System and Unit Test Report

Data Viz

X-Force

2 December 2018

System Test Scenarios

I. Sprint 1

   A. User Story 1: As a User, I want a website to access the app so it's easily accessible

      Scenario:

      1. Navigate to website
      2. View frontpage with text box without functionality

II. Sprint 2

   A. User Story 1: As a User, I want my data displayed in an organized and easy to implement line graph

      Scenario:

      1. Enter site
      2. Navigate to results page
      3. User can input data in the Graph Name (optional), X-Axis (optional), and Y-Axis fields
      4. Select Input to graph the data

B. User Story 2: As a User, I want the website to feel organized, work fast, and follow an intuitive flow

III. Sprint 3

A. User Story 1: As a User, I want to be able to edit data points in my graph without creating a new graph

Scenario:

1. Data has been inputted in the Results page
2. Change the data in the X-Axis and/or Y-Axis fields
3. Select Update to recreate the graph with the new data

B. User Story 2: As a User, I want to be able to input my own data into the website

Scenario:

1. Enter site
2. Navigate to results page
3. Input data in the Graph Name (optional), X-Axis (optional), and Y-Axis fields
4. Select Input to have the data graphed

C. User Story 3: As a User, I want my graph to be animated with the line being drawn between points

Scenario:

1. Data is entered in the various fields on the results page
2. Select Input or Update to have the line drawn or moved, respectively

D. User Story 4: As a User, I want to be able to playback sound where each point has a frequency corresponding to the value

Scenario:

1. Without access to database, enter site
2. Navigate to results page, enter values in data box
3. Push “Input” button to graph with sound playback

IV. Sprint 4

A. User Story 1: I want to be able to input ordered pairs of values as opposed to just y-values

Scenario:

1. Enter site
2. Navigate to the results page
3. Input data in both the X-Axis and Y-Axis fields
4. Select Input to have the graph drawn between the points by ascending x-value

B. User Story 2: I want to be able to find the value associated with a specific value on the x-axis

Scenario:

1. Graph the data on the results page
2. Input an x-value to be searched in the Search Point (x) field
3. Select inputSearch to highlight the corresponding data point on the graph

C. User Story 3: I want to be able to create an account and store my data

Scenario:

1. Enter site
2. Navigate to the Register page
3. Input
    a) Username
    b) Email
    c) Password
    d) Password confirmation
4. The User is now at the Login page
5. Login with just created username and password
6. At homepage, view datasets associated with your account. If you need to add data, select “Add Data” from nav bar
    a) Add title
    b) Add x-axis and y-axis data
    c) Submit
7. Select “Visualize” on desired dataset
8. Select sound type, press play for the graph and sound playback
9. If desired, datasets can be deleted from the homepage by selecting “Delete”

D. User Story 4: I want to be able to name my graphs

Scenario:

1. User is at either the Add Data or Results page
2. Enter the Title field, as well as the data fields
3. View the name of the graph along the y-axis of the created graph

Unit Tests

Django- Using different profiles to test that only user associated data sets are displayed on homepage. Trying to access detail pages without logging in will redirect to user login.

Testing for the D3 module was done mainly through visualization of the graph. A variety of inputs were tested in ensure that the graph was plotting the proper points. Print statements were used to ensure that values were stored in variables as expected.