

30/30 report ok

50/50 repo usage. Few PRs compared to most other teams, but that is not unusual.

See comments below.





Sprint 2 Review 4/28/20

Part 1: Sprint Review


PBIs planned

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

i. Defect PBIs






1.  **MHA5-21** - Metrics not rounded to 2 decimal places 
2.  **MHA5-22** - Elevation not displayed in meters and feet 

ii. Internal Improvement PBIs

1. **MHA5-23** - Row and Column checks not in JUnit Tests 

iii. Knowledge Acquisition PBIs







iv. User Story (Feature) PBIs

1. **MHA5-1** - 3. Plot location data on a 2D graph 
2. **MHA5-15** - 19. Display Table of Times at Various Speeds 
3. **MHA5-19** - 13. Distance vs time plot 
4. **MHA5-10** - 5. Implement elevation plot of loaded data 
5. **MHA5-13** - 6. Show elevation gain graphically 

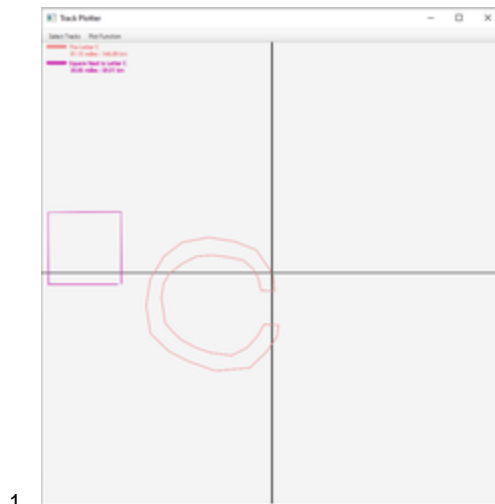
PBI completion status

In this section:

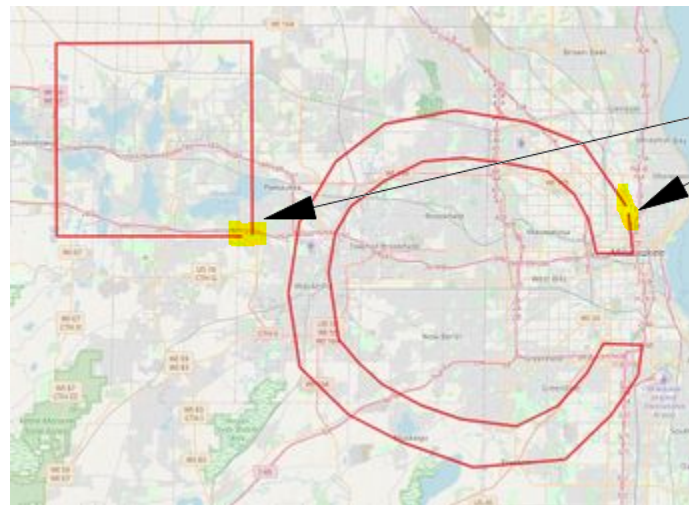
- a. Explain which specific PBIs (*Stories, Defects, Internal Improvements, Knowledge Acquisitions*) were completed (**Done** after approved by the Product Owner).
- i. **If the PBI is a User Story (Feature), insert a screen shot of that PBI that illustrates the feature when run against the test file(s) you created for that PBI.**
You do not have to insert screen shots for non-feature PBIs.

- ii.  **MHA5-21** - Metrics not rounded to 2 decimal places 
- iii.  **MHA5-22** - Elevation not displayed in meters and feet 
- iv. **MHA5-23** - Row and Column checks not in JUnit Tests 
- v. **MHA5-1** - 3. Plot location data on a 2D graph 

Using a combination of MHA5-1A.JPG and MHA5-1B.jpg



1.



what's with the gaps?

How do you know the plots are not mirrored about the x axis? Both C and the square are symmetric about x!

MHA5-15 - 19. Display Table of Times at Various Speeds

vi. **DONE**

Table View		
Data Select Track Select		
gps Test: Doubles Every Row : Times at Various Speeds		
Speed	Time (min)	% Total Time
<3mph	0.0	0.0
3-7mph	10.0	3.23
7-10mph	20.0	6.45
10-15mph	40.0	12.9
15-20mph	80.0	25.81
>20mph	160.0	51.61

1. MHA5-15-Doubles.gpx

Table View

Data SelectTrack Select

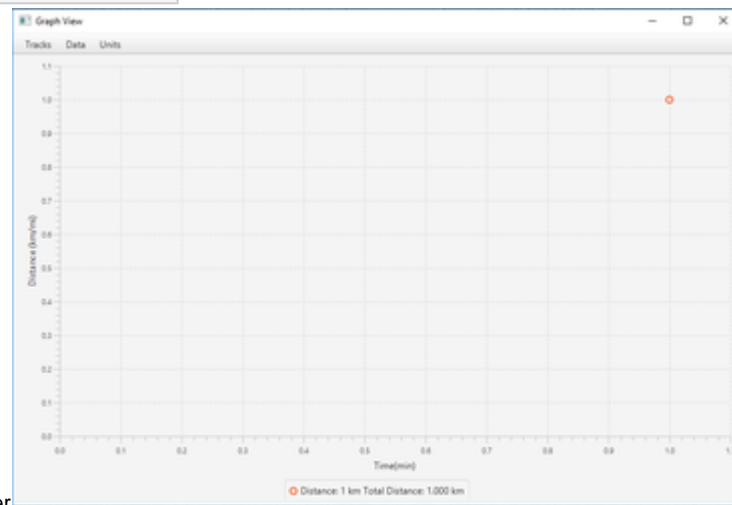
gps Test: 60 min for each speed : Times at Various Speeds

