

Part 1: Business Case

Our project is to build a web application for synchronizing student grades from web submission to MyUni by using Nodejs. It is used to input data from web submission to MyUni automatically. By using our project, teaching staff can easily modify students' assignment results from web submission in MyUni and students can check their web submission score in MyUni in real-time.

Currently, data in web submission and MyUni are completely independent. If we want to see the results in web submission in MyUni, the only way to get it is to manually input these data to MyUni. In order to get all students' scores in web submission and put them into MyUni, faculties have to do the following steps (Figure 1). Firstly, they need to download the result for a particular assignment in web submission first (this could be a CSV file). Secondly, they need to modify the content in the CSV file to make sure it meets the format of MyUni. Finally, teachers can update the modified file to MyUni. However, if there is something changed in web submission that changed the students' scores, the results in MyUni will not change at all and faculties need to repeat the steps above again to get the newest data in web submission.

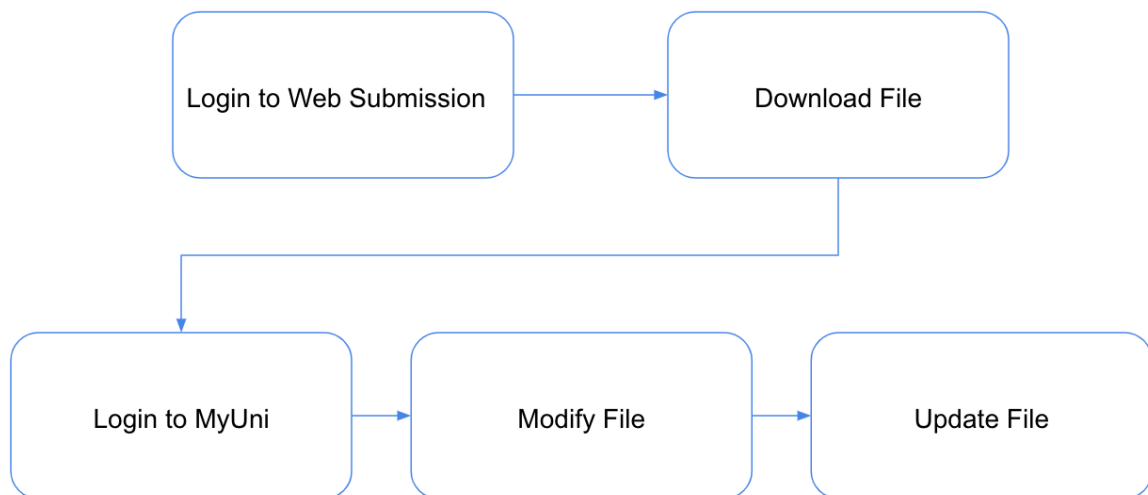


Figure 1. Current steps for teachers

For students, the steps show in Figure 2, normally they can see all the results in MyUni after their teacher updates the data from web submission to MyUni. However, if their teacher didn't update on time or they want to double-check their result, they still need to go to web submission to find these individual assignments one by one.

In order to make MyUni better and more convenient for all users, our team made this project. It aims to make MyUni users obtain external data more convenient, especially for faculties to get students' results.

