PRs were issued on the due date, a few hours before the sprint close.

# End Of Sprint 002 Report 4/28/2020

### **Part 1: Sprint Review**

### PBIs planned

In this section, list the specific PBIs that were included in the sprint plan (regardless of completion status). reviewed?

PR/repo use 40/50

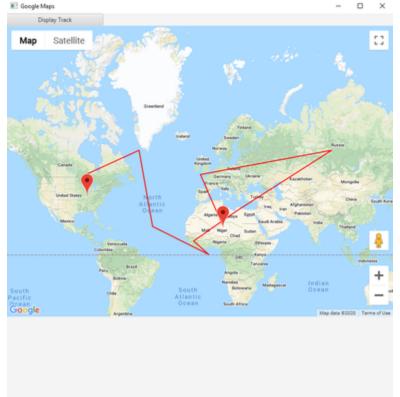
How thoroughly was that

- a. Defect PBIs
  - i. MHP1-21
  - ii. MHP1-23
- b. Internal Improvement PBIs
  - i. MHP1-22
- c. Knowledge Acquisition PBIs
  - i. N/A
- d. User Story (Feature) PBIs
  - i. MHP1-4
  - ii. MHP1-8
  - iii. MHP1-11
  - iv. MHP1-14

#### **PBI** completion status

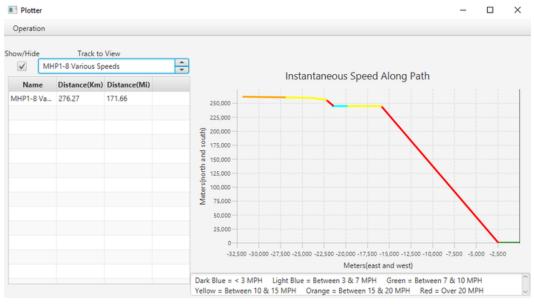
In this section:

- a. Explain which specific PBIs (Stories, Defects, Internal Improvements, Knowledge Acquisitions) were completed (Done after approved by the Product Owner).
  - i. MHP1-21
  - ii. MHP1-22
  - iii. MHP1-23
  - iv. MHP1-14



Unrealistic; what benefit is there to creating GPS points that seemingly sit in the middle of nowhere? How does this help you validate your implementation? Wouldn't it make more sense to generate points at known landmarks?

v. MHP1-8



- b. Discuss which specific PBIs were **not** finished (and must be moved to the next sprint). Justify the reason(s) that these Issues were not completed.
  - i. MHP1-4
  - ii. MHP1-11
- c. List the errors or needed work in your application that will be characterized as *Defects* for the next sprint. If not already entered, add these to your *Product Backlog*.
  - i. Graphically view 2D plot breaks when points go back on themselves
  - ii. Elevation Gain overtime should display any elevation gain, not net elevation gain

It is referred to as "total elevation gain" from a fitness/training perspective, since every time you have to climb, you are doing work.

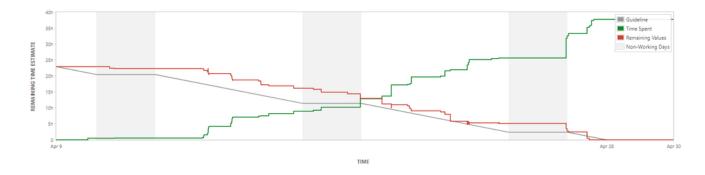
#### **Burndown chart**

Edit the Sprint Burndown Gadget below; in the Edit Dialog that appears, select your team's board from the dropdown (e.g. "A1 Scrum Board")



good situation to find yourselves

in.



## Work logs

Click the Worklog Gadget below; in the Edit Dialog that appears, modify the filter to conform to your team's project id (e.g. MHA1).

Work logs are an indication of whether all team members worked equitably throughout the course of the sprint.

