IT-314 Project Aegis Secure Automated GUI Testing

Group Number: 35

Mevada Soham Meghalkumar [202301484]
Dhruv Jigneshkumar Patel [202301095]
Gohil Suryadeepsinh Hardevsinh [202301463]
Bhagiya Jenish Rameshbhai [202301480]
Rana Neelabh Vijaykumar [202301476]
Akshat Bhatt [202301460]
Hrithik B Patel [202301441]
Vrajkumar Makwana [202301436]
Vadsmeiya Pransu Pradipkumar [202301445]
Chavda Mihirsinh Labhubhai [202301479]

Automated GUI Testing

Automated GUI Testing is a process used to verify that an application's user interface behaves as expected without requiring manual interaction. Instead of tapping, typing, and navigating the app manually, automated scripts perform these actions consistently, quickly, and accurately. This helps identify UI issues, navigation errors, unresponsive elements, or unexpected behavior early in the development cycle.

For this project, automated GUI testing was performed to validate different user flows such as signing in, verifying emails, scanning SMS messages, analyzing text, navigating through settings, and interacting with various buttons and widgets. These test cases ensure that every essential part of the UI is functional, responsive, and able to handle user interactions reliably.

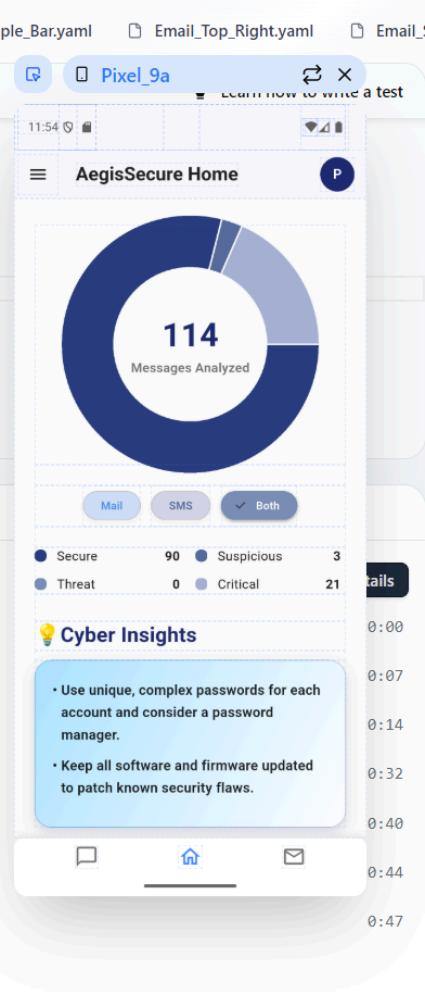
Notes on Maestro Studio (Tool Used)

Maestro Studio was used as the primary tool to create and execute the automated test cases. It provided a visual and intuitive environment for recording actions, inspecting screen elements, and converting interactions into YAML-based test scripts.

Why Maestro Studio Was Useful?

- **Visual Interface:** Allowed me to see the app screen live, making it easy to identify UI elements.
- **Record & Convert to YAML:** Every tap, long press, scroll, and text input could be generated automatically as YAML code.
- **Element Inspection:** I could inspect labels, coordinates, and text to precisely target buttons or fields.
- **Real-time Debugging:** The tool showed failures instantly, helping to correct scripts quickly.
- **Multi-step Flows:** Ideal for testing long sequences like login → OTP screen → home page → settings.

Sign In :-



The screenshot shows a mobile application interface titled "AegisSecure Home". At the top, there is a navigation bar with icons for "Run Locally" and "Unlock Cloud Runs". Below the navigation bar, a file list includes "Sign_in.yaml", "Home_Page.yaml", "SMS_Page.yaml", "Manual_SMS_input.yaml", "Triple_Bar.yaml", "Email_Top_Right.yaml", and "Email_". On the left side, a code editor displays a YAML script for "Sign_in.yaml" with the following content:

```
1 appId: com.example.gmailclone
2 ---
3 - launchApp:
4   | | clearState: true
5 - waitForAnimationToEnd:
6   | | timeout: 10000
7
8 - tapOn: "Email"
9 - inputText: "pvadsmiya@gmail.com"
10 - tapOn: Password
11 - inputText: "Vagabond@123"
12 - tapOn: "SIGN IN"
```

Below the code editor, there are tabs for "Local" and "Cloud". Under the "Local" tab, a log entry for "Sign_in" is shown:

```
Sign_in - C:\Users\Pransu\OneDrive\Desktop\Sequence_Diagram\new-workspace\Sign_in.yaml
✓ Launch app "com.example.gmailclone" with clear state
✓ Wait for animation to end
✓ Tap on "Email"
✓ Input text pvadsmiya@gmail.com
✓ Tap on "Password"
✓ Input text Vagabond@123
✓ Tap on "SIGN IN"
```

- The Email field was detected correctly and accepted user input.
- The Password field responded properly and allowed secure text entry.
- The “SIGN IN” button was active, clickable, and responded immediately.
- The screen was scrollable, and all UI elements remained accessible while scrolling.
- All interactive components were responsive, confirming that the Sign-In screen UI works smoothly and as expected.

Already Have An Account ?

1.Signing in using pre-registered email ID :

The screenshot shows a mobile application interface. On the left, a code editor displays a sequence diagram for an account selection process:

```
1 app -> mailclone: Run selected line(s)
2 mailclone --> User: Already Have an Account?
3 User --> mailclone: #Option1
4 mailclone --> User: |-
5   User --> mailclone: T
6   mailclone --> User: tinycoder69@gmail.com
7 User --> mailclone: #Option 2
8 mailclone --> User: |-
9   User --> mailclone: P
10  mailclone --> User: pvadsmiya@gmail.com
11  User --> mailclone: # If want to delete one of them
12  mailclone --> User: #- doubleTapOn:
13  mailclone --> User: #    point: 71%,49%
14  mailclone --> User: # Cross on the table
15  mailclone --> User: - longPressOn:
16  mailclone --> User: | | point: 74%,33%
```

Below the code editor, there are tabs for "Local" and "Cloud".

The main screen of the application is titled "AegisSecure Home". It displays the following statistics:

- 0 Messages Analyzed
- Mail, SMS, Both buttons (Both is selected)
- Secure: 0, Suspicious: 0, Threat: 0, Critical: 0

A "Cyber Insights" section contains two bullet points:

- Use multi-factor authentication to protect all critical accounts.
- Regularly update and patch software to close known vulnerabilities.

At the bottom, there are icons for a square, a house, and an envelope, along with a "View" button.

Ready_Have_An_Account - C:\Users\Pransu\OneDrive\Desktop\Sequence_Diagram

- ✓ Tap on "Already Have an Account?"
- ✓ Tap on "T tinycoder69@gmail.com"

- The “Already Have an Account?” button was detected and responded correctly.
- The app displayed the account selection options properly.
- Tapping on a pre-registered email (e.g., *tinycoder69@gmail.com* or *pvadsmiya@gmail.com*) worked as expected.
- All clickable elements on the screen were active and responsive.
- The app successfully proceeded to the Home Page after selecting an account, confirming stable and correct UI behavior.

2.Clicking on the cancel/cross button after opening the ‘Already Have an Account?’ screen

The screenshot shows a sequence diagram on the left and a mobile application interface on the right.

Sequence Diagram:

```
1 le.gmailclone
2
3 - tapOn: Already Have an Account?
4
5 # Cross on the table
6 - longPressOn:
7   point: 74%,33%
8
9 #Option1
10 - tapOn: |-
11   T
12   tinycoder69@gmail.com
13 #Option 2
14 - tapOn: |-
15   P
16   pvadsmiya@gmail.com
17 # If want to delete one of them
18 #- doubleTapOn:
19 #   point: 71%,49%
20
21
22
23
```

Mobile Application Interface (Aegis Secure Sign-in screen):

- The interface includes a logo with a shield and the text "AEGIS SECURE".
- A "Sign in your account" header.
- Input fields for "Email" and "Password".
- A "Forgot Password?" link.
- A large blue "SIGN IN" button.
- An "OR" separator.
- A "Already Have an Account?" link.
- A "Don't have an account? SIGN UP" link.
- A "Verify your email" button.
- A "View Details" button.

