

1 Introduction

The purpose of this report is to explain the modifications and tests performed for the three versions created of the weather app. For each version, this report will provide an explanation of the functionality and also a test case for that version. I have implemented different branches for the three versions so it was easier to see each individually.

REPOSITORY: <https://github.com/cpe1/devops-insights-20190515054910039>

WEBSITE LINKS:

<https://devops-insights-20190515054910039.mybluemix.net/#/>

<https://staging-devops-insights-20190515054910039.mybluemix.net/#/>

2.1 Version 1

URL: <https://github.com/cpe1/devops-insights-20190515054910039/tree/version-1>

This version was updated so that the text input fields now take city names in New Zealand rather than zip codes in the United States. For this version, I also removed unnecessary fields on the page.

Test Case

GET /getWeather

Equivalence Classes

(Valid, Invalid)

Valid - The server receives a valid city name

Boundary Values

Invalid: null

Valid: city name

Code coverage

1. Receive a city name.
2. Receive none.
3. Receive a city name that doesn't exist in NZ.

Inputs to test

1. A few valid city names.
2. Invalid boundary values.
3. Cover branches not covered already.

2.2 Version 2

URL: <https://github.com/cpe1/devops-insights-20190515054910039/tree/version-2>

This version was updated so that the application now has a map which markers are added to when a user types a city name in the text input fields. It also displays weather information about a location when a user clicks on the map.

Test Case

GET /getWeatherByCoordinates

Equivalence Classes

(Valid, Invalid)

Valid - The server receives a valid latitude and valid longitude

Boundary Values

Invalid: null, longitude

Invalid: null, null

Invalid: latitude, null

Valid: latitude, longitude

Code coverage

1. Receive both a latitude and longitude value.
2. Receive a latitude but not a longitude.
3. Receive a longitude but not a latitude.
4. Receive some other input.

Inputs to test

1. A few valid latitude combinations.
2. Invalid boundary values.
3. Cover branches not covered already.

Reasoning for these tests:

I needed to test every branch for maximum code coverage.

2.3 Version 3

URL: <https://github.com/cpe1/devops-insights-20190515054910039/tree/version-3>

This version was updated to interact with a database to store city names that have been visited. Unfortunately, I wasn't able to finish implementing the database functionality so this part doesn't quite work.