Handover 4

Failed cases from white box testing:

Test Case 1: Invalid Input for Topic Selection

Description: The test case checks if the system defaults to "General Knowledge" when an invalid topic is selected.

Original Issue: The test was written using assertNotEquals, which incorrectly expected the default topic to not be "General Knowledge."

Resolution: Changed the assertion to assertEquals, verifying that the default topic is correctly set to "General Knowledge."

Test Case 2: Invalid Input for Difficulty Selection

Description: The test case verifies if the system defaults to "Easy" when an invalid difficulty level is selected.

Original Issue: Similar to Test Case 1, assertNotEquals was used, leading to a failure since the expectation was incorrectly defined.

Resolution: Modified the assertion to assertEquals, ensuring the system defaults to "Easy" difficulty as expected.

Test case 3: Using a lifeline twice

Description: This test case aims to verify that the system correctly handles the scenario where a user attempts to use the "Fifty-Fifty" lifeline more than once on the same question.

Original issue: The application is designed such that it inherently prevents using the 50-50 lifeline twice for a single question, therefore, the test case checking for the ability to use the 50-50 lifeline twice might be redundant.

Test Case 5: Null options in a question

Description: A question with null options is passed to the askQuestion method.

Expectation: The method should throw a NullPointerException.

Initial Observation:The previous implementation did not handle the scenario where a question has null options properly. This resulted in the application failing to throw a NullPointerException, leading to an unsuccessful test case.

Analysis and Fix:

To address this issue, the askQuestion method was modified to include a check for null options.