

1 Project Management

1.1 Introduction

The project has been managed through GitHub with an addition of Kanban system to log the progress of the application and to check what the stage I am in terms of the project. The section of project management shows the phases of the project, going from the project idea through the requirements gathering, the specification for the project, the design, implementation, and testing phases for the project. It also discusses GitHub as a tool which assist in project management.

1.2 Project Phases

Through the development of the project, various issues and subjections have arisen from creating the web application. These issues have been grouped below as follow:

1.2.1 Requirements

the project requires a functioning website adequate to a shopping webpage. These essentials needed for creating the said website are distinguished in two major categories called functional and non-functional requirements. In which, functional requirements are conditions obliged for the website to properly function, while non-functional requirements are conditions that if not met do not stop the application from running, but also means that the app won't be working as well as it should.

1.2.2 Design

The designator of the website consists of various topic that has its own spotlights such as:

- **Layout** – a web framework which we will use to template the website, which in our cases is Laravel framework. Albeit, the very informative tutorial, it is quite grasp to deep dive into the complexity of the potential the framework allows us to do. It requires an amount of time to play around with the source and seek what it could do.

- **Interaction** – the website needs to be able to interact with its users in the means of graphical designs such as giving the user an element to access the log in i.e. a button, or a link. A problem occurs when I want to route to a page using a button. The layout is pretty straight-forward but the syntax of Laravel is pretty different from the regular terminology, thus there were a lot of learning curve in better the skill to develop using this framework.
- **Colour schemes** – this is needed to attract the eyes of the users with contrasting colour palette. Thus, deciding on one could become a difficult task.
- **Font choices** – is also a matter of choices and likings, picking two matching fonts with similar chemistry could create a perfect harmony for the eyes to glimpse through texts and articles.
- **Wireframes** – is the most important part of designing as it displays the overall state of the website and briefly shows how it would function in the case of an actual event.

1.2.3 Implementation

The implementation of extra extensions which allow us to ease up the hideous process of program our own implementations from the ground up, we could look on-line for an existing source and/or packages such that allow us to salvage additional time that could be used to further finalising the website. These extensions are Vue.js, Laravel Auth, SASS, Bootstraps and other existing API created by other users.

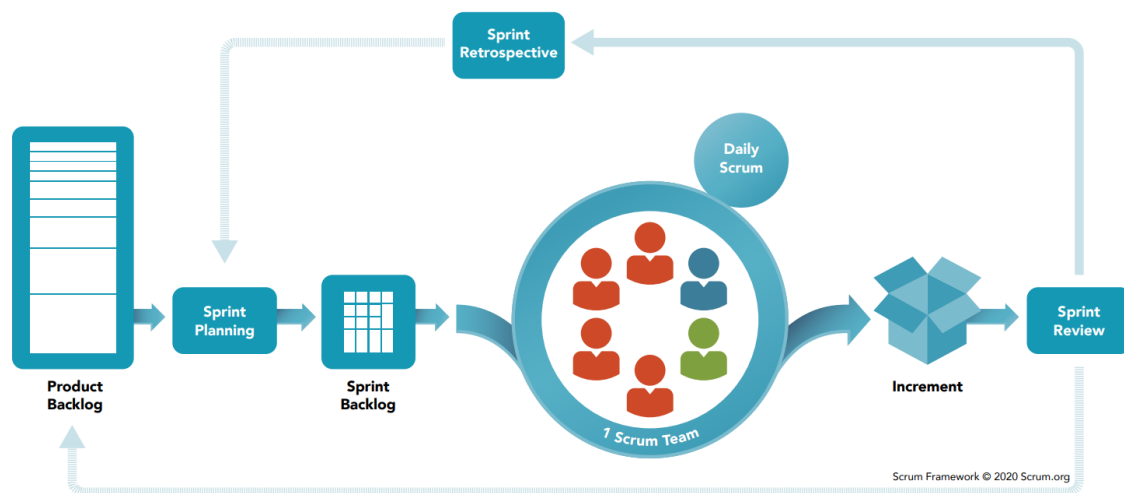
1.2.4 Testing

The testing of the application is also important and should be noted before releasing the official published application to the public eyes. In case it has some major issue of even minor ones.

Include a Gantt Chart

1.3 SCRUM Methodology

SCRUM is a genre of framework which allow various teams and organisation to gravely produce prototypes through adaptive solutions arise from compound problems.



