**Product Increment:**

Tagged in bitbucket as Sprint\_4\_Product\_Increment

**Test results and analysis:**

* Task 1: Testing Plot band titles
  + Unit Testing
    - Test Cases:
      * All Data in green
        + Expected Result: LOW RISK plot band always shows up. MODERATE RISK plot band shows up if .15 is on y-axis

**PASS**

* + - * All Data in yellow
        + Expected Result: All 3 plot bands show up.

**PASS**

* + - * All Data in red
        + Expected Result: HIGH RISK plot band always shows up. MODERATE RISK plot band shows up if .2 is on the y-axis

**PASS**

* + - * All Data in green/yellow
        + Expected Result: LOW and MODERATE RISK plot bands always show up. HIGH RISK displays when .2 is on the y-axis

**PASS**

* + - * All Data in yellow/red
        + Expected Result: MODERATE and HIGH RISK ploy bands always show up. LOW RISK displays when .15 is on the y-axis

**PASS**

* + - * All Data in red/green
        + Expected Result: All 3 plot bands show up

**PASS**

* Task 2: Resizing page bug
  + Black-Box testing
    - Test Cases
      * Resizing window
      * Minimize/Maximize
        + Expected result: Points do not change colors

**PASS**

* Task 3: Time zone labels – NOAA gives predictions only in every 3 hours starting with UTC 0
  + Unit testing
    - Test Cases
      * Try a zip code in the following time zones (Daylight savings time)
        + Pacific time zone

Expected Result: Get first available prediction and the times should be 5pm, 8pm, 11pm, 2am, 5am, 8am, 11am, 2pm. Should also display the appropriate time zone.

**PASS**

* + - * + Central time zone

Expected Result: Get first available prediction and the times should be 10pm, 1am, 4am, 7am, 10am, 1pm, 4pm, 7pm

**PASS**

* + - * + Mountain time zone

Expected Result: Get the first available prediction and the times should be 11pm, 2am, 5am, 8am, 11am, 2pm, 5pm, 8pm

**PASS**

* + - * + Eastern time zone

Expected Result: Get the first available prediction and the times should be 11pm, 2am, 5am, 8am, 11am, 2pm, 5pm, 8pm

**PASS**

* + - * + Alaska time zone

Expected Result: Get first available prediction and the times should be 10pm, 1am, 4am, 7am, 10am, 1pm, 4pm, 7pm

**??**

* + - * + Hawaii-Aleutian time zone

Expected Result: Get first available prediction and the times should be 5pm, 8pm, 11pm, 2am, 5am, 8am, 11am, 2pm

**??**

* + - * + Atlantic time zone

Expected Result: Get the first available prediction and the times should be midnight, 3am, 6am, 9am, noon, 3pm, 6pm, 9pm

**PASS**

* + - * + Chamorro time zone

Expected Result: Get first available prediction and the times should be 10pm, 1am, 4am, 7am, 10am, 1pm, 4pm, 7pm

**??**

* + **NOTE: We need to test when its standard time**
* Task 4: Changing wind/concrete temperatures in std and metric. And task 5 Boundary for changing conc temp/ wind speed in metric.std
  + Unit testing
    - Test Cases
      * Change wind in std
      * Change wind in metric
      * Change conc in std
      * Change conc in metric
      * Change conc and wind in std
      * Change conc and wind in metric
        + The appropriate std/metric labels should appear

**PASS**

* + - * + Correct concrete temp/ evap rate/ wind speed/ and point on graph is updated correctly

**PASS**

* + - * + Boundary for concrete temp (std) 40 – 99 degrees F

**PASS**

* + - * + Boundary for wind speed (std) is 0-35 mph

**PASS**

* + - * + Boundary for concrete temp (metric) is 4.4-37.2

**PASS**

* + - * + Boundary for wind speed (metric) is 0 – 56.3

**PASS**

* + - * + Make sure wind/conc isn’t empty

**PASS**

* Task 6 – Validate create account form
  + Name
    - Not required
  + Email
  + Password
* Anomalies

***ASSUMPTION: We are assuming the library that gets city, state, and time zone from the zip code is correct***

**Sprint Review**

* Monday Jan 2nd 2:00 – 3:00
* Daniel Grote, Zach Smith, Mark Grinter
* Discussion:
  + We demoed what was accomplished in sprint 3.
  + Discussed the graph:
    - Colors
    - Labels on changing concrete/wind speed
    - Tooltip
    - Dates and times
    - Vertical lines above start of day
  + Speed temperature
    - New functionality (changing the wind speed for one date and time)
    - A new way to get the concrete temp
      * Splitting NA into 10 zones separated by latitude lines and then using preset temps for these areas
* Decisions:
  + Clients want the following changes/additions:
    - Try to get avg temp of zip or region to be used for the concrete temp
    - Add page with explanations of how the calculation was done, where the weather data is coming from, etc.
* Follow up actions:
  + Update Project Spec and Plan with new requirements
  + Mark is researching more into concrete temp to get a better idea on how to predict it by the latitude zones discussed in the meeting

**Sprint Retrospective**

**Project/Sprint Overview (Talk about changes/decesions that we made/ How the sprint went/ etc – This is what we got taken off for in our last status report)**

**Update Sprint Backlog:**

See Backlog.xlsx, Tab: Sp4

**Create Sprint Burndown Charts:**

See Burndown.xlsx, Tab: Sp4

**Create Sprint Effort and Velocity Charts:**

See “Effort and Velocity.xlsx”, Tab: Sp4

**Update Product Effort Charts:**

See “Effort and Velocity.xlsx”, Tab: Product

**Update Product Backlog**

See Backlog.xlsx, Tab: Current