

SWEN303

Assignment 2 – Design

Jaimar Ong

300364226

Description

To help students find a room and a time to work together on projects and to study for different courses. The app should provide an interface for students who already know each other and the ability to meet other students interested in working on the same course/topic. There should be tools to help students communicate with each other and potentially link to project management tools.

An existing solution already exist for students to work on projects with students who knows one another or meet other students working on the same course. VUW library has a 'Book a group study room', where you can book a room in the 4 library campuses (Kelburn, Commerce, Architecture & Design and Law).

Business Description

As students, finding a room to study with other students/new people is helpful as it helps convey different ideas and understanding on the topic studied, meet new students doing the same course and work together on projects. Communication with students involved in the project is key to easily managing tasks to do. The Study Organiser should assist the students and tutors on finding a room to study or work with projects and manage it. By finding any room that is not being used for projects or a room that is studying the same course, alert students in a project through the app about task deadlines, roles, to-do-list etc.

The main objectives for Study Organiser business case:

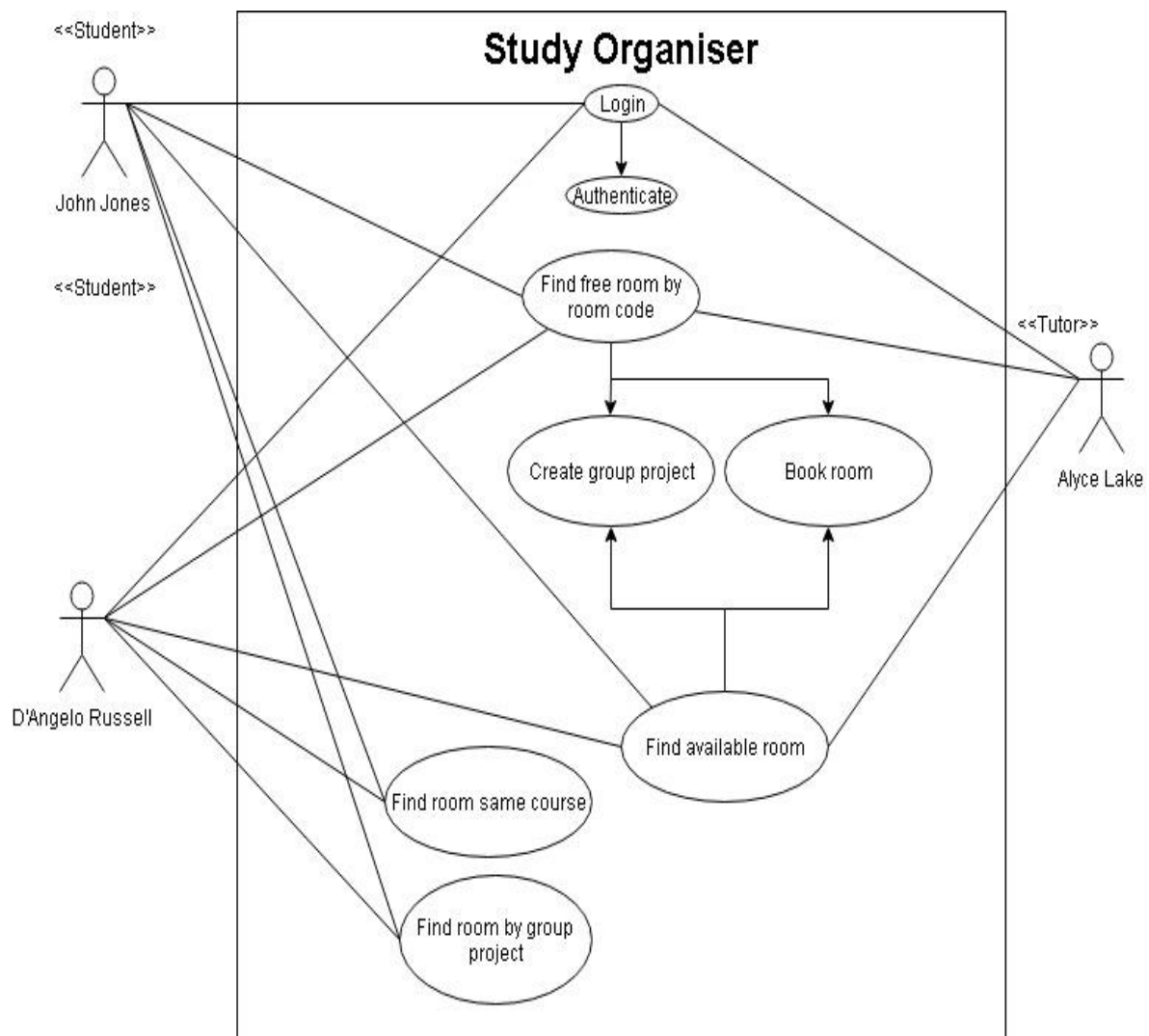
1. Assist students and tutors to find an available room that's studying the same course or book a room to work on projects.
2. Find all available room and be able to book or create a group project in that room.

