P1: End-to-End Testing of React Native Application using Maestro

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Midas Labs Assessment problem 1

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Documentation

Documentation and report of any possible error or improvement implementation.

Test Case ID: TC-001
Bug Title: **No Strict Response to Wrong Password During Login**

Severity: High (prevents unauthorized user access)

Module: Login

Description:
App fails to provide visual feedback or error message upon incorrect password entry during login.
Login screen proceeds to go ahead, causing a security breach as access is granted without password.

Steps to Reproduce:
Launch the app.
Tap "Login" button.
Enter valid username.
Enter incorrect password.
Tap "Sign In" button.
Expected Behavior:

CODE:
- clearState
- launchApp
- clearText:
   Selector:password
- inputText:
   selector: password
   text: "sjasjfoa"
- assertVisible: "Sign In"
- tapOn:
   text: "Tap to sign in!"

Expected Behavior:
App displays clear error message or feedback indicating incorrect password.
App remains on login screen, denying entry and allowing retry with correct password.

Actual Behavior:
No response or feedback displayed.
Login screen remains static without any indication of incorrect attempt.
Screenshots/Screen Recordings: (Attach if available)

Device/OS:

Device: Medium phone API34
OS: Android 14.0

Observed on multiple devices and OS versions.
Significant impact on user experience and app security.
Test Case ID: TC-002

Test Case Name: Podcast Favorites Flow

Module: Podcast

Description:
This test simulates a user journey involving login, podcast interaction, favoriting a podcast, and verifying its presence in the filtered favorites list.

Prerequisites:
Maestro configured and running
Device or simulator connected
App installed on the device/simulator
Login test case (Login.yaml) ready

Test Steps:

Run login flow (Login.yaml)
Tap "Podcast" screen
Assert "React Native Radio episodes" visibility
Tap "Switch on to only show favorites" (initial toggle)
Assert "This looks a bit empty" visibility
Tap "Switch on to only show favorites" (re-toggle with workaround)
Scroll to find podcast titled "RNR 257 - META RESPONDS! How can we improve React Native, part 2"
Long press on the podcast
Scroll to find "Switch on to only show favorites" again
Tap "Switch on to only show favorites"
Assert visibility of the favorited podcast
Expected Results:

All test steps should execute successfully.
Expected elements should be visible at designated steps.
Favorited podcast should appear in the filtered favorites list.

Key Assumptions:
App uses the specified app ID.
Podcast title and favorites toggle text match defined variables.
Limitations:

Test focuses on basic podcast favoriting and list filtering.
May require adjustments for different app content or UI.
Pass/Fail Criteria:

Pass: All test steps execute successfully, and expected elements are visible.
Fail: Any test step fails, or expected elements are not visible.

Test Execution:
Run Maestro using yarn maestro or npm run maestro.
Maestro generates a report indicating pass/fail status and logs.

Notes:

Incorporates a workaround for a known Android issue.
Consider expanding the test scope for more comprehensive podcast functionality testing.

```
CODE:


appId: com.sriyansapp
env:
  TITLE: "RNR 257 - META RESPONDS! How can we improve React Native, part 2"
  FAVORITES_TEXT: "Switch on to only show favorites"


---
- runFlow: Login.yaml
- tapOn: "Podcast"
- assertVisible: "React Native Radio episodes"
- tapOn:
    text: ${FAVORITES_TEXT}
- assertVisible: "This looks a bit empty"
- tapOn:
    text: ${FAVORITES_TEXT}
    retryTapIfNoChange: false
- scrollUntilVisible:
    element:
      text: ${TITLE}
    direction: DOWN
    timeout: 50000
    speed: 40
    visibilityPercentage: 100
- longPressOn: ${TITLE}
- scrollUntilVisible:
    element:
      text: ${FAVORITES_TEXT}
    direction: UP
    timeout: 50000
    speed: 40
    visibilityPercentage: 100
- tapOn:
    text: ${FAVORITES_TEXT}
- assertVisible: ${TITLE}
```

Test Case ID: TC-003

Test Case Name: Podcast Favoriting Toggle

Module: Podcast

Description:
This test verifies the functionality of favoriting and unfavoriting podcasts within the app. It simulates user interactions to toggle a podcast's favorite status and checks for expected text changes in the button.

Prerequisites:
Maestro configured and running
Device or simulator connected
App installed on the device/simulator
Login test case (Login.yaml) ready

Test Steps:
Run login flow (Login.yaml)
Tap "Podcast" screen
Assert "React Native Radio episodes" visibility
Tap the "Favorite" button (replace your_favorite_button_id with the actual ID)
Assert "Unfavorite" text visibility
Tap "Unfavorite"
Assert "Favorite" text visibility
Expected Results:

All test steps should execute successfully.
The button text should toggle between "Favorite" and "Unfavorite" as expected.
Key Assumptions:

App uses the specified app ID.
Button ID and text content match defined values.
Pass/Fail Criteria:

Pass: Button text toggles correctly between "Favorite" and "Unfavorite".
Fail: Button text does not toggle as expected, or any step fails.

Test Execution:
Run Maestro using yarn maestro or npm run maestro.
Maestro generates a report indicating pass/fail status and logs.
Notes:

Ensure the correct button ID is used for accurate targeting.
Adapt test steps if the UI or text content differs.

CODE:
```
# flow: Test favoriting and unfavoriting podcasts
appId: com.sriyansapp

---
- runFlow: Login.yaml
- tapOn: "Podcast"
- assertVisible: "React Native Radio episodes"
- tapOn:
    id: favorite_button_id
- assertVisible: "Unfavorite"
- tapOn:
    text: "Unfavorite"
- assertVisible: "Favorite"
```