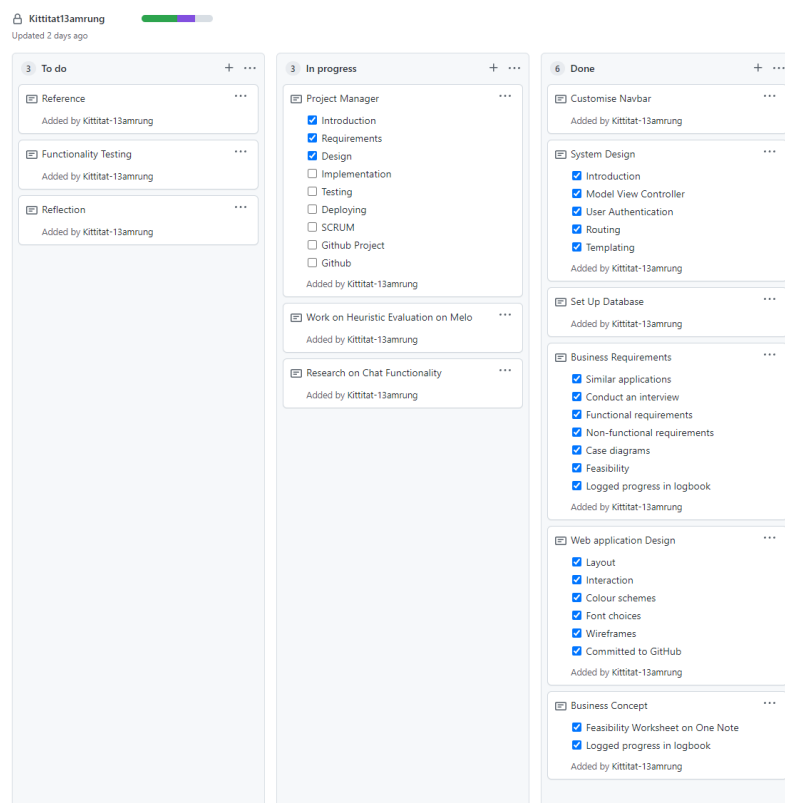
In order for the team to work efficiently, minimise the need for meetings and keep improving the end product, the Scrum events have implemented. These events are time-boxed where each duration has been fixed before the Sprint session started. A session may end whenever the purpose of the event has been accomplished. This process is done to ensure that no time is wasted in the process. These events are the following:

- Sprints – is the time fixed in length of working to create consistency to the team.
- Sprint Planning – is a prescribed goal before starting a session such as why is this Sprint valuable? What can be done this Sprint? And how will the chosen work get completed? These requirements would be increment into the Project Backlogs.
- Daily Scrum – is the checking of the progress made toward the Sprint goal. The inspection then could be put in the Sprint Backlog.
- Sprint Review – is to audit the outcome of the Sprint to decide whether to end the Sprint session.
- Sprint Retrospective – is purpose to create ways to improve quality and effectiveness by the inspection of the previous session(s).

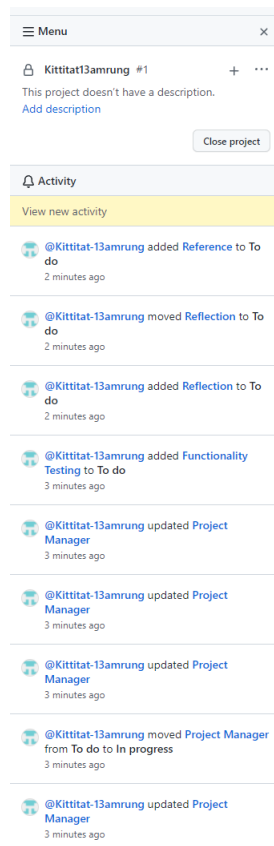
1.4 Project Management Tools

1.4.1 GitHub Project

GitHub project allows the developer (Devs) to keep track of their progresses and record them using a built-in Kanban system that let the Devs arrange where they are in terms of the project development, arranging and categorising their progress in 3 columns: To-Do, Work-In-Progress, and Done.



When organising your lists of work, the Dev could use these columns to sort their schedules of what is left to do, and what else is needed in the span of the project. This has made it so much easier to glance through the steps of the project, whether it needs further development in any criteria etc.



The side menu also provides activity feeds which exaggerate the opportunity for working in teams, checking what has been updated by which member and the timestamp of activities.

1.4.2 GitHub

GitHub is a hosting platform in which various Devs are currently using to store their prototyping codes and each version for beta testing to check for potential errors and could easily debug before merging the original code with a freshly developed code or even roll back to older version if they desired. This is done in order for the scenario of data loss or cloning projects to different devices, and/or even for team collaboration to work on the same code and easing up the process of the need to communicate as they could instantly express their issues through the site.

As the platform only act as a hosting platform, majority of the uploading/updating of the new data are done through command prompting line of codes. A Dev could update their code through a code editor of their choice and uses a Git, a software built with version control system, to commit your files to GitHub.