Importance to Stake Holders

This system is important to students studying and tutors in the university as it helps students to study with other students and have tutors assist students to succeed in their courses. It will help the users to easily book or find a room.

Victoria University would need to know that their system is working well and it is the reason why creating a study organiser system is important so it can help student easily.

Model Overview



I'm using Cooper's persona technique to create my personas. There will be 4 personas, Alyce Lake(tutor), John Jones(student) and D'Angelo Russell(student). The **students** will find and book a room in two different ways, by **normally finding a free room** and booking it or finding a room, **creating a group project** and then booking the room. By creating a group project, it will be easier for other students to find the room where their project is. **Tutors** may also **book a room** for tutorials, so students may **find what room** their tutorials are.

The three types of users for the model will be John Jones persona, Alyce Lake persona and D'Angelo Russell persona. These personas are the types that would study and would use the system Study Organiser to help them succeed in their studies. I believe that by using these personas, the users of this systems would use it the same way as the personas and the scenarios.

Personas

John Jones

John is 18 years old, lived in Otago and lives in Te Aro Hall. His major is Computer Science in Victoria University. He needs to join a study group specifically for COMP 112, as he finds studying by himself difficult. His goal is to pass his course with at least an A but also would like to meet new people as he knows no one. He uses the Study Organiser and wants to find a room and book it or join a room that is specifically for COMP112.



[1]

Activities: John spends most of his spare time coding and studying in a computer lab on weekdays. Relaxes on weekends by drinking with the boys.

Attitudes: John is carefree, but is serious about his studies. He is an extrovert so he is quite loud. Always interested on learning a new algorithm.

Aptitudes: John is very intelligent and manages his time very well.

Weaknesses: John underestimates his work sometimes, leading to last minute work.

Domain Knowledge: No knowledge on the system.

System Knowledge: Not familiar but could learn to use it quickly.

Interaction: John wants to find a room associating with his courses or book a room to study quietly.

Priorities: John wants to find a study group and meet new people since he doesn't know anyone in university yet.

Motivations: John wants to use the Study Organiser to study and help with people doing the same courses as him. He believes that studying in a group helps him learn about different ideas people have and also voice out his ideas to others in the group.

Computer self-efficacy: John is pretty smart and will have no trouble adapting to learning the system.

Risk Tolerance: John makes a lot of risky mistake but learns what not to do next time and what is right.

Information Processing: John will try to figure out on his own how to find a room without any instructions.

Tinkering: John is carefree and will tinker with the new system until he understands how to use it properly.

D'Angelo Russell

D'Angelo Russell is a 23 year old students in Victoria University. His major is Psychology and on his 3rd year. D'Angelo has breezed through the couple of years in university as he studies very hard. His goal is to finish his last year of university but he has a lot of group projects to finish. He needs to book a room and create a group project as he is the leader of the group.



[2]

Activities: D'Angelo plays basketball and likes to donate to charity.

Attitudes: D'Angelo is very observative and tries to understand people as much as possible. He is willing to learn new psychological techniques.

Aptitudes: D'Angelo is on his 3rd year and is experienced on his field.

Weaknesses: D'Angelo only tries things he knows.

Domain Knowledge: Has a similar system in high school.

System Knowledge: He is familiar with the system due to using a similar system in high school, setting up a Facebook event or setting up an event on Google calendar. Though there are some options he needed to learn.

Interaction: D'Angelo wants to use the Study Organiser whenever he has a group project. He creates the group project room and let other students know in his group where the room is.

Priorities: D'Angelo wants to set up a group project in a room so his group members can study and discuss about the group project in their room.

Motivations: D'Angelo wants to have a room solely for the group project.

Computer self-efficacy: D'Angelo no trouble using it in first year due to having a similar system in high school.

Risk Tolerance: D'Angelo doesn't like to take risk and wants to avoid making mistakes because of the consequences he may face.

Information Processing: D'Angelo needs information to learn the system before trying it out himself. A step by step is what he prefers to avoid mistakes.

Tinkering: He doesn't like tinkering with a new system as he's a low risk person.