Annotations:

- A callout bubble at the bottom right says "Flow executed successfully" with a checkmark.
- Checkmarks next to the steps in the sequence diagram indicate they were successful.

- The “Already Have an Account?” option opened the account selection screen correctly.
- The cancel/cross button was detected successfully through the long-press action.
- Tapping the cancel/cross button returned the user back to the Sign-In screen without any issues.
- All UI elements on this screen were responsive, confirming that the cancel action works properly and the navigation flow behaves as expected.

3.Clicking on the bin widget/icon on the side of the mail ID when 'Already have an account?' is pressed, deletes corresponding email address.

The screenshot shows the Aegis Secure sign-in screen and a sequence diagram for testing account deletion.

Aegis Secure Sign-in Screen:

- Top navigation: Run Locally, Unlock Cloud Runs, Pixel_9a.
- Header: 2:38, battery, signal.
- Logo: Aegis Secure.
- Text: Aegis Secure, Sign in your account.
- Form fields: Email, Password, Forgot Password?
- Buttons: SIGN IN, OR, Already Have an Account?, Verify your email.

Sequence Diagram (Left):

```
sequenceDiagram
    participant UD as User Device
    participant SE as Sequence Editor
    UD->>SE: Tap on "Already Have an Account?"
    activate SE
    SE->>UD: Long press on point (71%,49%)
    deactivate SE
    UD-->>SE: Bin icon pressed
    activate SE
    SE->>UD: Email deleted from list
    deactivate SE
```

Test Log (Bottom):

- ✓ Tap on "Already Have an Account?"
- ✓ Long press on point (71%,49%)

- The “Already Have an Account?” option opened the saved email list correctly.
- The bin/delete icon beside each email was detected and responded to user interaction.
- Long-pressing the bin area successfully removed the selected email from the list.
- The UI updated immediately after deletion, confirming proper functionality.
- All elements on the screen were responsive, showing that the email deletion feature works smoothly and as expected.

Sign up

The screenshot shows a mobile application interface for a sign-up process. On the right, a smartphone screen displays a "Verification code" screen. The text on the screen reads: "We have sent the code verification to bernardo.lubowitz@gmail.com". Below this is a 6-digit OTP field with six empty boxes. A timer at the bottom indicates "OTP expires in 03:18". At the bottom of the screen are "Resend" and "Confirm" buttons. The top of the phone screen shows a status bar with the time 12:12, signal strength, and battery level.

The left side of the image shows a test runner interface for a YAML configuration file named "Sign_up.yaml". The file contains the following sequence of steps:

```
1 appId: com.example.gmailclone
2
3 ---
4 - launchApp:
5   | clearState: true
6 - waitForAnimationToEnd:
7   | timeout: 2000
8 - tapOn: "Don't have an account? SIGN UP"
9
10 - tapOn: "Full Name"
11
12 - inputText: "Pransu Vadsmiya"
```

The "Local" tab is selected in the test runner. Below the YAML file, a list of executed steps is shown with green checkmarks:

- ✓ Launch app "com.example.gmailclone" with clear state
- ✓ Wait for animation to end
- ✓ Tap on "Don't have an account? SIGN UP"
- ✓ Tap on "Full Name"
- ✓ Input text Pransu Vadsmiya
- ✓ Tap on "Email"
- ✓ Input text random TEXT_EMAIL_ADDRESS
- ✓ Tap on "Password"
- ✓ Input text Vagabond123#
- ✓ Tap on "Confirm Password"
- ✓ Input text Vagabond123#
- ✓ Double tap on point (7%,15%)
- ✓ Tap on "SIGN UP"
- ✓ Assert that "Verification code" is visible

Timestamps are listed to the right of each step: 00, 05, 15, 10, 14, 53, 0:57, 1:06, 1:10, 1:11, 20, 1:21, 1:24, and 1:31.

```

35
36 #i-button
37 - tapOn:
38   | | point: 70%,52%
39
40 - waitForAnimationToEnd:
41   | | timeout: 20000
42
43 - tapOn: Already have an account? SIGN IN
44

```

Sign_up - C:\Users\Pransu\OneDrive\Desktop\Sequence_Diagram\new-workspace\Sign_up.yaml

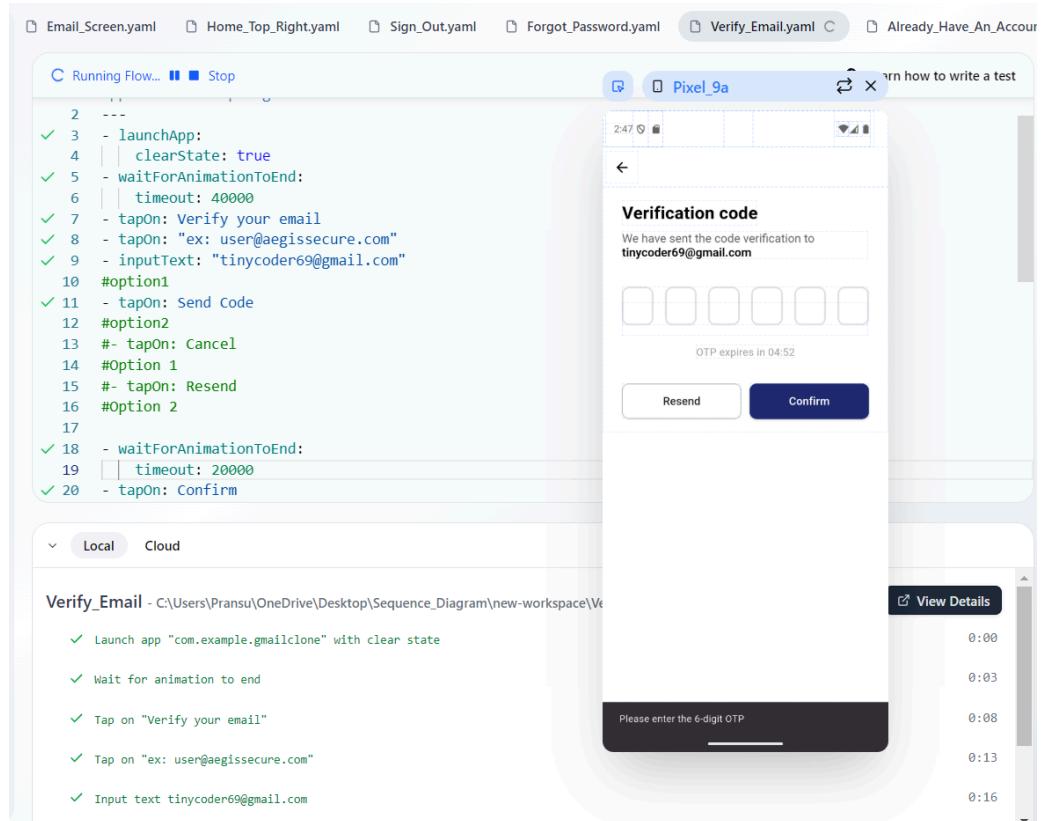
- ✓ Tap on point (70%,52%)
- ✓ Wait for animation to end
- ✓ Tap on "Already have an account? SIGN IN"

- The “Don’t have an account? SIGN UP” link worked and opened the sign-up form correctly.
- All input fields (Full Name, Email, Password, Confirm Password) were active and accepted user inputs without issues.
- Buttons like “SIGN UP” responded properly when tapped.
- After submitting the information, the app successfully moved to the Verification Code (OTP) screen.
- This shows that the Sign Up screen UI is working smoothly and all main elements behave as expected.