Speed	Time (min)	% Total Time	
<3mph	60.0	16.67	
3-7mph	60.0	16.67	
7-10mph	60.0	16.67	
10-15mph	60.0	16.67	
15-20mph	60.0	16.67	
>20mph	60.0	16.67	

2. MHA5-15-All60.txt

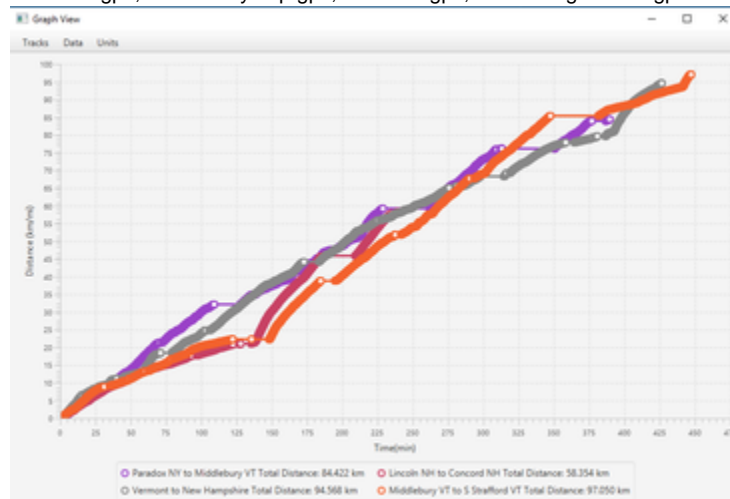
MHA5-19 - 13. Distance vs time plot

vii. **DONE**



1. MHA5-19-1Kilometer

2. NewYork.gpx, MiddleburyGap.gpx, Vermont.gpx, KancamagusPass.gpx



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.

MHA5-10 - 5. Implement elevation plot of loaded data

i. **DEVELOPMENT**

MHA5-13 - 6. Show elevation gain graphically

This was a bit unusual, but I thought it was warranted given the circumstances in this instance.

ii. **READY**

iii. For both of these issues, we decided to focus on what we knew we could complete. Taking on these tasks would have left us in a worse position to finish the tasks we were already working on. So as a team along with the product owner, we decided to let these go for this sprint.

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. We only received a backlog item for 2D plot improvements.
e were notified of no other defects.

MHA5-92 - 2D Plot improvements

DEVELOPMENT

W

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")

A5 Sprint 2 ▾

...

Closed sprint, ended by Mark Hornick 09/Apr/20 12:00 PM - 30/Apr/20 10:38 AM [View linked pages](#)



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	Remaining Estimate	Key	Summary	Status
Matt Haas	Apr 27, 2020 21:00	1 hour, 10 minutes	1 hour, 30 minutes	0 minutes	MHA5-69	Create table showing distance and color of each track on plot	DONE
Matt Haas	Apr 27, 2020 21:00	1 hour, 30 minutes	1 hour	0 minutes	MHA5-63	Allow multiple tracks to be displayed and removed one by one	DONE
Matt Haas	Apr 27, 2020 21:00	50 minutes	1 hour	0 minutes	MHA5-60	Create a window that allows proper scaling	DONE
Matt Haas	Apr 28, 2020 10:50	1 day, 6 hours, 50 minutes	2 hours	0 minutes	MHA5-59	Implement drawing functionality	DONE
Matt Haas	Apr 27, 2020 21:00	2 hours	2 hours	0 minutes	MHA5-56	Create functionality within Controller	DONE
Matt Haas	Apr 27, 2020 21:00	2 hours, 30 minutes	2 hours	0 minutes	MHA5-55	Implement new classes	DONE
Matt Haas	Apr 27, 2020 21:00	30 minutes	30 minutes	0 minutes	MHA5-50	Create class diagram	DONE
Noah Ernst	Apr 27, 2020 23:47	2 hours	2 hours	0 minutes	MHA5-85	Implement controller functionality	DONE