Alyce Lake

Alyce Lake is a postgraduate student in Victoria University, her major is Computer Graphics. She's 25 years old, her goal in life is to finish her PhD and work for Activision. She wants to help younger students doing computer graphics by participating as a tutor and go to the rooms specifically for comp students. She's used the Study Organiser system before.



[3]

Activities: Alyce likes to make new games while she's at home. Enjoys showing her games to other people. She likes helping others as well.

Attitudes: Alyce is very enthusiastic and is always positive. She's excited to finish her PhD and work.

Aptitudes: Alyce is on her Master's and has a couple of years left in university.

Weaknesses: Alyce can be impatient.

Domain Knowledge: Has used a library book room system in university that's similar to the Study Organiser system.

System Knowledge: She's familiar with the system by using the library book room system.

Interaction: Alyce interacts with the Study Organiser whenever she needs to book a room for a tutorial or find a room and help a study group.

Priorities: Alyce wants to be able to find a room and assist that study room.

Motivations: Alyce enjoys helping whenever she's free and by using the system, it makes it easier to find the room.

Computer self-efficacy: Alyce adapts to systems she has to use, as she plays with the system until she understands it fully.

Risk Tolerance: Alyce takes risk as it helps her learn and understand what not to be done.

Information Processing: Alyce searches for information while figuring out how the system works.

Tinkering: She likes tinkering with the system until she believes that she understand how to use it properly with information searched.

Scenarios

Find a room by course (Student, Tutor)

User Intention	System Responsibility
	Ask for login
Enter login	Check login
	Shows option
Choose find room by course	
	Ask for course code
Enter course code	Finds room using course code
	Shows room codes associated with course code

Find specified room then book (Student, Tutor)

User Intention	System Responsibility
	Ask for login
Enter login	Check login
	Shows option
Choose find room by room code	
	Ask room code
Enter room code	Check room availability
	Show room status and options
Choose book room	
	Ask user for name of room
Enter name of room	System updates database
	Shows room is booked, the room code and room name

Find specified room and create group project (Student)

User Intention	System Responsibility
	Ask for login
Enter login	Check login

	Shows option
Choose find room by room code	
	Ask room code
Enter room code	Check availability
	Show room's status and option
Choose create group project room	
	Ask for user for name of room
Enter name of room	
	Ask user for group member names and course code
Enter group member names and course code	System updates database
	Shows room code, group project name and course code

Finding room by group project(Student)

User Intention	System Responsibility
	Ask for login
Enter login	Check login
	Shows option
Choose find room by group project	Checks room with group projects
	Shows room with group projects listing user's courses first
Chooses group project that user takes	Show group project details (group members name, project name, room code and course code)

Find all available rooms then book(Student,Tutor)

User Intention	System Responsibility
	Ask for login
Enter login	Check login
	Shows option
Choose find available rooms	Checks rooms available
	Shows room available and option
Choose book room	
	Ask for room name
Enter room name	System update database
	Show room name, room code and that it is booked

Linking project management tools (Student)

User Intention	System Responsibility
	Ask for login
Enter login	Check login
	Shows option
Choose group project	Checks group project associated with student
	Shows group project details and project management tool available
Chooses project management tool eg: Trello	Redirect user to Trello website

Finding a specified room but not available(Student,Tutor)

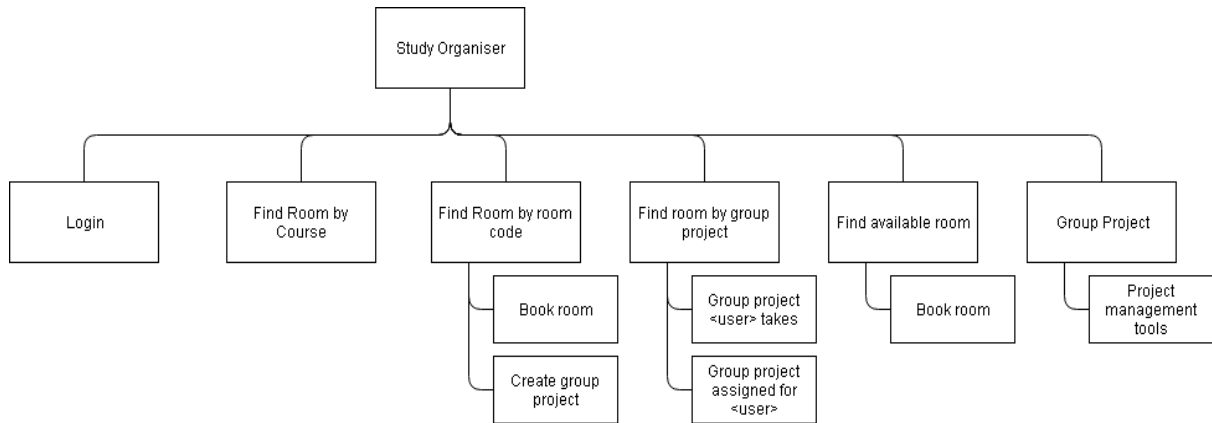
User Intention	System Responsibility
	Ask for login
Enter login	Check login
	Shows option
Choose find room by room code	
	Ask for room code
Enter room code	Check availability
	Show room is booked
	Return 'show option'