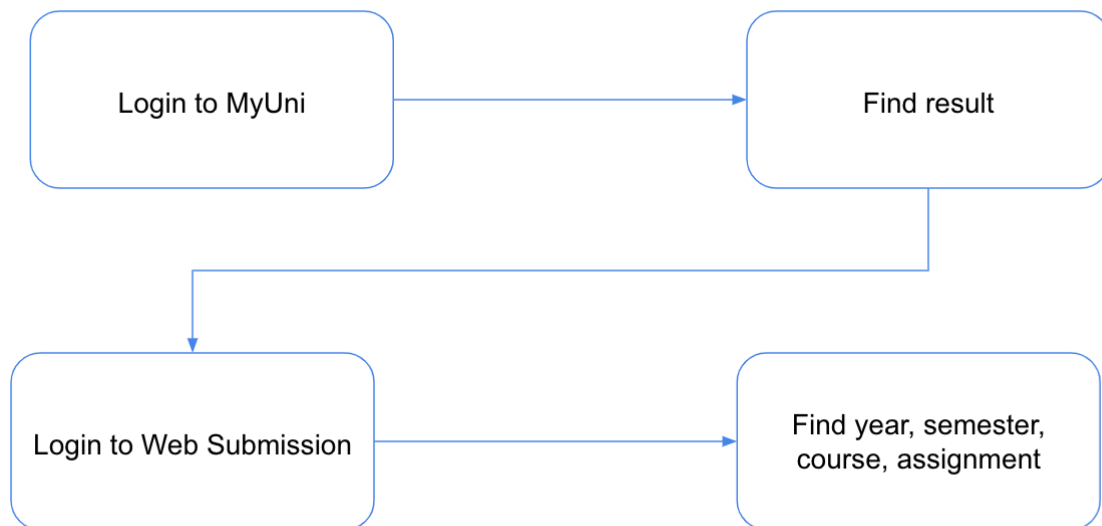


Figure 2. Current steps for students

After using this project (Figure 3), students' results in web submission can automatically import into MyUni. If there is any change in web submission, the results in MyUni will also change in time. Thus, for teachers, what they need to do is just set the link between MyUni and web submission for the first time and the results will automatically come to MyUni in time. For students, they will no need to go to web submission and they can get all their results in MyUni.

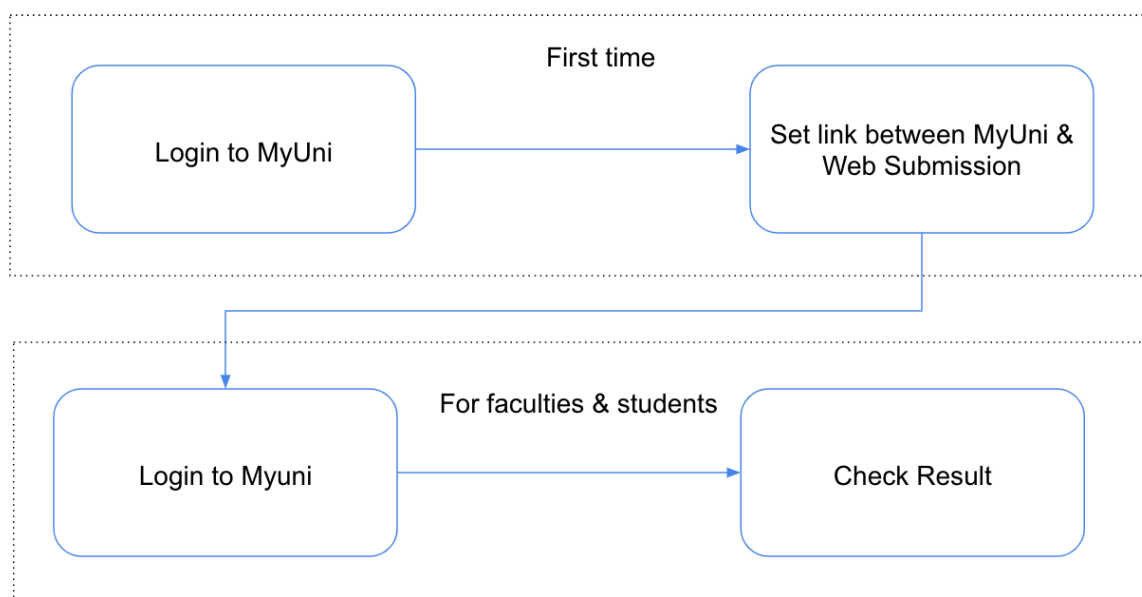
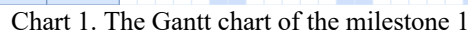


Figure 3. Steps for our project

In summary, our project is a link between MyUni and web submission and it can let MyUni users get results from web submission easier.