Verify the email

1. When we don't want to cancel after writing the email.

OTP confirm button clicked



- The “Verify your email” option opened the OTP verification screen correctly.
- The app accepted the entered email and displayed the OTP input interface without issues.
- The “Send Code” and “Confirm” buttons were responsive and triggered the expected actions.
- The verification screen loaded properly and all interactive elements behaved as intended, confirming that the email verification flow works smoothly.

The OTP was resend :-

The screenshot shows a mobile application test setup. On the left, a code editor displays a YAML script for testing an OTP verification feature. The script includes steps like launching the app, entering an email address, and tapping the 'Resend' button. On the right, a screenshot of a mobile device screen shows the OTP verification interface. The screen displays a verification code input field with the placeholder 'Verification code' and a message indicating the code was sent to 'tinycoder69@gmail.com'. Below the input field is a 6-digit OTP entry field with several empty boxes. A timer at the bottom indicates the OTP expires in 05:00. At the bottom of the screen are two buttons: 'Resend' (gray) and 'Confirm' (dark blue). A timeline at the bottom of the screenshot shows the test execution progress: 0:00, 0:04, 0:10, 0:15, and 0:17. A tooltip 'Resending OTP...' is visible near the end of the timeline.

```
1 appId: com.example.gmailclone
2 ---
3 - launchApp:
4   | | clearState: true
5   | | waitForAnimationToEnd:
6   | | timeout: 40000
7 - tapOn: Verify your email
8 - tapOn: "ex: user@aegissecure.com"
9 - inputText: "tinycoder69@gmail.com"
10 #option1
11 - tapOn: Send Code
12 #option2
13 #- tapOn: Cancel
14 #Option 1
15 - tapOn: Resend
16 #Option 2
17
18 #- waitForAnimationToEnd:
```

- After entering the email, the OTP verification screen loaded correctly.
- The “Resend” button was active and responded immediately when tapped.
- The app successfully triggered the OTP resend process, confirming the expected behavior.
- All interactive elements remained functional, showing that the resend feature works smoothly and reliably.

2. When we want to cancel after adding the email

The screenshot shows a mobile application test interface. On the left, a code editor displays a YAML configuration for a test flow named 'Verify_Email'. The code includes steps for launching the app, clearing state, waiting for animation, tapping on 'Verify your email', entering an email address, and finally tapping on 'Cancel'. On the right, a visual representation of the app's interface is shown on a 'Pixel_9a' device. The interface features a logo for 'AEGIS SECURE' and a 'Sign in your account' section with fields for 'Email' and 'Password'. Below these are 'SIGN IN' and 'Forgot Password?' buttons. A link for 'Already Have an Account?' is also present. At the bottom, there is a 'Verify your email' button. A timeline on the right indicates the execution time from 0:00 to 0:48. A green checkmark at the bottom right of the interface confirms that the flow executed successfully.

```
2 ---  
✓ 3 - launchApp:  
  4 | | clearState: true  
✓ 5 - waitForAnimationToEnd:  
  6 | | timeout: 40000  
✓ 7 - tapOn: Verify your email  
✓ 8 - tapOn: "ex: user@aegissecure.com"  
✓ 9 - inputText: "pvadsmiya@gmail.com"  
10 #option1  
11 #- tapOn: Send Code  
12 #option2  
✓ 13 - tapOn: Cancel  
14
```

- The email field allowed the user to enter their email normally.
- The “Cancel” button was clickable and responded correctly.
- After pressing Cancel, the app returned safely to the Sign-In screen without errors.
- This shows that the cancellation flow works properly and the user can back out of the verification process anytime.

Forgot password

The screenshot displays a mobile testing interface. On the left, a code editor shows a series of test steps for an application with ID com.example.gmailclone. The steps include launching the app with clear state, waiting for animation to end, tapping on 'Forgot Password?', tapping on 'Email', inputting the email pvadsmiya@gmail.com, and finally tapping on 'Send OTP'. A green checkmark indicates each step has been completed successfully. To the right of the code editor is a screenshot of a 'Change Password' screen on a Pixel_9a device. The screen shows fields for entering an email (pvadsmiya@gmail.com) and a 6-digit OTP, with a message stating 'OTP expires in 04:37'. A large blue button labeled 'Verify OTP' is at the bottom. Below the screenshot is a timeline showing the execution of the test steps over a period of 0:15 minutes. The timeline includes icons for a checkmark, a close button, a smiley face, and a list, with corresponding time markers at 0:00, 0:03, 0:08, 0:13, and 0:15.

```
1 appId: com.example.gmailclone
2 ---
3 ✓ - launchApp:
4   | | clearState: true
5 ✓ - waitForAnimationToEnd:
6   | | timeout: 20000
7 ✓ - tapOn: Forgot Password?
8 ✓ - tapOn: Email
9 ✓ - inputText: "pvadsmiya@gmail.com"
10 ✓ - tapOn: Send OTP
11 #
12 # If want to go back
13 #- doubleTapOn:
14 #  point: 1%,6%
15
16 #Verify_Screen_for_change_password
17 ✓ - tapOn: pvadsmiya@gmail.com
18 ✓ - tapOn: Verify OTP
19
```

- The “Forgot Password?” button was detected and opened the password recovery screen correctly.
- The Email field accepted user input without any issues.
- The “Send OTP” button responded properly and navigated to the OTP verification section.
- The verification screen loaded smoothly, and all elements—including the email display and “Verify OTP” button—were active and responsive.
- Overall, the Forgot Password workflow functioned correctly and behaved as expected.

The screenshot shows a mobile application interface. On the left, a code editor displays a YAML test script for a "Forgot Password?" screen. The script includes actions like clearing state, waiting for animation, entering an email address, and sending an OTP. On the right, a UI mockup of the "Aegis Secure" app shows a sign-in screen with fields for Email and Password, a "Forgot Password?" link, a "SIGN IN" button, and an "Already Have an Account?" link. Below the sign-in area is a "Verify your email" button.

```

yaml
  Run Locally
  - clearState: true
  - waitForAnimationToEnd:
    - timeout: 20000
  - tapOn: Forgot Password?
  - tapOn: Email
  - inputText: "pvadsmiya@gmail.com"
  - tapOn: Send OTP
  - # If want to go back
  - tapOn:
    | point: 1%,6%

```

Local Cloud

- ✓ Tap on "Forgot Password?"
- ✓ Tap on "Email"
- ✓ Input text pvadsmiya@gmail.com
- ✓ Tap on "Send OTP"
- ✓ Tap on point (1%,6%)

- The “Forgot Password?” button opened the correct password-reset screen.
- The email field accepted the user’s input without any problems.
- The back action (double tap/tap on the top-left/back area) worked correctly.
- After going back, the app returned safely to the main Sign-In page.
- This shows that the back-navigation from the Forgot Password screen works properly and the user can return without completing the reset.