Assignee	Updated	Time Spent	Original Estimate	Remaini ng Estimate	Key	Summary	Status
Austin DeMars	Apr 27, 2020 22:32	20 minutes	20 minutes	0 minutes	MHP1-81	Set up maps window to work with existing system	DONE
Austin DeMars	Apr 30, 2020 19:50	35 minutes	1 hour <b>4/30? Th</b> a	0 minutes	MHP1-77 vork	Create and run JUNIT tests for calculating elevation gain	DONE
Austin DeMars	A <mark>pr 30,</mark> 2020 19:50	35 minutes	1 hour	0 minutes	MHP1-76	Test 2D plot UI	DONE
Austin DeMars	Apr 22, 2020 18:50	1 hour, 40 minutes	2 hours	0 minutes	MHP1-74	Create/Add to Plotter class which sets display of 2D plot	DONE
Austin DeMars	Apr 30, 2020 19:50	1 hour, 45 minutes	2 hours	0 minutes	MHP1-72	Create methods to calculate elevation gain vs time	DONE
Austin DeMars	Apr 22, 2020 18:50	45 minutes	20 minutes	0 minutes	MHP1-69	Edit/Add any additional items for UML class diagram	DONE
Austin DeMars	Apr 21, 2020 14:52	3 minutes	3 minutes	0 minutes	MHP1-62	Call calculation method after track is loaded	DONE
Austin DeMars	Apr 21, 2020 14:52	10 minutes	5 minutes	0 minutes	MHP1-58	Run the tests to make sure they still work	DONE
Austin DeMars	Apr 21, 2020 14:52	1 hour	30 minutes	0 minutes	MHP1-57	Update and correct tests	DONE
Austin DeMars	Apr 21, 2020 14:52	20 minutes	20 minutes	0 minutes	MHP1-56	Read through the issues	DONE
Austin DeMars	Apr 21, 2020 14:52	15 minutes	15 minutes	0 minutes	MHP1-50	Update UI to label elevations (m and ft)	DONE
Austin DeMars	Apr 21, 2020 14:52	30 minutes	5 minutes	0 minutes	MHP1-49	Calculate and store elevation in feet	DONE
Austin DeMars	Apr 21, 2020 14:52	2 minutes	2 minutes	0 minutes	MHP1-48	Remove UI button for calculating metrics	DONE
Hunter Hess	May 02, 2020 19:36	1 hour, 10 minutes	30 minutes	20 minutes	MHP1-107	Make the chart scale both axis equally	DEVELOPMENT
Hunter Hess	May 02, 2020 17:26	1 hour, 30 minutes		port was ger 2 Was dosed		hMake the chart series not auto sort	REVIEW READY
Hunter Hess	Apr 22, 2020 21:09	1 hour, 10 minutes	45 minutes	0 minutes	MHP1-78	Update GUI	DONE
Hunter Hess	May 02, 2020 17:27	2 hours, 30 minutes	45 minutes	0 minutes	MHP1-75	Create tests	REVIEW READY
Hunter Hess	Apr 22,	35	45 minutes	0 minutes	MHP1-73	Create a method to allow graphing of tracks with	DONE

	2020 21:09	minutes				less than 2 points	
Hunter Hess	Apr 22, 2020 21:09	1 hour, 30 minutes	45 minutes	0 minutes	MHP1-71	Add information to plot	DONE
Hunter Hess	Apr 22, 2020 21:09	2 hours, 40 minutes	30 minutes	0 minutes	MHP1-70	Convert Longitude and Latitude to Cartesian points	DONE
Hunter Hess	Apr 2 <mark>7,</mark> 2020 <mark>22:</mark> 32	45 minutes	1 hour	0 minutes	MHP1-65	Ensure tracks appear in color on Google Maps view	DONE
Hunter Hess	Apr 2 <mark>7,</mark> 2020 <mark>22</mark> :32	1 hour, 50 minutes	1 hour	0 minutes	MHP1-64	Ensure tracks appear superimposed on the Google Map view	DONE
Hunter Hess	Apr 21, 2020 14:52	1 hour	15 minutes	0 minutes	MHP1-54	Create and run JUNIT test for feet elevation	DONE
Hunter Hess	Apr 21, 2020 14:52	7 minutes	10 minutes	0 minutes	MHP1-51	Test updated UI	DONE
Paul Rinaldi	Apr <mark> 27,</mark> 2020 <mark>22</mark> :32	1 hour	1 hour	0 minutes	MHP1-66	Ensure Google Maps controls work (zoom, pan)	DONE
Paul Rinaldi	Apr <mark>27</mark> , 20 <mark>20</mark> 22:32	10 minutes	1 hour	0 minutes	MHP1-61	Use Gson or deserialize java library to work with json from google api	DONE
Paul Rinaldi	Apr <mark>27</mark> , 2020 22:32	3 hours, 25 minutes	2 hours	0 minutes	MHP1-59	Research how to show the google map / web google app on top of a javafx pane	DONE
Paul Rinaldi	Apr 2 <mark>7,</mark> 2020 <mark>22:</mark> 32	6 hours	1 hour	0 minutes	MHP1-53	Implement an HTTP request to Google API from coordinates	DONE
Paul Rinaldi	Apr 2 <mark>7,</mark> 2020 22:32	35 minutes	1 hour	0 minutes	MHP1-52	Create a button for switching between Google Maps Satellite view GoogleMaps maps view and nonGoogleMaps view	DONE
Rhyo Balisnomo	Apr 28, 2020 07:47	1 hour, 30 minutes	1 hour	0 minutes	MHP1-79	Map out the speeds in a path	DONE
Rhyo Balisnomo	Apr 22, 2020 21:09	1 hour	30 minutes	0 minutes	MHP1-68	Figure out what to use to plot the graph	DONE
Rhyo Balisnomo	Apr <mark>28,</mark> 2020 <mark>07</mark> :47	40 minutes	30 minutes	0 minutes	MHP1-63	Figure out how the Graph display works	DONE
Rhyo Balisnomo	Apr <mark>28,</mark> 2020 07:47	4 hours, 30 minutes	40 minutes	0 minutes	MHP1-60	Create method to color each specific line to match the speed	DONE

