Part3-1

Time management and planning

Requirements gathering (graph to show our effort)

Related knowledge learning

This project took seven months and started from scratch. The whole team has made great efforts for it. Unlike other groups, we need to spend pretty much time collecting user requirements for this project. Because except basic claims mentioned in the bid, we have not been provided with any user requirements. We need to start by identifying the target user and finish a complete requirement engineering. We conducted questionnaire surveys, organized focus groups and took interviews with some professors. Finally, we validated the requirements we collected with the supervisor.

Considering that gathering user requirement is the most important part of the software engineering process, we spent nearly two months collecting complete and detailed user requirements. And then finish the prototype design.

However, because we spent a lot of time and effort on the preliminary design, not much time is left to implement functions. At that time, we also encountered another problem. According to the research, we found the most appropriate programming language for this project is JavaScript. So we decide to use React to build the UI interface and use Electron as the development framework. Although all of us have no foundation in these two programming languages, we used the winter vacation to learn relevant knowledge independently. At the end of the vacation, we had already completed some essential components.

Through self-learning during winter vacation, most members of the team are familiar with React and Electron. Then, at the beginning of the spring semester, we quickly completed all the functions. In the end, nearly 90% of user requirements have been achieved.