Home Page

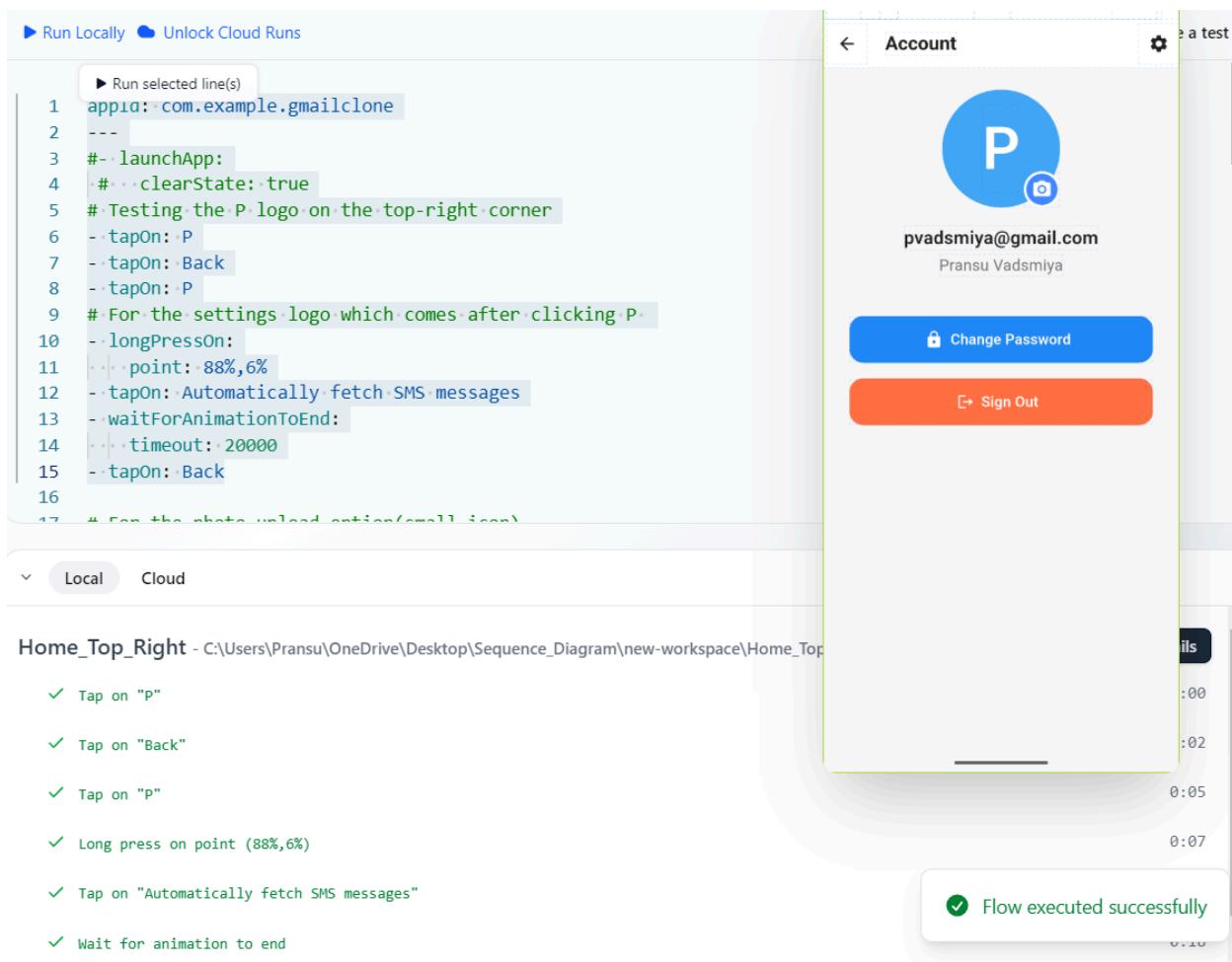
1. Analysis Page

The screenshot shows the AegisSecure Home analysis page. On the left, a code editor displays a sequence of interactions for an app with ID com.example.gmailclone. The interactions include launching the app, clearing state, performing long presses, tapping on Mail and SMS, and double-tapping Both. The status bar indicates the test was run on a Pixel_9a device at 12:49. The main area features a large circular progress indicator showing 116 messages analyzed. Below it, a pie chart breaks down the results into Mail (blue), SMS (light blue), and Both (dark blue). A summary table shows message counts by category: Secure (92), Threat (0), Suspicious (3), Critical (21), and Malware (0). A 'Cyber Insights' section provides security tips, such as using strong passwords and updating software, with a timestamp of 0:09. At the bottom, there are navigation icons for back, forward, and search.

- The Home Page loaded correctly and all visible elements appeared as expected.
- The “Mail,” “SMS,” and “Both” filter buttons were active and responded instantly when tapped.
- The long-press and double-tap actions were recognized successfully on the Home Page.
- The UI updated properly after each interaction, confirming that the Home Page is fully functional, responsive, and stable.

Home Page (Top Right)

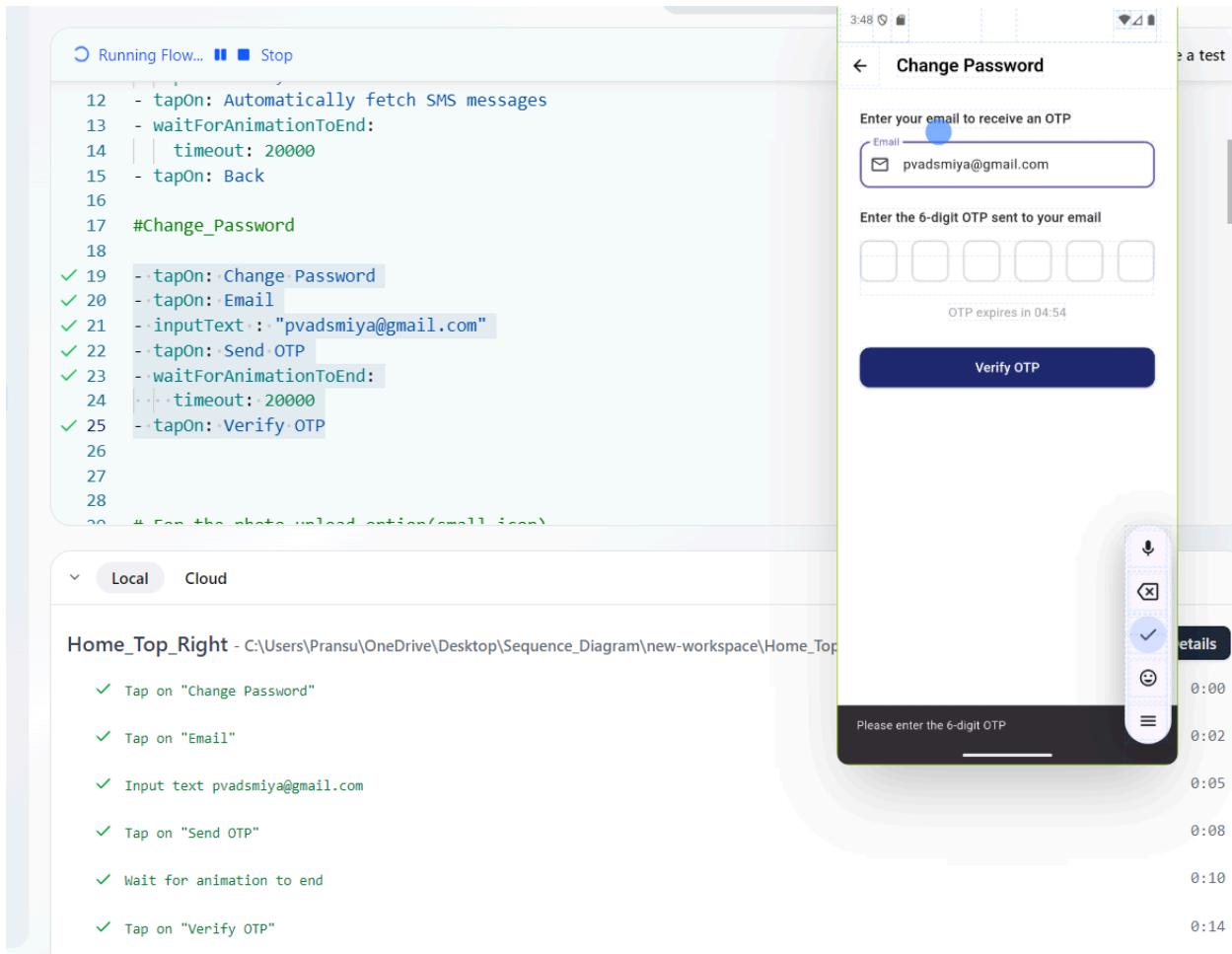
1. Settings



- Tapping the profile icon in the top-right corner opened the Account/Settings screen correctly.
- Inside the Settings tab, “Automatically fetch SMS messages,” was active and responded as expected.
- Navigation actions such as opening Settings and returning back worked smoothly.

