

Test Mapping Functionality:

1. Open a new App instance
2. Create a new account
3. Login with the new account
 - a. Should see the app homepage
 - b. Check the debug console to ensure the correct user was logged in
4. Hit 'Map Position'
 - ☐ Ensure an appropriate error message is displayed: 'You have no data to display.'
(Acceptance Criteria #1)
5. Hit 'Import Data'
 - a. Select any of the 3 demo files.
 - b. Should see a success message in the GUI
 - c. Hit 'Continue'
 - d. The debug console should show the data that was imported as strings
 - i. ' ' are file separators
 - ii. ';' are column separators
 - iii. ',' are row separators
 - e. Ensure the imported data is as expected
6. Go back to the homepage
7. Hit 'Map Position'
 - ☐ Ensure a new page is rendered for mapping (Acceptance Criteria #2)
 - a. Hit 'Add Accelerometer Data'
 - b. Hit 'Ok' to 'Please fill out the right panel with your Accelerometer data.'
 - ☐ Ensure you see a pop-up on the right side of the mapping page in the GUI for data type, time, x-acceleration, and y-acceleration. (Acceptance Criteria #3)
 - c. Click the box under 'Choose the accelerometer data'
 - d. Select the data type that contains your accelerometer data
 - e. Click the box under 'Select Data for the time', then for x-acceleration, and y-acceleration.
 - ☐ Ensure that there are options to select the correct data column for each
(Acceptance Criteria #4)
 - f. Make appropriate selections
 - g. Hit 'Load Map'
 - ☐ Ensure that a 2d image in the map window is rendered showing the path of the robot over the course of the match (Acceptance Criteria #5)
8. Return to the homepage
9. Hit 'Map Position' (using the SampleDemo data)
 - a. Hit 'Add Accelerometer Data'
 - b. Click the white box under 'Choose the accelerometer data'
 - c. Select 'Motor'

- d. Select 'Time (s)', then 'Spin Angle (rad)', then 'Angular Velocity (rad/s)' for time, x-acceleration, and y-acceleration respectively
- e. Hit 'Load Map'
- ☐ Ensure an appropriate error message is displayed: 'The time, x-axis acceleration, and y-axis acceleration must have the same number of elements as each other for mapping.' (Acceptance Criteria #6)

10. Return to the homepage

11. Hit 'Map Position' (using any data)

- a. Hit 'Add Accelerometer Data'
- b. Click the white box under 'Choose the accelerometer data'
- c. Select any
- d. Select all 3 prompted data columns, with two or more as the same data column
- e. Hit 'Load Map'
- ☐ Ensure an appropriate error message is displayed: 'You cannot select 2 or more of time, xAcceleration, or yAcceleration to be the same as each other.' (Acceptance Criteria #7)