Retrospective 1 & Sprint Plan 2

CS2001 - Group 50

Ahmed Alkhazraji, Alek Rifai, Nawal Malik, Nusrat Keyka, Philipp Bibik, & Thoybur Rohman

Sprint 1 Retrospective

In the first sprint we set an overarching goal of creating a Minimum Viable Product, which had to include the most rudimentary functionality a user would expect from our platform. This workload consisted of partial development of the front-end, back-end, and database systems, and also connected them. While as a group we made significant strides towards our goal, we did not manage to complete the task in its entirety. Upon conclusion of the first sprint, we had a retrospective event, in which we discussed what went well, what went poorly, and how we can improve our group cohesion in future sprints. What follows are the findings of that event.

The Positives

These are the the aspects of our collaborations which we deemed to be highly successful:

1. In the first sprint we clearly identified separate task domains, with individual developers primarily being responsible for a single one. This gave developers a significant opportunity to familiarise themselves with the individual task and a clearly bound set of technologies which they need to learn for the purposes of implementation. Beyond that, it also resulted in a highly decoupled system, which will ease further development.

2. The team got to have two meetings a week during the sprint, in which general progress and difficulties were discussed. This was frequent enough for everyone to have an understanding about the state and the progress of the sprint, while not being so frequent as to have nothing to discuss.

The Problems

These are the problems we identified as the main hurdles in our first sprint:

1. As most group members did not have prior experience with the development of three-tier web architectures, a significant portion of time had to be devoted towards research and learning. While this was taken into consideration during the task allocation for the first sprint, this time was, for the most part, greatly underestimated.

2. Conflicting deadlines for other modules, which overlapped with the end of the first sprint, were not sufficiently considered when planning the workload, thus putting unnecessary strain on individual group members.

3. Some tasks performed by other people were sequential in nature, thus one developer could not start their task before the conclusion of a different developer’s task. This was not sufficiently considered when deciding on the order which tasks will be

completed in.

4. The workload required for the integration of separate group member's components was greatly underestimated, thus, little integration was managed to be performed in the first sprint.

Recommendations for Future Sprints

1. In the future, when assigning tasks, the individual developer should be asked for a self-assessment of their personal abilities in the relevant task domain. This should then influence the workload assigned to them, and the scope of the sprint as a whole.

2. Tasks that have to be completed in order for other people's tasks to be started, should take priority, and be completed as early in the sprint as possible.

3. Significantly greater weight should be given towards the integration workload, when deciding on the sprint's scope. In addition, integration should be started at the earliest point possible, instead of being the last task performed (e.g. create non-functional dummy methods early on, which can be integrated already. Functionality can then be worked on for the remainder of the sprint, with the integration already having been completed).

Sprint Plan 2

Product Backlog

An initial product backlog was drafted that greatly exceeds the level of functionality that can be implemented for the minimum viable product (MVP). Yet, the backlog is not complete and will continue to adapt during the subsequent sprints, as requirements and scope become

more clear.

1. As a user, I need to be able to access the website, to interact with it. (Functional)
2. As a user, I have to create an account with TechDon, so I can access the platform's functionality. (Functional)
3. As a donor, I need to be able to list devices for donation, so students in need can receive them. (Functional)
4. As a student, I need to be able to select which devices I need, so I can be informed once any are available. (Functional)
5. As a student, I need to be informed when a device is available, so I can claim it. (Functional)
6. As a donor, I need to be able to communicate with students who receive my device, so we can coordinate the delivery or collection. (Functional)
7. As a user I need to be able to access all required functionality from the website, to be able to complete the tasks efficiently. (UI / Functional)
8. As a user, I need my personal information to be secure, so I can entrust it to the website. (Non-functional, security)
9. As a user, I need the website to be fast and have maximal uptime, to be able to access it whenever I want. (Non-functional, reliability)
10. As a user, the website needs to have a logically organized interface, so using it is not a hassle. (UI)
11. As a user, the website needs to be intuitive and easily navigable, so I can quickly find the functionality I'm looking for. (UI)
12. As a user, I need the website to be responsive and accessible from mobile devices, so I can access it whenever I want. (UI)
13. As an admin, there needs to be an admin panel, so website management and analytics tasks can be performed easily. (Functional)
14. As a donor, I want recipients to have their identity and eligibility verified, to assure the right people are receiving the donation. (Functional)
15. As a student, I need to be able to see an estimate of how long it will take for me to get a device, to have an understanding of the progress. (Functional)
16. As a donor, I want students to be able to only receive one device, to make sure my devices go to people who need them. (Functional)

Sprint Goal & Distribution

The goal of the second sprint is to complete the tasks that were not finished in the first sprint and create a MVP that will mainly focus on improving our front-end but still results in a working product by the end of it. This is the motivation behind choosing the user stories that

we chose, and setting the acceptance criteria the way we set it. The acceptance criteria for this sprint should be understood as that for the MVP and not as the acceptance criteria for our platform as a whole. The tasks of the sprint 2 will be updated as the group progresses with the tasks.

