Project Individual Task 3 - Requirements Review

We have formulated a range of requirements that support the main needs of the customer: <u>Mobile application</u>

- "Student life shall be compatible with all standard smartphones (Apple, Samsung, Google, Huawei and LG)"

Formation of intuitive individual and group calendars/ Help with event organisation

- A logged-in student shall be able to set a reminder for an upcoming event.
- A logged-in student shall be able to form a group calendar that tracks the events of the users in the group.
- A logged-in student shall be able to receive and accept event invites from other users.
- A logged-in coordinator user shall be able to create an event, set the details of the event and invite others to it.
- A logged-in coordinator user can delete events which they have created. This will remove the event from the system and notify all other staff members who accepted the invitation of the deletion.

Formation of intuitive individual and group communities

- A logged-in student shall be able to access and use the instant messaging system.
- A logged-in student shall be able to create a group chat with other users.

Facilitate for lending/borrowing study items

- A logged-in student shall be able to lend and borrow items from other users.

Creating challenges

- A logged-in student shall be able to create a challenge for themselves from the system.

Supporting educational activities

- A logged-in student shall be able to submit an assignment to the university from the system.
- A logged-in student shall be able to download available lectures from their classes.

<u>Integrate with the existing systems</u>

- The commercially available systems must be able to integrate with existing university systems.
- Commercially available systems shall be used for the messaging and calendar features of the system, limiting the amount of unique code that needs to be created.
- All anticipated software interfacing systems can be found in section 4.2

However, we have not specified all behaviours for anticipated error conditions. For instance, it has not specified what will happen if a logged-in student tries to submit an assignment to the university from the system which is larger than that allowed file size. In order to solve this issue, we will need to add a use case under the assignment submission requirement which states: "if the file uploaded is larger than the allowable file size, the system shall display a

message saying, "file size too large, please try again". Another instance where errors have not been identified is if the user does not complete the creation of challenges, events, group chats, or lending/borrowing submissions. These errors could be mitigated by specifying: "if the user has left a submission or field incomplete for a period of 24 hours, clear all entered data form the submission".

None of the requirements that have been created are duplicates, nor are any of them contradictory to each other. I believe that most of the requirement are written in clear, concise, unambiguous, grammatically correct language. However, there are a few requirements that are not written in this manner.

- i) "A logged-in student shall be able to create a challenge for themselves from the system" this requirement if ambiguous and unclear. The requirement could be rewritten as such "A logged-in student shall be able to create a challenge by entering the details of the challenge into the system"
- ii) "A logged-in student shall be able to set a reminder for an upcoming event." this requirement is ambiguous, due to the unspecified manner of the reminder. As such it could be rewritten as "A logged-in student shall be able to set a visual or audio reminder for an upcoming event."
- iii) "A logged-in student shall be able to create a group chat with other users." this requirement is ambiguous, due to the unspecified manner of the group chat. As such it could be rewritten as "A logged-in student shall be able to create an instant messaging group chat with other users".

All specified error messages, for instance, "user not found" if a user is not found when creating a group chat, are clear and concise with the displayed message. This ensure that any error is quickly and easily conveyed to the user. The only requirements that could be considered a solution and not actually requirements are those related to the creation of instant messaging groups. This is because the customer only specifies a need for the formation of intuitive individual and group communities, meaning this system does not necessarily have to be an instant messaging system. These requirements could be altered as such: A logged-in student shall be able to access and community channels, A logged-in student shall be able to create a community channels with other users.

Each of the quality attributes have been thoroughly analysed and specified. These attributes have been specified through establishing system requirements related to the attribute. For example, security - the application shall adhere to Adelaide University's security protocols when transferring any private information regarding users. Within our project we have also added availability and extensibility quality attributes, which cover functionalities related to future development of the application and when the system should be available for use. All time critical functions have been identified and time criteria have been established. Time criteria are mainly evident in the requirement for performance and availability attributes. Each of the quality attributes are testable and measurable, for instance security can be tested by trying to create an account with a non-university related email or by checking that breaches are recorded.