Noah Ernst	Apr 27, 2020 23:47	30 minutes	30 minutes	0 minutes	MHA5-84	Create UI Mockup	DONE
Noah Ernst	Apr 27, 2020 21:00	1 hour	30 minutes	0 minutes	MHA5-83	Create UI Mockup of Plot	DONE
Noah Ernst	Apr 27, 2020 23:47	2 hours	2 hours	0 minutes	MHA5-76	Create tests for plotter	DONE
Noah Ernst	Apr 27, 2020 23:47	1 hour, 45 minutes	2 hours	0 minutes	MHA5-65	Make plot scale and redraw image	DONE
Noah Ernst	Apr 27, 2020 23:47	30 minutes	3 hours	0 minutes	MHA5-62	Display plot with correct axis markers	DONE
Noah Ernst	Apr 27, 2020 23:47	1 hour	1 hour, 30 minutes	0 minutes	MHA5-58	For each point, plot distance vs time	DONE
Noah Ernst	Apr 27, 2020 23:47	1 hour, 30 minutes	1 hour, 30 minutes	0 minutes	MHA5-53	Grab the necessary point data for each track	DONE
Noah Ernst	Apr 27, 2020 23:47	1 hour, 10 minutes	1 hour	0 minutes	MHA5-52	Create GUI to graph on	DONE
Stuart Harley	Apr 23, 2020 16:51	30 minutes	1 hour	0 minutes	MHA5-67	Test/Debug table	DONE
Stuart Harley	Apr 23, 2020 16:51	30 minutes	30 minutes	0 minutes	MHA5-66	Determine intended output for certain tracks	DONE
Stuart Harley	Apr 21, 2020 10:34	3 hours, 10 minutes	2 hours	0 minutes	MHA5-61	Display data to table	DONE
Stuart Harley	Apr 21, 2020 10:34	2 hours, 50 minutes	2 hours	0 minutes	MHA5-57	Create Table GUI Window	DONE
Stuart Harley	Apr 21, 2020 10:34	20 minutes	30 minutes	0 minutes	MHA5-54	Create Table GUI Mock Up	DONE
Stuart Harley	Apr 09, 2020 12:24	15 minutes	30 minutes	0 minutes	MHA5-49	Add button to main GUI window to open up a table window	DONE
Stuart Harley	Apr 09, 2020 12:24	15 minutes	15 minutes	0 minutes	MHA5-48	Add row and column checks to specified tests	DONE
Stuart Harley	Apr 09, 2020 12:24	5 minutes	5 minutes	0 minutes	MHA5-47	Convert meters to feet and display	DONE
Stuart Harley	Apr 09, 2020 12:24	5 minutes	5 minutes	0 minutes	MHA5-46	Specify elevation in meters	DONE
Stuart Harley	Apr 09, 2020 12:24	10 minutes	10 minutes	0 minutes	MHA5-45	Round remaining metrics to 2 decimal places	DONE
Unassigned	Apr 27, 2020 21:00	35 minutes	1 hour	0 minutes	MHA5-51	Create JUnit tests with different plots of data	DONE

[27 issues](#)

Part 2: Sprint Retrospective

In this section:

- 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.
 - The only task that differed by more than about an hour on this sprint was  **MHA5-59** - Implement drawing functionality **DONE** which was to implement drawing functionality for the 2D plot. This task was estimated at 2h but Matt ended up taking 1d 6h 50m to complete it. Matt ran into significant issues when trying to implement this task which took him a while to complete. Also, he incorrectly displayed the tracks at first due to a misunderstanding of the requirements, so he had to redo much of his work in order to display them correctly.
- Examine actual times logged. Was the division of effort among the team equitable?
 - Stuart logged 8h 10m this sprint. Noah logged 10h 25m this sprint. Matt logged 25h 55m this sprint. When we began the sprint

we each took one task that we had originally timed out to be of similar lengths. Matt ended up running into significant issues implementing his plotter so he ended up logging a lot more time trying to get that working.

Was this due to not using a plotting library?

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 for Defects? Do you think this is reasonable?
 - a. 35 min was spent working on defects for this sprint. This is compared to the ~41.5 hours we spent working on features. This is around 1.5% of the total we spent working this sprint, which is very low. This is mainly because of the simple nature of the defect tasks. Stuart had them fixed very quickly. If the defects were more difficult and involved more tinkering with code, the percentage of time spent on defects will naturally increase.
It is extremely low.
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. We made the choice during the sprint to focus solely on the tasks we could finish instead of tackling extra tasks we were unsure we could complete. Working this way allowed us to complete each feature to a satisfactory degree.
5. Examine the Pull Requests your team issued. Of those, indicate how many were Declined vs. Accepted. Discuss the reasons for the Decline votes.
 - a. We only issued 3 pull requests during this sprint (one for each completed feature PBI) since Stuart hotfixed the defect issues on the dev branch before. Each of the three requests were approved without issue.
6. Considering software quality, discuss the effectiveness of your current code reviews, and any changes you will make for the next sprint.
 - a. Fortunately, nothing glaring was apparent in the software quality each of the team members contributed.
7. Considering software quality, discuss your team's Definition of Done, and whether additional criteria need to be added to this definition.
 - a. Our definition of Done is in line with our textbooks. We are done when we believe our code satisfies our clients acceptance criteria. Though we are not aware of every defect, these will be found and placed onto the backlog.
8. Discuss any other things from the past sprint that you will address (mainly with the aim for improvement) in the next sprint.
 - a. If a method is not working out, don't spent an undue amount of time trying to get it to function. Rethink the problem and tackle it in a different manner. This was mainly encountered in creating the functionality for drawing the tracks on a 2D plot.

For sprint 3, I suggest that you demonstrate your working code (on your feature branches) to each other as part of reviewing a PR.