- The interface remained responsive throughout, confirming that the top-right Settings section functions properly and consistently.

2.Change Password



- The “Change Password” option opened the password reset screen successfully.
- The Email field accepted input correctly and without delay.
- The “Send OTP” button responded immediately and loaded the OTP verification section.
- The “Verify OTP” button was active and clickable on the verification screen.

- Overall, the Change Password flow functioned smoothly, and all UI elements behaved as expected.

3.Taking photo

```
--▶ Run selected line(s) upload option(small icon)
29 - · tapOn:
30   · · · point: 56%,25%
31
32 #Take photo option --- button
33 - · tapOn: Take Photo
34
35
36 # Buttons to select whether to upload or not
```

Local Cloud

ome_Top_Right - C:\Users\Pransu\OneDrive\Desktop\Sequence_Diagram\new-workspace\Home_Top_Right

- ✓ Tap on point (56%,25%)
- ✓ Tap on "Take Photo"

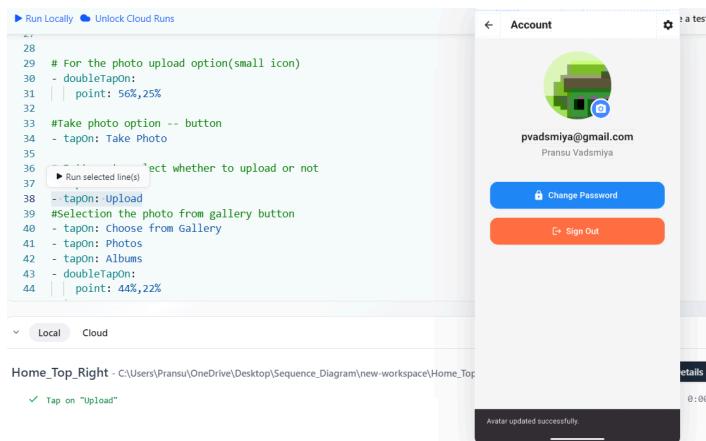
- The double-tap action at the specified screen position (56%, 25%) worked correctly and successfully opened the photo options menu.
- The “Take Photo” option responded immediately when tapped, confirming that the menu interaction and button functionality are working as expected.

4. Cancelling the taken photo



- Tapping the “Cancel” button worked correctly and dismissed the photo upload options.
- The app returned to the previous screen smoothly, confirming that the cancel action is responsive and functioning as intended.

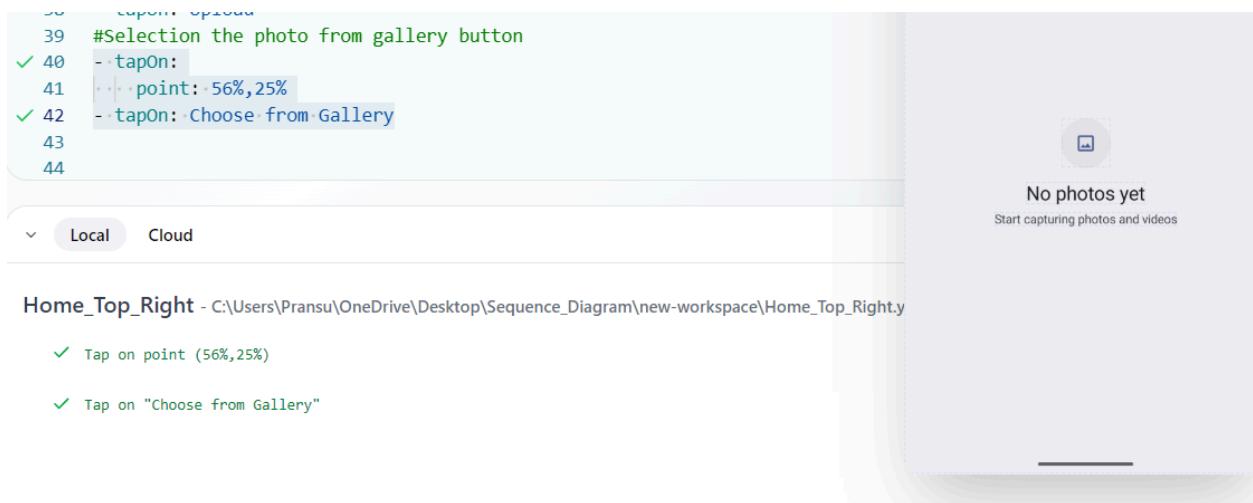
5. Uploading the photo taken



- The “Upload” button responded correctly when tapped.

- The selected photo was uploaded successfully, and the profile avatar updated immediately.
- This confirms that the photo upload functionality works smoothly and behaves as expected.

6. Checking the select from gallery button



- The double-tap action successfully opened the photo selection options.
- Tapping on “Choose from Gallery” worked correctly and opened the device’s gallery screen.
- The gallery interface loaded properly, confirming that the gallery selection feature is fully functional.

SMS Page

1. Checking if SMS opens :

▶ Resume Flow ■ Stop

Pixel_9a

Message Details

H HAIERe-S 5.00 27/11/2025 18:07

Verdict: legitimate

[HaierWash] Dear master, your clothes have been cleaned carefully, you can take them out of the machine now.

Reasoning

The forensic URL scan did not find any URLs in the HTML. The message content appears to be a benign notification about laundry. There are no indicators of phishing or malicious activity.

Suggestion

This message appears to be a legitimate notification and is safe.

View Details

0:00

0:04

SMS_Page - C:\Users\Pransu\OneDrive\Desktop\Sequence_Diagram\new-workspace\SMS

- ✓ Long press on point (17%, 94%)
- ✓ Tap on "H HAIERe-S [HaierWash] Dear master, your clothes have been cleaned c Nov 27"
- *** Tap on "Back"
- *** Tap on "Search Messages"
- *** Input text Jio

- The long-press action correctly selected the SMS from the list.
- The chosen SMS opened successfully, and all message details were displayed without delay.
- The UI inside the SMS details screen was fully responsive, confirming that SMS messages open and load correctly as expected.

▶ Run Locally ● Unlock Cloud Runs

```

1 le.gmailclone
2 ▶ Run selected line(s)
3 # - launchApp:
4 # - clearState: true
5 - longPressOn:
6   point: 17%,94%
7
8 # An example test message we need to scroll
9 - scrollUntilVisible:
10   element:
11     text: |- I
12       ISATHI-G
13       Want to check number of SIMs in your name? Download Sanchar Sa...
14       5.00
15       Nov 24
16
17 Insert Command ⌘K Inspect Screen ⌘I
18

```

● Click to tap
● Right click to inspect element

text J JIOPAY-S સાપ્લાઈ! 25-N...

SMS Home Page ➔ a test

SMS Home Page

- J સાપ્લાઈ! 25-Nov-25 19:05 ના રોજનો 100% ઇન્ફો કેરા ખતમ ... Nov 25
- J JIOPAY-S ALERT! 100% of daily data exhausted as on 25-Nov-... Nov 25
- J JioPay-S ધ્યાન આપો! ઈન્ફો કેરા માંથી 90% કેરા 25-Nov-25 14:42 ... Nov 25
- J JioPay-S ATTENTION! 90% of daily data used as on 25-Nov-25 14:42! Nov 25
- S SBIUPI-S Dear UPI user A/C X6854 debited by 15.0 on date 25Nov25 trf to DAIICT Infocity Refno 69... Nov 25
- J JioPay-S કેરા વારસા અહેવી! તમે 25-Nov-25 12:24 શુદ્ધી 50% ઇન્ફો કેરા નો વપરા... Nov 25
- J JioPay-S Data usage Alert! 50% of your daily data used as of 25-Nov-25 ... Nov 25
- I ISATHI-G તમારા નો કેરા SIM કાર્ડ હે ને તાપસનું હે? રંગર રાણી કાર્ટનાંક કરીને તપરો: એન્ફ્રોંડ: https://play.goog... Nov 25
- J JIOVOC-S Your JioAirFiber experience matters to us! Share your feedback and help us serve you be... Nov 24
- I ISATHI-G Want to check number of SIMs in your name? Download Sanchar Saathi to check: Android: https://play.google.com/store/apps/details?id=com.dot.app.sancharsaathi05: https://apps.apple.com/in/app/sanchar-saathi/id6739700695 Department of Telecom 5.00 Nov 24

lay.goo

Local Cloud

SMS_Page - C:\Users\Pransu\OneDrive\Desktop\Sequence_Diagram\new-workspace\SMS_Page.yaml

