- 1. Open the app with a fresh install and no current user signed in.
  - a. Click Sign Up
    - i. Verify user is taken to Sign Up page.
  - b. Click Sign Up without entering information.
    - i. Verify error messages indicate required fields.
  - c. Enter invalid parameters
    - i. Verify error messages indicate invalid inputs.
  - d. Enter valid Sign Up credentials without selecting "Professor" check box.
    - i. Verify user lands on Sign In page and is told a verification email was sent.
    - ii. Verify user cannot sign in without verifying email.
  - e. Check entered email inbox for verification email and verify your account.
    - i. Verify that user is able to sign in.
    - ii. Verify color scheme is green to reflect student side.
  - f. Repeat step d with the "Professor" checkbox selected.
    - i. Verify that user is able to sign in.
    - ii. Verify color scheme is blue to reflect professor side.

## 2. Student Side

- a. Verify there are no broken UI elements.
- b. Select the Logout button in the top right corner.
  - i. Verify user is logged out.
  - ii. Verify user can log back in.
- c. Select the Question Mark icon in the top right.
  - i. Verify user is shown a help page on how to navigate the app.
  - ii. Hit back to return to My Classes.
- d. Select Add a Class
  - i. Verify user is brought to Add Class screen.
  - ii. Click Add Class with no inputs.
    - 1. Verify user is shown errors stating invalid inputs.
  - iii. Enter a valid class code and pin.
    - 1. Verify user is brought to My Classes page and the added class appears in their list view.
  - iv. Select the class from the listview.
    - 1. Verify user is brought to class page.
    - 2. Verify any announcements added by the professor are visible.
  - v. Select Check In.
    - 1. Verify user is brought to check in page.
    - 2. Select Check In with no inputs.
      - a. Verify user receives error message stating input is invalid.
    - 3. Input valid check in code while outside the location boundary.
      - a. Verify user cannot check in because they are too far away.
    - 4. Move into location boundary and input incorrect code.
      - a. Verify user cannot check in because the code is wrong.
    - 5. While within the location boundary, check in with the correct code.

- a. Verify user lands back on class page and checks in successfully.
- vi. Return to My Classes page.
- vii. Swipe left on class in listview.
  - 1. Verify can swipe left to expose trash can icon.
  - 2. Verify selecting the trash can icon will delete the class from their account.

## 3. Professor Side

- a. Verify there are no broken UI elements.
- b. Select the Logout button in the top right corner.
  - i. Verify user is logged out.
  - ii. Verify user can log back in.
- a. Select the Question Mark.
  - i. Verify user is shown a help page on how to navigate the app.
- b. Select Create a Class.
  - i. Verify user is brought to Create a Class page.
  - ii. Click Create Class without any input.
    - 1. Verify error messages indicate inputs are required.
  - iii. Give very short inputs and click Create Class
    - 1. Verify error messages indicate inputs are too short.
  - iv. Give valid inputs and click Create Class
    - 1. Verify user is brought to My Classes page and the created class appears in their list view.
  - v. Select the class in the list view.
    - 1. Verify user is brought to calendar view.
  - vi. Select a day in the calendar and click Select Day.
    - 1. Verify user is brought to a screen title with the date of the selected day.
    - 2. Verify the buttons are: "Set Attendance Day," "Present Students," "Absent Students," "Set Location," and "Announcements."
  - vii. Select Set Attendance Day.
    - 1. Verify user is able to input Attendance Code.
    - 2. Verify attendance code is saved in database.
  - viii. Select Present Students
    - 1. Verify this page has a header but the contents are empty, since no one has checked in for the created day.
    - 2. Check in with an enrolled student account and verify they show up in the list as present.
  - ix. Select Absent Students
    - 1. Verify there is a list view of all students enrolled in the class once a day code has been set.
  - x. Set Location

- 1. Verify the user is able to see their own location and has the map zoom in on the user's location.
- 2. Verify the marker and boundary circle displays on the map properly.
- 3. Verify that multiple markers and boundary circles are not created on the map.
- 4. Verify that the "add location" button exists.
- 5. Verify that pressing the "add location" button, when a marker is not set, causes a toast to notify the user to select a location on the map.
- 6. Verify that the "add location" functionality makes changes in the database and sends the user back to the day page.

## xi. Announcements

- 1. Verify that the announcements are displaying the date and content of the announcement.
- 2. Verify that the "create announcement" button exists and goes to the create announcement page.
- 3. Verify that the announcement can be typed in the textview and sends it to the database.
- 4. Verify that the announcement sent in step 3, displays in the announcement listview after refreshing the listview by re-entering the listview activity.