Reports / Management Information

Key Objectives

Due to the limited development time our team has access to, our team decided to us e the 'divide and conquer' strategy along with the 'Agile' development approac h. We identified the four main parts of the projects to be the following:

- 1. Reports and documentation These are mostly written materials that are required to be submitted or stored somewhere for later references.
- 2. Backend infrastructure These include the database we are using to store d ata as well as the API we need to build in order to communicate the databas e with the frontend of our application.
- 3. Designs This refers to the UI and UX design of our application.
- **4. Frontend infrastructure** This is the window we build for our end-users to interact with our backend functionalities with ease.

Mangament tools

In order to deliver the product within time limit and with exceptional quality, Ou r development team has also decided to integrate additional tools to assist with o ur workflow. A list of chosen tools are as follow:

- 1. **GitHub** GitHub was chosen to be our primary version control tool. GitHub is a powerful platform that allows developers to share and edit the same code base across different machines which is extremely handy when multiple developers are working on the same project. On top of code sharing it offers developers the ability to switch freely between each iteration of the codebases. Last but not least, it also provides a convenient visual interface for developers without command line experience.
- 2. Jira As mentioned above, our team has decided to implement our solution u sing the 'Agile' development approach, as its rapid changes and short per iod of development best suits our use case. Jira is a convenient tool that allows the development team to visualize both the overall 'Agile' development progress and the progress for any given sprint by simply flicking bet ween the backlogs and current sprint boards.
- 3. Confluences Similar to GitHub, confluences is another powerful collaborat ive editing platform that gives each developer the permissions to add, remo ve and alter documentations. It is a compact platform that gives developers the ability to take concise and meaningful notes efficiently.
- **4. Google Drive** Google drive is an online text editing tool that allows mult iple members to edit a certain document at the same time through different

- locations and devices. Additionally, it also provides an easy interface for commenting and change suggestestion hence It is chosen to be our primary to ol for editing lengthy documents such as reports.
- 5. Microsoft Teams Due to the current Covid outbreak, our team has decided to migrate physical meetings to online meetings. Since the course is deliver ed through Microsoft Teams, and it provides a stable online meeting platfor m.
- **6. WeChat** WeChat is a lightweight mobile application that allows team member s to have regular short conversations through text or voice messages.

Members' Roles & Responsibilities

With key objectives in mind and management tools selected, we were able to careful ly identify the strength of each team member and assigned each member with tasks a ccording to their confidences. Details for roles and responsibilities for each member are as follow:

| Reports and docume ntations | Backend infrastruc ture | Designs | Frontend infrastru cture |
|-----------------------------|--|-----------|--------------------------|
| All members | Jiaxin Liu Zhiyuan Yin Yilin Zhu | Ziyu Zhou | Jing Deng |

Apart from completing corresponding development, team leads are also selected base d on the differences between members' expertise as shown in the chart below.

| Head leader | Backend lead | Design lead | Frontend lead | |
|-------------|--------------|-------------|---------------|--|
| | Jiaxin Liu | Ziyu Zhou | Jing Deng | |

Each team lead is responsible for communicating and allocating work to each team m ember according to the situation and documenting necessary changes. The head leade r is responsible for communicating with other team leaders outside of meetings to ensure teams are making reasonable progress and making schedule adjustments accordingly.

Communication & Meeting Schedules

To ensure leaders and members are aware of the progress and therefore stay on top of schedules, communications and regular meetings are inevitable. Regular meetings will take place on every Tuesday and Friday, each team leader is expected to report progress or any roadblocks encountered. Members are also expected to reach out for assistance if necessary outside of meetings via Wechat and Microsoft Team.

Progression Estimation

Below is a visual representation of how our team envisioned the project's lifecyc le.

| | Week2 | Week3 | week4 | Week5 | Week6 | |
|----------------------|-------|-------|-------|-------|--------|--|
| Ideas brain -strom | | | | | | |
| Forming requirements | | | | | | |
| UI / UX des igns | | | | | | |
| Backend Dev | | | | | | |
| | | | | | | |
| | Week6 | Week7 | Week8 | Week9 | Week10 | |
| Backend Dev | | | | | | |
| Frontend De v | | | | | | |

Phase one is where the entire team will come together to brainstorm the scope of the application and come up with requirements that development teams can refer to later on. Once the requirements are set, the design team lead by Ziyu Zhou and the backend development team lead by Jiaxin Liu will simultaneously start working according to the requirements. When the design for the frontend infrastructure is inplace and got the tick of approval from all members, the frontend development team 1 ead by Jing Deng will proceed to build out the frontend infrastructures.

However, as our development team are still in the early stages of the project, fut ure changes and alternation of the requirements or schedules are extremely likely, thus the progression plan above only serves as a rough estimation.