- ✓ Long press on point (17%,94%)
- ✓ Scrolling DOWN until "I ISATHI-G Want to check number of SIMs in your name? Download Sanchar Saathi to check: Android: https://play.google.com/store/apps/details?id=com.dot.app.sancharsaathi05: https://apps.apple.com/in/app/sanchar-saathi/id6739700695 Department of Telecom 5.00 Nov 24" is visible with speed 40, visibility percentage 100%, timeout 20000 ms, with centering disabled

0:00 0:04

- The scroll action worked correctly, moving down the list until the target SMS became visible.
- The target message appeared after scrolling, confirming that the SMS list is fully scrollable and responsive.

2. Checking if Search bar is responsive:

```

18
19   out searching a sms from the list of SMSes
20
21 - tapOn: "Search Messages"
22 - inputText: "Jio"
23 # checking if scroll is possible in search option
24 - scrollUntilVisible:
25   element:
26   text: |- ...
27   J
28   JG-JIOPAY-S
29   रिचार्ज प्लान 20-Nov-25 22:35 Hrs को समाप्त हो चूका है!
30   Jio नंबर: 7984719576
31   प्लान का नाम: Rs 349_28D_2GB/D
32   MyJio का उपयोग करके रिचार्ज करें और सभी रिचार्ज पर शून्य सुविधा शुल्क का
33   रिचार्ज करने के लिए - https://www.jio.com/dl/recharge\_web
34   10.00
35   Nov 20
36
37

```

The screenshot shows a mobile application interface for managing messages. At the top, there is a search bar with the text 'Jio' entered. Below the search bar, a list of messages is shown in a scrollable area. One message from 'JG-JIOPAY-S' is visible, indicating a plan ends on Nov 20. The interface includes standard message components like profile icons, message text, and timestamp.

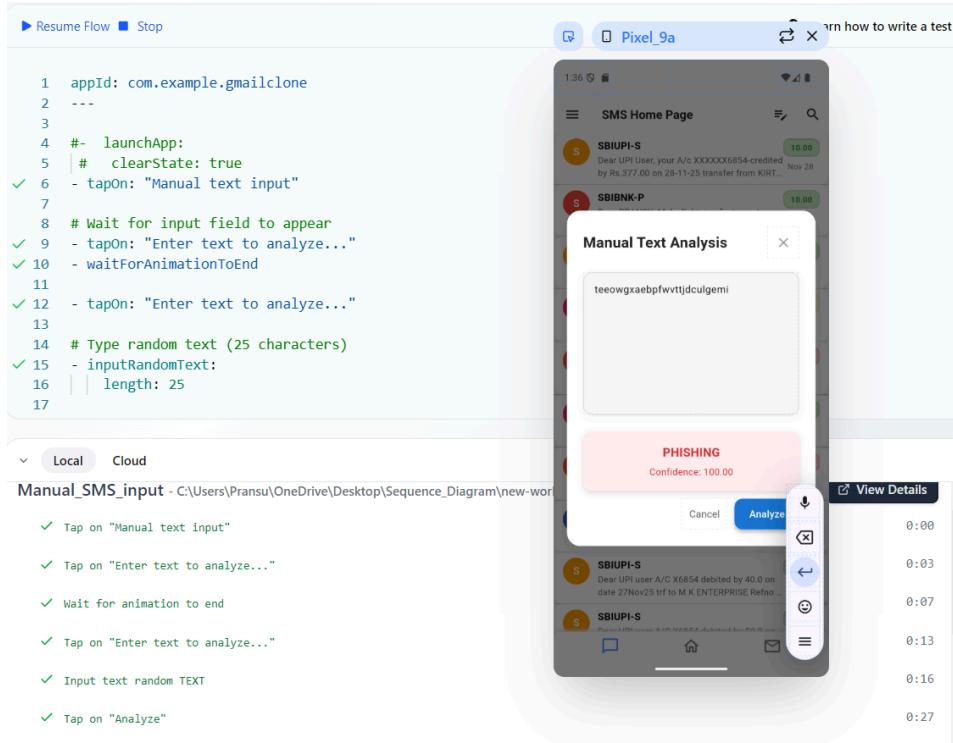
SMS_Page - C:\Users\Pransu\OneDrive\Desktop\Sequence_Diagram\new-workspace\SMS_Page.yaml

- ✓ Tap on "Search Messages"
- ✓ Input text Jio
- ✓ Scrolling DOWN until "J G-JIOPAY-S रिचार्ज प्लान 20-Nov-25 22:35 Hrs को समाप्त हो चूका है! Jio नंबर: 7984719576 प्लान का नाम: Rs 349_28D_2GB/D 0:05 MyJio का उपयोग करके रिचार्ज करें और सभी रिचार्ज पर शून्य सुविधा शुल्क का आनंद लें। रिचार्ज करने के लिए - https://www.jio.com/dl/recharge_web 10.00 Nov 20" is visible with speed 40, visibility percentage 100%, timeout 20000 ms, with centering disabled

- The search bar accepted the input ("Jio") correctly and filtered the SMS list instantly.
- The scroll action worked within the search results, successfully finding the target SMS.
- The filtered list remained responsive while scrolling, confirming that both the search functionality and scroll behavior work properly.

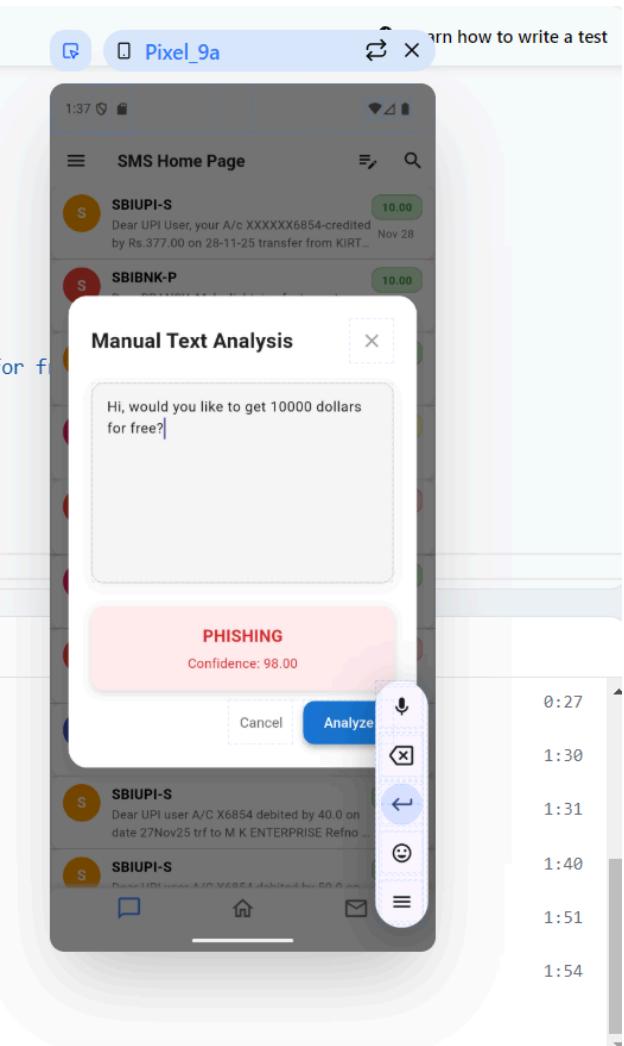
Manual Text Input

1. Entering some random text input



- The “Manual text input” option opened correctly and displayed the text analysis dialog.
- The input field responded and accepted randomly generated text without any issues.
- Tapping the “Analyze” button worked properly, and the system generated a phishing analysis result instantly.
- This confirms that manual text entry and analysis functionalities are fully responsive and working as expected.