In this plan, the Agile method will be used in the development and management of the project. Due to the impact of COVID-19, some changes were agreed upon by the client: the milestone 2 has been removed from the plan. The next milestone will be the final project report. Therefore, there will be some activities, more than expected, added in the plan.

The GitHub will be used to manage, and version controls our works. All the documents, codes, meeting agenda and records will be uploaded to our GitHub repository, the link is: <https://github.cs.adelaide.edu.au/MCI-Projects-2020/Team36>. Overall, there are 7 critical activities during the first milestone. The Gantt chart is showed below:



From 26/03/2020 to 08/04/2020, the team will focus on the resource learning, including the Node.JS and service resource. All the materials are applied by the Ian.

From 01/04/2020 to 12/04/2020, the team should familiar with the operation on the MyUni Sandbox, such as add and modify the assignment.

From 02/04/2020 to 12/04/2020, the team learn the API of MyUni and Node.JS for the further works.

From 13/04/2020 to 23/04/2020, try to build the server which can add and modify the assignment.

From 16/04/2020 to 27/04/2020, programming for the application.

From 27/04/2020 to 30/04/2020, testing the application, finding the problems and defects to improve for the next iteration.

Activity 7: Submit the first Milestone report.

Team organization :

Team role:

Team master: Junze Huang

He needs to monitor the progress of the project to ensure that the project can be completed on time. Once a problem occurs in a certain part of the project, he discusses with the team members in time and makes adjustments to the project plan. In addition, he is responsible for hosting each meeting, organizing team members and assigning personal tasks.

Product owner: Sicheng Xin

Mainly responsible for pre-meeting communication with the supervisor, and appointment with him. He is responsible for ensuring that the supervisor's project requirements are not misunderstood and to ensure that each meeting with the supervisor goes smoothly.

Developer: Qianyang Tang and all the members

He is responsible for executing the project, including writing necessary files, writing code, etc. Whenever the project leader thinks that some details are not completed as required, he needs to make corresponding adjustments to the project according to specific needs

Communication Plan

Internal meeting:

Every week our group held at least an internal meeting. The meeting was held on Monday, including every group member. Each meeting lasts about an hour. During the meeting, each member of the group summarized his work in the previous week and expressed his views. After that, the team leader evaluated the personal task completion of last week. Based on the project completion in the previous week, the team leader set the goals for the next week and assigns personal tasks.

Whenever a member encounters a problem that the individual cannot solve, he can apply to other members for additional internal meetings. The team leader assessed the difficulty of the question and sent an email to ask the opinions of the team members. Finally, the team leader collects the personal feedback of the team members and decides the new meeting time, place and meeting content.

External meeting:

Every Wednesday, the team members will meet once with the supervisor. The meeting time is half an hour. At the meeting, we reported what we did and what kind of problem we met last week. We will discuss the solution of the problem with the supervisor and resolve the problem as soon as possible before the next meeting. Each client meeting, we had an agenda and minutes so that we can smoothly carry out the next meeting or review the previous meeting process.

Below are the meeting details:

| MCI Project Weekly Time Sheet of April | | | | | |
|--|------------------|---------|----------|-------------|------------------|
| Day | Date | Time In | Time Out | Total hours | Task |
| Monday | 6, 13, 20, 27 | 2:00 PM | 3:00 PM | 1 | Internal meeting |
| Tuesday | 7, 14, 21, 28 | | | | Personal task |
| Wednesday | 1, 8, 15, 22, 29 | 2:00 PM | 2:30 PM | 0.5 | External meeting |
| Thursday | 2, 9, 16, 23, 30 | | | | Personal task |
| Friday | 3, 10, 17, 24 | 1:00 PM | 5:00 PM | 4 | Teamwork |
| Saturday | 4, 11, 18, 25 | 1:00 PM | 5:00 PM | 4 | Teamwork |
| Sunday | 5, 12, 19, 26 | 1:00 PM | 5:00 PM | 4 | Teamwork |
| | | | Total | 13.5 | |

Figure 4. Meeting Agenda