Manual Testing Instructions for Tabbed Interface Update

Pre-condition: Launch the application successfully.

Page Navigation and Layout Testing

1. **Home Page Tab Navigation**
   - **Steps:**
     a. Launch the application.
     b. Verify the presence of a navigation bar with tabs labeled: "Home," "Plot," "Map," and "Instructions."
     c. Click on the "Home" tab.
   - **Expected Outcomes:**
     a. The navigation bar is visible, and tabs are labeled correctly.
     b. Clicking the "Home" tab navigates to the Home page, displaying sub-options (e.g., "Import Data," "Preferences," "Log Out," "Report Bug").
2. **Plot Page Tab Navigation**
   - **Steps:**
     a. Click on the "Plot" tab in the navigation bar.
     b. Verify the presence of buttons for "Add Plot," "Delete Plot," and "Export Plot."
   - **Expected Outcomes:**
     a. Clicking the "Plot" tab navigates to the Plot page.
     b. Buttons for plot management are displayed and functional.
3. **Map Page Tab Navigation**
   - **Steps:**
     a. Click on the "Map" tab in the navigation bar.
     b. Verify the page contains features related to robot path mapping.
   - **Expected Outcomes:**
     a. Clicking the "Map" tab navigates to the Map page.
     b. Path mapping functionality is displayed.
4. **Instructions Page Tab Navigation**
   - **Steps:**
     a. Click on the "Instructions" tab in the navigation bar.
     b. Verify the page contains detailed instructions for robot data retrieval.
   - **Expected Outcomes:**
     a. Clicking the "Instructions" tab navigates to the Instructions page.
     b. Instructions for robot data retrieval are displayed.

Functionality Testing for Individual Pages

5. **Home Page Button Functionality**

- ○ **Steps:**
  a. On the Home page, click the "Import Data" button.
  b. Verify that a file selector popup appears.
  c. Click the "Report Bug" button and verify it opens a bug report submission form.
- ○ **Expected Outcomes:**
  a. The file selector popup is displayed for importing data.
  b. The bug report form opens upon clicking the "Report Bug" button.

6. **Plot Page Export Button Functionality**
   - ○ **Steps:**
     a. On the Plot page, click the "Export Plot" button.
     b. Verify a save-to dialog window appears with a file explorer.
   - ○ **Expected Outcomes:**
     a. The save-to dialog window appears for exporting plots.

7. **Map Page Robot Path Mapping**
   - ○ **Steps:**
     a. On the Map page, input sample data for robot paths.
     b. Verify the path visualization updates accordingly.
   - ○ **Expected Outcomes:**
     a. Robot path mapping is displayed correctly based on the input data.

8. **Instructions Page Motor/Sensor Labeling Updates**
   - ○ **Steps:**
     a. Navigate to the Instructions page.
     b. Verify the presence of updated instructions for labeling motors and sensors (e.g., "Drive Motor," "Swerve Motor").
   - ○ **Expected Outcomes:**
     a. Updated instructions are present and correctly labeled for different motor/sensor outputs.

General Validation

9. **Navigation Bar Consistency**
   - ○ **Steps:**
     a. Navigate through all tabs multiple times.
   - ○ **Expected Outcomes:**
     a. The navigation bar remains consistent across all pages without visual glitches or misalignment.

10. **Error Handling for Missing Features**
    - ○ **Steps:**
      a. Attempt to use unimplemented or unavailable features.
    - ○ **Expected Outcomes:**
      a. The application displays appropriate error messages without crashing.