**Product Increment:**

Tagged in bitbucket as Sprint\_2\_Product\_Increment

**Test results and analysis:**

* **T**ask 1: Add colors to graph background - **Completed**
  + All colors are displayed when needed and in the correct location. Will have to test again next sprint due to adds/changes in requirements
* Task 2: Add option for inputting concrete temp - **Completed**
  + Unit Testing different concrete temp boundary of -50 to 150 (in fahrenheit)
    - Will have to test again due to clients specifying new boundaries (45 – 115)
* Task 3: Show weather variables when hovering over a point and add metric conversions – **Completed**
* Task 4: Improve input and output UI - **Completed**
  + Test to see if UI looks the same on IE, Firefox, and Chrome.
  + Date is correctly formatted Month-Day-Hour
    - Format was changed to Day and time
* Task 5: Validation of zip code - **Completed**
  + Unit Testing
* Integration testing – **Completed**
  + Input form, calculation, metric, graph output
    - Modules are all combined and all functionality works together as expected
* Performance testing - **Completed**
  + Test to see that the graph takes less than 5 seconds to load
    - Out of 20 test cases of random zip codes the average time it took after zip code was entered until graph was fully loaded was 1.9 seconds

*Notes:*

* + *Need to test further and perform a more in depth performance tests when we receive a server from ITS.*
  + *Note: Once the data from NOAA is received the graph loads extremely fast.*

**Sprint Review**

* Monday Dec. 8th 2:00 – 3:15
* Bryan Allen, Daniel Grote, Mark Grinter, Anne Werner
* Discussion:
  + We demoed what was accomplished in sprint 2.
  + Discussed the graph:
    - Colors
    - Labels
    - Tooltip
    - Dates and times
  + Metric conversions
  + Concrete temperature
    - Input boundaries
    - New functionality
* Decisions:
  + Clients want the following changes/additions:
    - Red on graph to be a darker shade and colors more vibrant
    - Add a low-med-high risk in tooltip
    - Colors on data points
    - Try to get avg temp of zip or region to be used for the concrete temp
    - Boundary of concrete temp = 45-115 F
    - 12PM changed to NOON
    - Tooltips moved closer to data points
    - Round evaporation rate to 2 digits
    - Can add people’s email to notifications
    - See if the graph can add transparent text on the colors which would say LOW, MEDIUM, and HIGH RISK
    - Add page with explanations of how the calculation was done, where the weather data is coming from, etc.
    - Add title on graph page of this zip code
    - Be able to click on the dot and change a concrete temp for a certain dataset
    - Concrete temp for medium risk, and concrete temp for low risk in tooltip
    - Label axes
    - Hour Increments (Not sure on what they want- create an all 6 hour or 3 hour version )
* Follow up actions:
  + Update Project Spec and Plan with new requirements
  + Anne is researching more into concrete temp to get a better idea on how to predict it

**Sprint Retrospective**

* Mark and Anne had no complaints and thought everything was going well.

**Update Sprint Backlog:**

See Backlog.xlsx, Tab: Sp2

**Create Sprint Burndown Charts:**

See Burndown.xlsx, Tab: Sp2

**Create Sprint Effort and Velocity Charts:**

See “Effort and Velocity.xlsx”, Tab: Sp2

**Update Product Effort Charts:**

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

**Update Product Backlog**

See Backlog.xlsx, Tab: Current