

## Project Sprint Retrospective

Team: Thu1930-Dipto-Group8

Sprint: 1

Date: 9/09/2021

Attended: Jeremy Chung, Pemal Padukkage, Yeu Haw Teh

Scrum Master: Jeremy Chung

Product Owner: Dipto Pratyaska

Development team: Jeremy Chung, Pemal Padukkage, Yeu Haw Teh

### 1. Things That Went Well

Things That Went Well
Backend development is progressing above previous expectations.
Communication between team-members has been maintained at a steady rate.
Integrating elements of the BOOKEROO application during merges was seamless.
Knowledge and skills in formerly unknown technologies were acquired quickly by the team.

Table 1. Items that went well

Difficulties with development were initially strongly felt, however, these difficulties were alleviated as more time was spent developing the BOOKEROO application. The development process eventually headed towards a steady pace once knowledge and skills were developed. Due to the consistent communication of code-blocks, a more leveled learning environment was created where team-members could learn from the mistakes of each other; further cultivating the ethos required in a Scrum team in terms of development and organization. Thus, the iterative manner of cooperation lead overall, towards things going well.

### 2. Things That Could Have Gone Better

Things that could have gone better
Resolving merge-conflicts: avoiding 'merge-hell', should be a priority for future sprints.
Some tests were written after the code-development of the feature, causing issues with the flow of development regarding; Git-Flow, CI/CD Tools, Unit-Testing and Code Refactoring.
Incongruent progress throughout development has created bottlenecks in some parts of the codebase, holding back further development until older tasks were completed.

Table 2. Things that could have gone better

The collation of the myriad completed features of the project was difficult at times and required a group effort to resolve, this resulted in a time-sink that could have been avoided had things been merged more consistently and the collective group had been

considering the project features as elements of the Sprint Backlog instead of miniature projects.

### 3. Things That Surprised Us

The expectation of effort as assigned to tasks were not inline with the actual number of effort-hours required to complete tasks in person, as a separate reality away from the abstractions of planning.

Things That Surprised Us
Frontend development is more time consuming than initially anticipated, compared with Backend development.
Additions and updates to the Product Backlog and User Stories had to be made continually to reflect actual development progress made.

*Table 3. Things that surprised us*

### 4. Lessons Learned

Lessons learned derive from three concepts outlined in the table below: Differences in similar technologies; Re-opening old discussions when relevance arises; and Unit-Testing as it relates to the codebase and future development.

Lessons Learned
Git, Git-Flow and GitHub; albeit seeming synonymous to each other; pertain to different skillsets and technologies which must be learnt and respected in the development cycle to maintain healthy Scrum processes.
User Stories, Product and Sprint Backlog Items should be further discussed between Team-Members as to eliminate ambiguities during development and merges of Frontend and Backend elements of the application.
Unit-Testing is paramount to understanding the requirements of outlined by User-Stories, as it provides developers an anchor for which they can continue development in line with the ideas they have been built for.

*Table 4. Lessons Learned*

### 5. Final Thoughts

Complaints are once again sparse in this Sprint; thus, it is difficult to highlight trappings experienced by our Team. Roughly speaking, expectations were met, and progress made. The few things that can be said in terms of detriments of the Team would be the approach taken in Integrating various stages of the project manually; this problem has of course will be eliminated in future development cycles with the addition of CI/CD to our development cycle. Containers provided by Docker will also aid in this regard, as the myriad operating environments used by our team members; will no longer strain development time. It will be our vision to maintain and further cultivate knowledge and habits for the team to continue throughout future Sprints and adapt and integrate new technologies and workflows to facilitate the development of the BOOKEROO application.