2.Entering meaningful text input :



The screenshot shows a mobile application interface on a Pixel 9a device. At the top, there's a navigation bar with 'Pixel_9a' and a search icon. Below it is the 'SMS Home Page' screen, displaying two messages from 'SBIUPI-S' and 'SBIBNK-P'. A modal dialog titled 'Manual Text Analysis' is open in the foreground. The text input field contains 'Hi, would you like to get 10000 dollars for free?'. Below the input field, a red box highlights the word 'PHISHING' with the text 'Confidence: 98.00'. At the bottom of the dialog are 'Cancel' and 'Analyze' buttons. To the right of the dialog, a vertical timeline shows the progression of the test steps with timestamps from 0:27 to 1:54.

```
▶ Resume Flow ■ Stop
  ↻ Pixel_9a
  Learn how to write a test

✓ 18 - tapOn: "Analyze"
  19 # Small wait so UI can update
✓ 20 - waitForAnimationToEnd:
  21 | | timeout: 10000
  22
  23
  24 # Clear the text field for next test
✓ 25 - eraseText
  26
  27
✓ 28 - inputText: "Hi, would you like to get 10000 dollars for free?"
  29
  30 # Click Analyze
✓ 31 - tapOn: "Analyze"
  32
  33 # Wait for analysis screen/dialog
✓ 34 - waitForAnimationToEnd:
  35 | | timeout: 60000

  ✓ Local Cloud

  ✓ Tap on "Analyze"
  ✓ Wait for animation to end
  ✓ Erase text
  ✓ Input text Hi, would you like to get 10000 dollars for free?
  ✓ Tap on "Analyze"
  ✓ Wait for animation to end
  *** Tap on "Cancel"

  0:27
  1:30
  1:31
  1:40
  1:51
  1:54
```

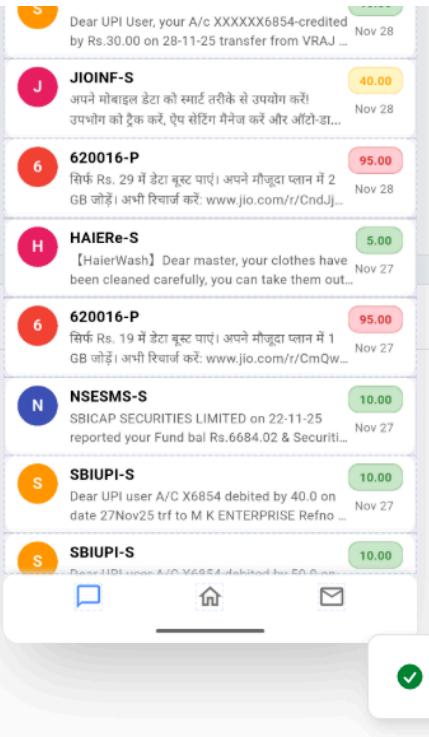
- The input field was cleared successfully and accepted the meaningful text without any issues.
- The “Analyze” button responded correctly and triggered the text analysis process.
- The analysis result appeared smoothly, identifying the message as phishing with a high confidence score.
- This confirms that meaningful text input and analysis functionalities are fully responsive and working as intended.

3. Checking the cancel button

```
37
38
39 # Verify Cancel button works
✓ 40 - tapOn: "Cancel"
41
```

▼ Local Cloud

- ✓ Tap on "Analyze"
- ✓ Wait for animation to end
- ✓ Erase text
- ✓ Input text Hi, would you like to get 10000 dollars for free?
- ✓ Tap on "Analyze"
- ✓ Wait for animation to end
- ✓ Tap on "Cancel"



- The “Cancel” button responded immediately when tapped.
- The manual text analysis dialog closed successfully and returned to the SMS list view.
- This confirms that the Cancel button is fully functional and performs the expected dismissal action

Email

The screenshot shows a mobile application interface for an email verification process. At the top, there's a navigation bar with 'Pixel_9a' and a search icon. Below the navigation is a sequence of code steps:

```
1 appId: com.example.gmailclone
2 ---
3 #- launchApp:
4 #  clearState: true
5 - tapOn: |-
6   A
7   aegissecure25@gmail.com
8   AegisSecure OTP
9   AegisSecure Protecting you from online threats. Verific.
10  10.00
11  Nov 28
12 # Back button when we open a mail
13 - tapOn : Back
14
15 # Search button of email screen
16 - doubleTapOn:
17   point: 76%,6%
```

Below the code, there are tabs for 'Local' and 'Cloud'. The 'Email_Screen' tab is active, showing the following details:

- Message from "A aegissecure25@gmail.com AegisSecure OTP AegisSecure Protecting you following one-time passcode (OTP) for the verification process. 516415 This c 10.00 Nov 28"
- *** Tap on "Back"
- *** Double tap on point (76%,6%)
- *** Input text Customer
- *** Double tap on point (1%,6%)

The main content area shows an email message from 'aegissecure25@gmail.com' with a subject 'AegisSecure OTP'. The message body contains:
Verdict: legitimate
Protecting you from online threats.
Verification
Please use the following one-time passcode (OTP) for the verification process.
516415
This code will be valid for 5 minutes. Please complete your verification within this time.
If you didn't request this verification, you can safely ignore this message.
2025 AegisSecure – All rights reserved
Stay protected. Stay informed.

A 'Reasoning' section notes: "The email appears to be a legitimate OTP verification". There is also a 'View Details' button.

- The selected email opened correctly and displayed all details without delay.
- The Back button responded properly and returned to the email list screen.
- The search icon on the email screen was detected and reacted instantly to the double-tap action.
- These actions confirm that the email view and its navigation elements are fully functional and responsive.

```

3  #- launchApp:
4  | #   clearState: true
5  - scrollUntilVisible:
6  | .element:
7  | | .text: |-|
8  | | | C
9  | | | Codeforces@codeforces.com
10 | | | Codeforces Round 1067 (Div. 2)
11 | | | Hello, Pransu2005. Welcome to the regular Codeforces round. I'm glad to invite you to take part in Codeforces Round 1067 (Div. 2). It starts on Saturday, November, 29, 2025 14:35 (UTC). The contest 5.00 Nov 29 is visible with speed 40, visibility percentage 40, and centering disabled.
12 | | | 5.00
13 | | | Nov 29
14 # Back button when we open a mail
15 - tapOn: Back
16
17 - waitForAnimationToEnd:
18 | | timeout: 10000
19
20 # Search button of email screen
21 - doubleTapOn:
22 | | point: 76%,6%
23
24

```

Email_Screen - C:\Users\Pransu\OneDrive\Desktop\Sequence_Diagram\new-workspace>Email_Screen.yaml

✓ Scrolling DOWN until "C Codeforces@codeforces.com Codeforces Round 1067 (Div. 2) Hello, Pransu2005. Welcome to the regular Codeforces round. I'm glad to invite you to take part in Codeforces Round 1067 (Div. 2). It starts on Saturday, November, 29, 2025 14:35 (UTC). The contest 5.00 Nov 29 is visible with speed 40, visibility percentage 40, and centering disabled"

- The scrolling functionality on the Email screen worked correctly and was able to locate the target email even when it was partially off-screen.
- The test successfully identified the Codeforces mail by matching its subject, sender, and content snippets.
- The back navigation also responded as expected, returning to the inbox without errors.

```

19
20 # Search button of email screen
✓ 21 - tapOn:
22 | | point: 76%,6%
23
24
25 #input text for searching
✓ 26 - inputText : "r"
27 # Back button after searching for a mail
✓ 28 - tapOn:
29 | | point: 1%,6%
30
31 Insert Command ⌘K Inspect Screen ⌘I
32
33

```

Email_Screen - C:\Users\Pransu\OneDrive\Desktop\Sequence_Diagram\new-workspace>Email_Screen.yaml

✓ Tap on point (76%,6%)
✓ Input text Customer
✓ Tap on point (1%,6%)

- The search button on the email screen responded correctly to the double-tap and opened the search bar.
- Entering the keyword “r” worked properly, and the system searched through the emails.
- The UI correctly displayed “**matching emails**”, confirming that the search function behaves accurately.
- The back button navigated back from the search screen without any issues.

