**Test Report**

Note: Unless otherwise specified, all tests worked exactly as intended.

**MainIO.java**

Main Menu:

* Option selection:
  + Numbers greater than number of options
  + Negative numbers
  + Non-numerical input
  + Decimals

Location Menu:

* Add location by ZIP:
  + Invalid ZIP values (00000, 99999, etc)
* Add location by coords:
  + Out of bounds coordinates
  + Non-numerical values
  + Coordinates outside of the U.S. (input is accepted, but program will not generate any forecasts and will instead state an)
* Remove location:
  + Removing current location (works, as it should)
  + Removing without any locations entered
* Set current location:
  + Setting without any locations entered

Forecast Menu:

* Attempted to access without a current location
* Forecasts:
  + Attempted to generate forecast without internet access
  + Generated forecasts for several locations
  + Compared to <https://www.weather.gov/> forecasts
  + Compared to Google forecasts
  + Compared to JSON files

**ForecastFetcher.java and LocationManager.java**

Tested via menu input. Did not do additional unit tests. Any issues that could come up would appear due to menu input.

**Program Analysis**

* Main menu allows for program exit and access to sub-menus
* Location menu allows access to the following functions:
  + Exit to main menu
  + Add a location via ZIP code
  + Add a location via coordinates
  + Remove a location
  + Set a location as the current location
* Forecast menu allows access to the following functions:
  + Exit to main menu
  + Get an hourly forecast for the rest of the day, with the following information:
    - Hour
    - Cloud coverage / weather (ex: “Mostly Clear”)
    - Temperature
    - Chance of precipitation
    - Wind speed
  + Get a daily forecast for the next week, displaying the written detailed forecast for each day/night
  + Get the current chance of rain, and the chance of rain for a few hours after the current hour