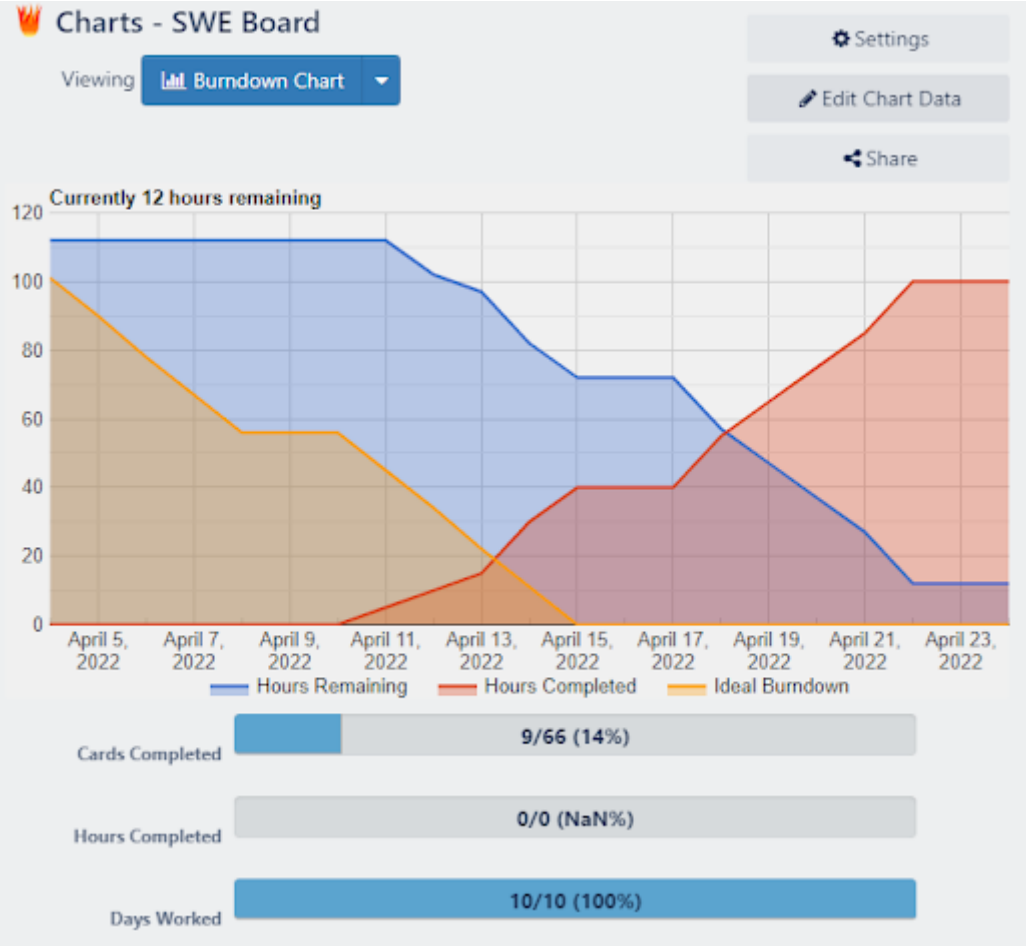
Sprint retrospective

Group task 13p

Team Name: Team Grotle
Tutorial Class: Tue 12:30 EN310
Tutor: Naveed Ali
Team members:

Group members	**Student ID**
Hamish	103607352
Dilni	103616345
Kamar	103607585
Melanie	103489466
Justin	102589705
Tevy	103139978
Cormac	102581060

Team Velocity Retrospective



Ideal vs Actual:
The chart above shows our final burn-down chart from Sprint 1. The orange line shows our ideal burn-down chart for the sprint and the blue line shows our actual progress. As shown above, the actual burndown is above the ideal burndown, meaning our project is behind schedule. The problems affecting our project schedule have been discussed in the next section.

Team Abilities & Task Completion Retrospective

<table>
<tr><th>Problem</th><th>Solution</th></tr>
<tr><td>We overestimated our team's ability. In this project, we plan to develop GotoGro-MRM as a Java web application using the Java Database Connectivity (JDBC) application programming interface (API). However, as seen in the “Programming Skills” section of Task 04P (see Appendix A), only 2 members know how to use JDBC. This has caused a lot of issues during Sprint 1 since most members were unable to set up the NetBeans integrated development environment (IDE) properly. Furthermore, most members were unable to write code for the application due to inexperience with the API.</td><td>We should take into account everyone’s programming skills and utilise programming languages and APIs that every member is comfortable with so that the team can develop the application effectively. Therefore, we might consider developing GotoGro-MRM as a PHP web application instead of a Java web application. This will cause the following changes in the hardware and software utilised in this project (which were specified in Task 07P):