33 issues

### **Part 2: Sprint Retrospective**

In this section:

- 1. Examine the estimated time for tasks vs the actual times logged. Look particularly for those that are significantly above or below the estimates, and discuss what you think caused the estimates to differ.
  - a. Our time logged was about 1.5 times more than what we estimated for it to be. Most of the underestimated tasks were less work than anticipated. Most of the overestimated tasks were overestimated because it took time to hunt down bugs in the methods written and because the issues took more work than expected. This was the first time we had to estimate the time implementing features would take so our estimates were not very accurate.
- 2. Examine actual times logged. Was the division of effort among the team equitable?
  - a. Paul 11 hours 30 minutes
  - b. Hunter 11 hours 40 minutes

Some of the time listed above is post-sprint, so this doesn't seem

- c. Rhyo 7 hours 40 minutes
- accurate.
- d. Austin 7 hours 20 minutes
- e. The work was evenly distributed between the team.
- 3. Sum the time spent on Defects vs the time spent on Stories. State those values here. What percent of the overall time was spent on Defects? Do you think this is reasonable?

- a. Defects: 207m (3hr 27min) b. Stories: 2083m (~34hr 43min)
- c. ~9.9376% of the time was spent on defects. It was reasonable based on the story points of the defects. In comparison to time on features, it was also reasonable because if maintenance covers 1/5 or 1/6 of the software development life cycle and assuming each phase is equal (not in reality and due to story point skews it won't be), ideal or at the maximum, time working on defects, i.e. maintenance, should be 20-16% of the time of the sprint.
- 4. If you have new Defects from errors or lack of required functionality, discuss how those might have been avoided. Discuss what you will do differently in the next sprint to improve quality.
  - a. For the elevation gain defect that could have been avoided by asking a question about the acceptance criteria instead of assuming we understood what it meant.
  - b. For the graphically view 2D plot defect could have been avoided by more thoroughly testing the functionality.
- 5. Examine the Pull Requests your team issued. Of those, indicate how many were Declined vs. Accepted. Discuss the reasons for the Decline votes.
  - usually, merge conflicts are resolved on the feature

    a. Out of 15 pull requests, 6 were declined and 9 were accepted, the ones that were declined had unresolved merge conflicts or were missing elements like fully commented methods that they should have had.
- 6. Considering software quality, discuss the effectiveness of your current code reviews, and any changes you will make for the next sprint.
  - a. Reviewing the code went well but the one thing that we could and will improve on for the next sprint is evaluating the PBI's verses the acceptance criteria more thoroughly. We also would like to be more consistent in including the issue link on the PR so that each approver can evaluate the AC.
- 7. Considering software quality, discuss your team's Definition of Done, and whether additional criteria need to be added to this definition.
  - a. Have code implemented, tested, and merged. One thing we need to focus on more for the next sprint is to make sure everything is tested more in-depth and more rigorously.
- 8. Discuss any other things from the past sprint that you will address (mainly with the aim for improvement) in the next sprint.
  - a. One thing that we need to improve on for the next sprint has a more even burn down chart, we put in a lot of effort the last couple of days. Another thing that we need to improve for the next sprint is to evaluate the acceptance criteria more.

hours

Follow through in sprint 3