The screenshot shows the Appium Inspector interface with a sequence of tap actions recorded. The sequence details are as follows:

```

1  appId: com.example.gmailclone
2  ---
3  #- launchApp:
4  | # clearState: true
5  - doubleTapOn:
6  | | point: 76%,94%
7  | # Top-right-corner account button
8  - tapOn: P
9  - tapOn: Back
10 - tapOn: P
11 # A redundant cross button
12
13 - tapOn: Add another account
14
15 # Managing accounts widget
16 - tapOn: Manage your Accounts
17
18

```

The recorded actions are:

- ✓ Double tap on point (76%,94%)
- ✓ Tap on "P"
- ✓ Tap on "Back"
- ✓ Tap on "P"
- ✓ Tap on "Add another account"
- ✓ Tap on "Manage your Accounts"

- The tap on the top-right profile icon was detected correctly and opened the account menu.
- Navigation through the Back button and re-opening the menu worked smoothly.
- The “Add another account” option responded immediately and opened the Google account selection screen.

- However, the “Manage your Accounts” button did not work as expected, indicating an issue with its functionality or navigation flow.

Sequence Diagram Script (Left Side):

```

14
15 # Managing accounts widget
16 - tapOn: Manage your Accounts
17
18 # Selecting a particular account
19 - tapOn: |-
20   P
21   pvadsmiya@gmail.com
22   pvadsmiya@gmail.com
23
24 # Deleting an account (Bin widget)
25 - doubleTapOn:
26   | point: 76%,45%
27

```

Mobile Application Screenshot (Right Side):

pvadsmiya@gmail.com

Hi, Pransu Vadsmiyal

Manage your Accounts

Switch account

No connected accounts yet.

+ Add another account

Privacy Policy • Terms of Service

Local Cloud

Email_Top_Right - C:\Users\Pransu\OneDrive\Desktop\Sequence_Diagram\new-workspace

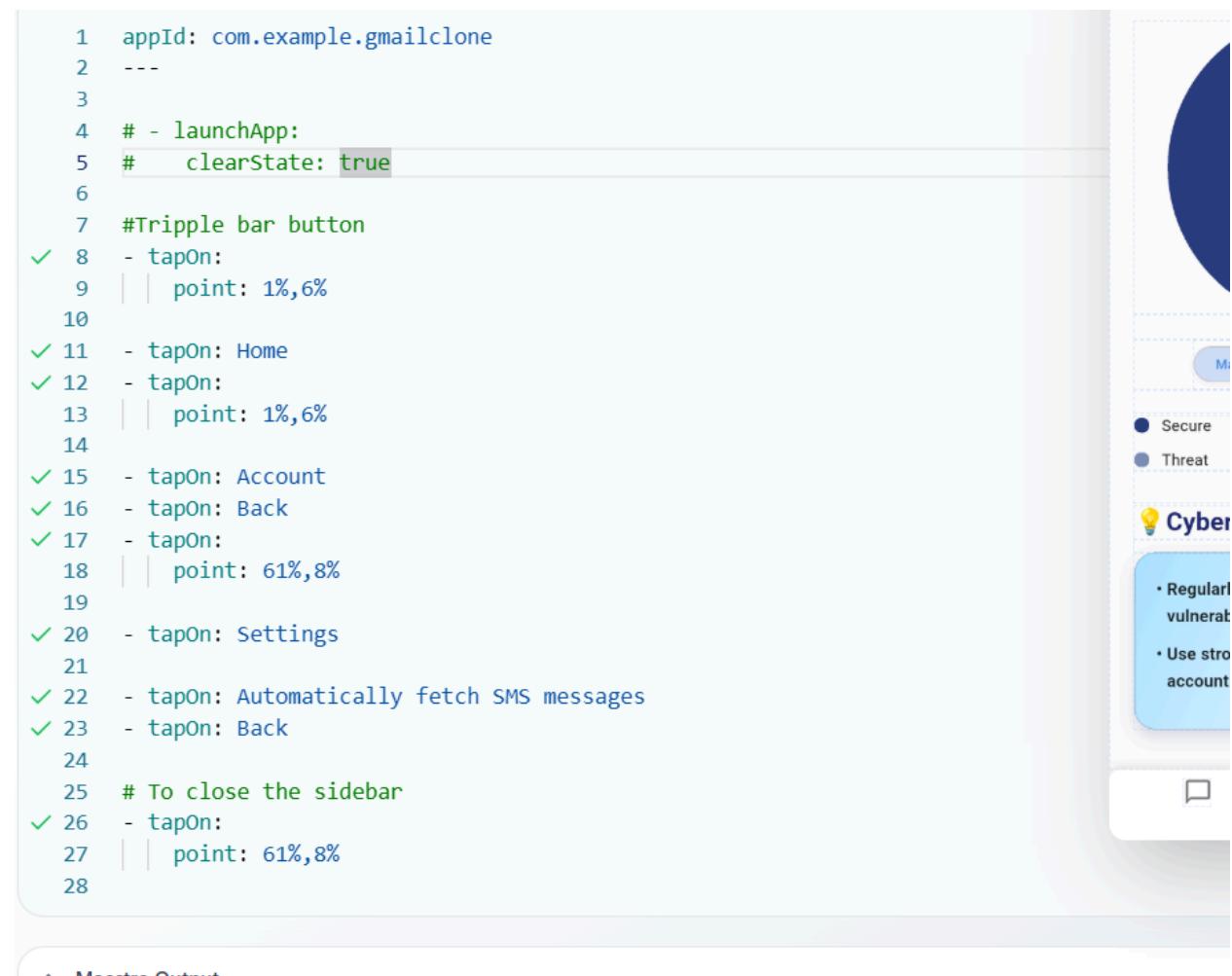
- ✓ Tap on "Manage your Accounts"
- ✓ Tap on "P pvadsmiya@gmail.com pvadsmiya@gmail.com"
- ✓ Double tap on point (76%,45%)

View

- Selecting a particular account from the list worked correctly and responded immediately.
- The double-tap on the bin icon functioned properly and initiated the delete action on the selected account item.
- Aside from the non-responsive “Manage your Accounts” button, all other interactions performed as intended.

SIDEBAR

1. Testing the buttons



```
1  appId: com.example.gmailclone
2  ---
3
4  # - launchApp:
5  #   clearState: true
6
7  #Tripple bar button
8  ✓ 8  - tapOn:
9    | | point: 1%,6%
10
11  ✓ 11 - tapOn: Home
12  ✓ 12 - tapOn:
13    | | point: 1%,6%
14
15  ✓ 15 - tapOn: Account
16  ✓ 16 - tapOn: Back
17  ✓ 17 - tapOn:
18    | | point: 61%,8%
19
20  ✓ 20 - tapOn: Settings
21
22  ✓ 22 - tapOn: Automatically fetch SMS messages
23  ✓ 23 - tapOn: Back
24
25  # To close the sidebar
26  ✓ 26 - tapOn:
27    | | point: 61%,8%
28
```

- The sidebar opened successfully on double-tap, confirming the hamburger menu is responsive.
- The **Home**, **Account**, and **Settings** options were all clickable and navigated correctly to their respective screens.

- The “**Automatically fetch SMS messages**” option responded properly and allowed navigation back without issues.
- Tapping again correctly **closed the sidebar**, showing that the menu toggles as expected.