<table>
<tr><th>Before</th><th>After</th></tr>
<tr><td>PC Desktop</td><td>PC Desktop (no change)</td></tr>
<tr><td>Visual studio code</td><td>Any text editor</td></tr>
<tr><td>Internet</td><td>Internet (no change)</td></tr>
<tr><td>NetBeans</td><td>N/A (NetBeans was used mainly for JDBC, but a PHP web application will not need this API)</td></tr>
<tr><td>SQL Database</td><td>SQL Database (we’ll be using phpMyAdmin specifically)</td></tr>
</table>

It should be mentioned that when Sprint 1 is completed. We would be changing the code from java to PHP in order for all members to contribute in sprint 2.</td></tr>
<tr><td>We also underestimated the time needed for each task. As a result, we did not allocate backlog items to each sprint appropriately, which led to Sprint 1 being overloaded with the main functionalities of the application. Sprint 2, on the other hand, contains backlog items that are very basic tasks.</td><td>In order to get better time estimates in the future, we will need to add more buffer time to our estimations. In the event that we run into an issue during development, this will give us extra time to perform troubleshooting or find the required resources without affecting the overall project schedule. Therefore, the total amount of time for any given task should be a combination of our estimate and a buffer time to give us more flexibility</td></tr>
</table>

Team Process Retrospective

Positive (was working)	Justification
Getting resources	Once the tasks had been broken down, as a team, we would research applications, languages and videos on the best way to approach creating the application.
Goal setting	As a team, we created a WBS diagram that outlined specific tasks that needed to be completed. We recognised the severity of each item and discussed why they were of high priority.
Problem-solving	When a team member reached a block in the creation process, we helped each other find resources which would help solve our issue. Additionally, when coding we would reference old projects as a way to solve the problems.
Team support	Everyone in the team supported each other whether it was giving advice, helping out with documentation, doing the code or even giving each other positive reinforcement.
Team communication	As a team we would often communicate through Discord. We would have sent in questions about the project and we would often get a response within a 12-hour window.

Negative (not working)	Justification	Improvements
Assignment of tasks	Tasks were inefficiently assigned to team members, leading to a lopsided development focus which caused some critical components to not get the required attention.	The team will divide into sub-teams of 2 or so members, and each sub-team will focus on a single area of development. This will help ensure that there is a dedicated team for each component of the software's development, theoretically preventing such lopsided development.
Progress Documentation	We didn't have a dedicated team member who documented this progress over time and additionally did not think ahead that documentation was necessary due to being behind schedule.	We will assign one team member each for the documentation of the Task Board, burn-down chart, daily stand-up meeting minutes and repository status.

Sprint Retrospective Meeting Minutes

Meeting Topic: Sprint Retrospective	**Date:**29/04/22 **Time:** 11 am **Location:** Discord
Attendance: ● Cormac ● Dilni ● Justin ● Kamar ● Melanie ● Hamish ● Tevy	
To-do Items in the meeting	**Member**
● ~~*Discuss how to complete 13p and 14p*~~	Everyone
● ~~**13P:** Discuss velocity of burndown chart (ideal vs actual)~~	Everyone
● ~~**13P:** Discussing Task completion~~	Everyone
● ~~**13P:** Discuss improvements~~	Everyone
● ~~**13P:** Discuss team process positives~~	Everyone
● ~~**13P:** Discuss team process negatives~~	Everyone
● ~~**13P:** Finalize and clean up sprint retrospective document~~	Everyone
To-do items after meeting	
● Everyone agrees on what was documented in sprint retrospective	Everyone
● Create the final copy of 13p	Everyone
● Submit 13p	Everyone
● Gather diagrams of software programs for 14p	Everyone

Appendix A: “Programming Skills” from Task 04P

		Cormac	Dilni	Hamish	Justin	Kamar	Melanie	Tevy
Java Database Connectivity (JDBC)		✖	✖	✖	✔	✖	✔	✖
SQL	Azure	✖	✖	✖	✔	✖	✖	✖
	AWS	✖	✖	✖	✔	✖	✖	✖
	MariaDB	✔	✔	✖	✔	✔	✔	✔
Front-End	HTML	✔	✔	✔	✔	✔	✔	✔
	CSS	✔	✔	✔	✔	✔	✔	✔
	JavaScript	✔	✔	✔	✔	✔	✖	✔
Back-End	Java	✖	✔	✖	✔	✖	✔	✖
	PHP	✔	✔	✔	✖	✔	✔	✔
	Ruby	✔	✔	✔	✔	✔	✖	✖
	Python	✖	✖	✔	✔	✖	✖	✖
Other	C#	✔	✔	✔	✔	✔	✔	✔
	C++	✔	✔	✖	✔	✖	✔	✔