## Plan

# 1. Delivery Approach - Scrum/Agile

In this project, the team will use the Scrum approach, an Agile method, as the SDLC model to implement this project according to the client's requirements, there are several reasons for that.

- 1. The client will get involved in the project, and he might change some of his requirements during the project. In the Scrum model, the project development will be processed by a series of short sprints. After each sprint, the function can be demonstrated at the review and the team will make a conclusion of the current sprint and prepare for the next one with the feedback of the client. Scrum approach provides a model that could adapt to the changing requirements more smoothly and quickly [1], which is more flexible and more suitable for this project.
- 2. This project is expected to have a usable delivery within around two months. Scrum is an approach that could support rapid delivery and shorten the time for development by a series of short sprints [2].
- This project requires a model that the client and the development team could communicate with each other frequently about the delivery of each sprint. Scrum model encourages teams to interact with clients and learn through experiences for a better outcome which is more appropriate for this project [3].
- 4. In this project, the development team is quite small with just five members. Compared with the Formal method such as waterfall and incremental model that need more people, Scrum approach has a more tight-knit team with just a few members which is more feasible in this project.
- 5. All the team members are in the major of Information Technology and have some experiences of developing. The Scrum team is self-organized that members could decide how to implement their work [4], which could let all members fully participate in the project's implementation and decision-making and use their knowledge and experience better.
- 6. FinallyConsidering the impact of the epidemic and lockdown on project development, it is almost impossible for team members to hold meetings or discuss development progress locally. Under the condition of limited time and space resources, Agile can better balance the development progress among the team members and make the project proceed steadily.

#### 2. Communication Plan

## 2.1 Sprint Planning Meeting

Describe the main features and functionalities at the beginning phase of each sprint. The scrum master and product owner will pick up some parts of the product backlog based on priorities to form the sprint backlog. Also, the scrum master should break user stories down into detailed and smaller tasks. Documentation of Sprint Planning Meeting is Spring Goal and Sprint Backlog.

## 2.2 Stand-up meeting

A stand-Up meeting is supposed to be a daily process for the whole team in each sprint. Each member should discuss what they did and completed yesterday, what they will plan to do currently in brief summaries and what issues or obstacles they have met during development. The whole team should join this meeting. Scrum master could adjust work pace according to members' feedback and help them resolve problems.

#### 2.3 Sprint Review Meeting

Sprint Review Meeting is held at the end of each sprint. The whole team, the client and product owner will take part in this meeting. The scrum master will present the current product during the sprint by a demo, showing accomplished tasks and production increment. Another purpose of this meeting is to revise the Product Backlog as well as adjust the Product Backlog properly to face changes and challenges.

#### 2.4 Sprint Retrospective Meeting

Sprint Retrospective Meeting occurs after the Sprint Review Meeting and prior to next Sprint Planning. In the meeting, the team records failures and summarizes successes from the previous sprint. Then commit where can be improved in the next sprint.

#### 2.5 Additional Communication

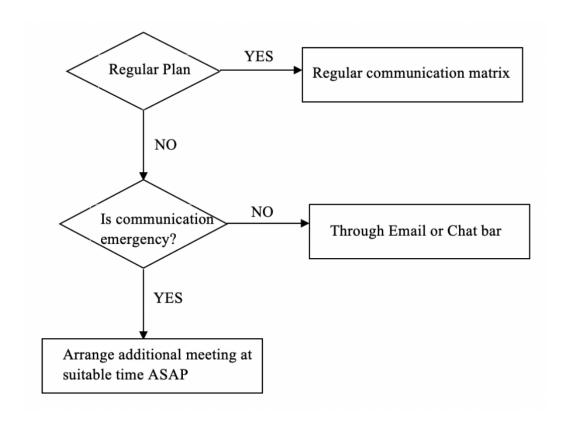
Discuss emergency events or problems. Talk about the urgent or difficult technical problems met during development or any other kinds of issues with other members or Scrum Master. It does not have a standard format of communication. We may choose virtual meetings, email or just chat on Slack, depending on the level of emergency.

#### Communication Matrix:

Communication	Organizer	Participants	Format	Frequency	Duration	
Objective						

Sprint Planning Meeting	Scrum Master Product Owner	Scrum Master Product Owner Dev Team	Virtual Meeting via Zoom	The beginning of each sprint ( almost once per month)	about 1.5h
Stand-up Meeting	Scrum Master	Dev Team	Virtual Meeting via Zoom/report via Slack	Virtual Meeting: every Wednesday and Sunday / brief report: other weekdays	about 15 minutes
Spring Review Meeting	Product Owner	Product Owner Scrum Master Client Dev Team	Virtual Meeting via Zoom	The end of each sprint ( almost once per month)	about 1-1.5h
Spring Retrospective Meeting	Scrum Master	Scrum Master Dev Team	Virtual Meeting via Zoom	The end of each sprint ( almost once per month)	about 1h
Additional Communication	Scrum Master	Dev Team	Virtual Meeting via Zoom / Email / Slack	Communicate if necessary	not sure

# Communication Flow Chart:



# 3. Project Progress Timeline

## **Inception Planimation:**

Duration: The inception phase lasts for 2 weeks up until 22 Aug 2021.

Process:

- -Since the team is initially working to get a complete understanding of the project, we followed a collaborative approach rather than a cooperative approach.
- -Client meeting is held, requirements are identified.
- -Each team member explored the current code and possible technologies.



#### **Sprint 1 Planimation:**

Duration: The sprint is from 22 Aug 2021 to 19 Sep 2021.

Process: -The sprint backlog will derive the Tasks from product backlog user stories.

- At the end, the quality is checked for all documents and code is well tested to determine the end of the sprint.
- Unfinished tasks are moved to the next sprint.

#### **Sprint 2 Planimation:**

Duration: The sprint is from 19 Sep 2021 to 24 Oct 2021.

**Process:** -The sprint backlog will derive the Tasks from product backlog user stories.

- At the end, the quality is checked for all documents and code is well tested to determine the end of the sprint.
- The team prepare the handover to the client.

#### Reference

[1] Casandra, M. (2020). Top 20 Agile Scrum Master Interview Questions & Answers. Retrieved from https://www.simplilearn.com/agile-Scrum-master-interview-questions-article

[2] R. Simons, "Advantages and Disadvantages of Agile Project Management" Retrieved from https://activecollab.com/blog/project-management/agile-project-management-advantages-disadvantages

[3] Chandana, D. (2019). Scrum Project Management Article. Retrieved from https://www.simplilearn.com/Scrum-project-management-article

[4] Harry, D., & Marion, Z. (2020). Week3 Formal and Agile approaches [Lecture notes]. Retrieved from https://canvas.lms.unimelb.edu.au/courses/89089 /pages/lecture-3?module\_item\_id=2215058