This sprint the responsibilities of Scrum Master and Product Owner have been given to Thoybur and Ahmed respectively.

The backlog items to be completed during the second sprint are as follows:

#	*User Story*	Priority	Points
1	***As a user, I need to be able to access the website, to interact with it***	Very High	20
Acceptance criteria : ● The basic website needs to load and present the user with rudimentary information ● Provide forms that hook into the endpoints of the back end			
Tasks		Responsible	Points
Set up react		Thoy	2
Create and see which web pages need to be added using react		Thoy/ahmed	2
Integrate front and back end		Thoy	2

#	*User Story*	Priority	Points
2	***As a user, I have to create an account with TechDon, so I can access the platform's functionality***	Very High	23
Acceptance criteria : ● Have an account system that support registration, login, and persistent storage of user-related information ● Let the account functionality be externally accessible via an API endpoint			
Tasks		Responsible	Points

Create internal capabilities that allow accounts to be created, logged into, and modified	Alek	12
Implement the API Endpoint that allows external interaction with the login system	Alek / Thoy	4

#	*User Story*	Priority	Points
3	***As a donor, I need to be able to list devices for donation, so students in need can receive them***	Very High	6
Acceptance criteria : ● Have a website that allows donors to fill out information about their devices that add them to the user's persistent data			
Tasks		Responsible	Points
Implement the endpoint that allows devices to be added		Nusrat	3
Integrate the data into the DB via the interface		Nusrat	3
Implement an endpoint that allows devices to be removed		Philipp	1
Implement an endpoint that lists all donated devices per user		Philipp	1
Implement an endpoint for updating donated devices		Philipp	2

#	*User Story*	Priority	Points
4	***As a student, I need to be able to select which devices I need, so I can be informed once any are available***	Very High	6
Acceptance criteria : ● Have a website form that permits selection of device categories listed in our system and adds selected devices to the user's persistent memory			

Tasks	Responsible	Points
Implement an endpoint that allows the devices to be selected	Nusrat	2
Integrate the data into the user's persistent memory	Nusrat	2

#	*User Story*	Priority	Points
5	***As a student, I need to be informed when a device is available, so I can claim it***	High	18
Acceptance criteria : ● Have a working system that decides the recipients of the devices ● Inform recipients upon selection by Email			
Tasks		Responsible	Points
Create a rudimentary queue system that allots devices to users in the order they queued up for them		Philipp	3
Create an internal endpoint for email capabilities and integrate it with an SMTP server		Nawal	6
Send an email to users upon being selected		Nawal	1
Add a webpage on which users can see the device and claim it		Ahmed	2
Create an endpoint view offered devices		Philipp	2
Create an endpoint to claim offered devices		Philipp	2

#	*User Story*	Priority	Points
6	***As a donor, I need to be able to communicate with students who receive my device, so we can coordinate the delivery or collection***	Medium	2

Preliminary Acceptance criteria : ● Send both the donor and the recipient the contact details of the other party, so they can get in touch (*will be expanded in later sprints*)		
Tasks	Responsible	Points
Send emails containing contact email addresses and phone numbers of the donor and recipient to each other	Nawal	2

#	*User Story*	Priority	Points
7	***As a user, I need my personal information to be secure, so I can entrust it to the website***	high	3
Acceptance criteria : ● Have a storage interface that enables all required information to be stored ● (Future Sprints) Pentest the system and unittest the database interactions to assure maximum security			
Tasks		Responsible	Points
Continue expanding and maintaining the database interface to fit expanding project needs		Philipp	3

#	*User Story*	Priority	Points
9	***As a user, the website needs to be intuitive and easily navigable, so I can quickly find the functionality I'm looking for. (UI)***	Medium	
Acceptance criteria : ● have a navigation bar			
Tasks		Responsible	Points
Navigation bar which reaches all web pages		Thoy	2

#	*User Story*	Priority	Points

11	***As a donor, I want recipients to have their identity and eligibility verified, to assure the right people are receiving the donation.***	Medium	11
Acceptance criteria : ● have email receipts sent to user after receiving the item			
Tasks		Responsible	Points
Let user upload supporting documentation for student status		Philipp	2
Implement an endpoint for user ID verification		Philipp	2
Admin endpoint to have a queue of student verification		Philipp	4
Preliminary admin page		Philipp	1
End point to verify student status		Philipp	2