Finding group project room (Student)

User Intention	System Responsibility
	Ask for login
Enter login	Check login
	Shows option
Choose find room by group project	Checks room with group projects
	Shows room with group projects listing user's courses first
Chooses group project assigned for user	Show group project details (group members name, project name, room code and course code)

Design

I created a site map which helps view how the system will be connected to each other by the use of my scenarios. With the site map, I'm able to create mock up pages by the use of Balsamiq and show my design of the system.



Login page

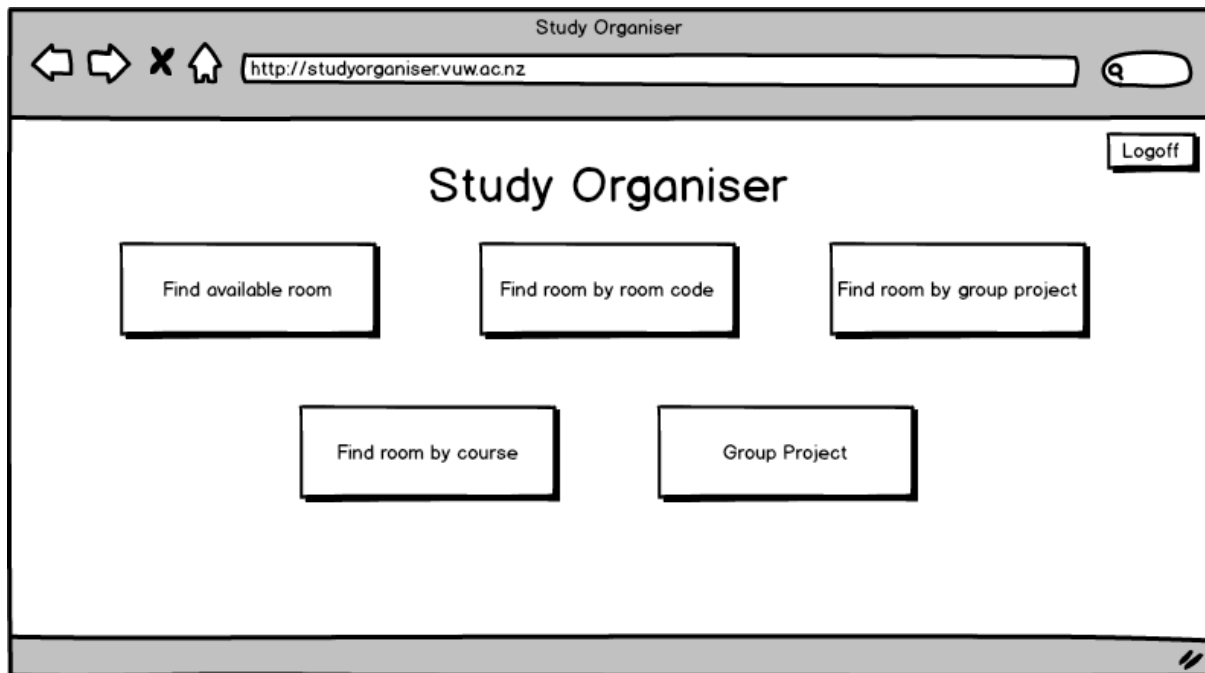
Before booking a room or finding a room, the system needs to ask for the login to make sure that the student or tutor is still enrolled in the university.

The mockup shows a web browser window titled 'Study Organiser'. The address bar contains the URL 'http://studyorganiser.vuw.ac.nz/login'. The main content area displays the 'Study Organiser' title, followed by a 'Login' heading. Below the heading are two input fields: 'Username' and 'Password'. A 'Login' button is positioned below the password field. A blue link labeled 'Forgot password?' is located below the login button. The browser window includes standard navigation icons (back, forward, home, search) and a search bar in the top right corner.

The user will need to enter their login details to continue. If they've forgotten their password or login details, they are able to reset or find out their details by pressing on the link. I think it's good to have a login page for security purposes, so that only enrolled students/tutors can book study rooms.

Main page

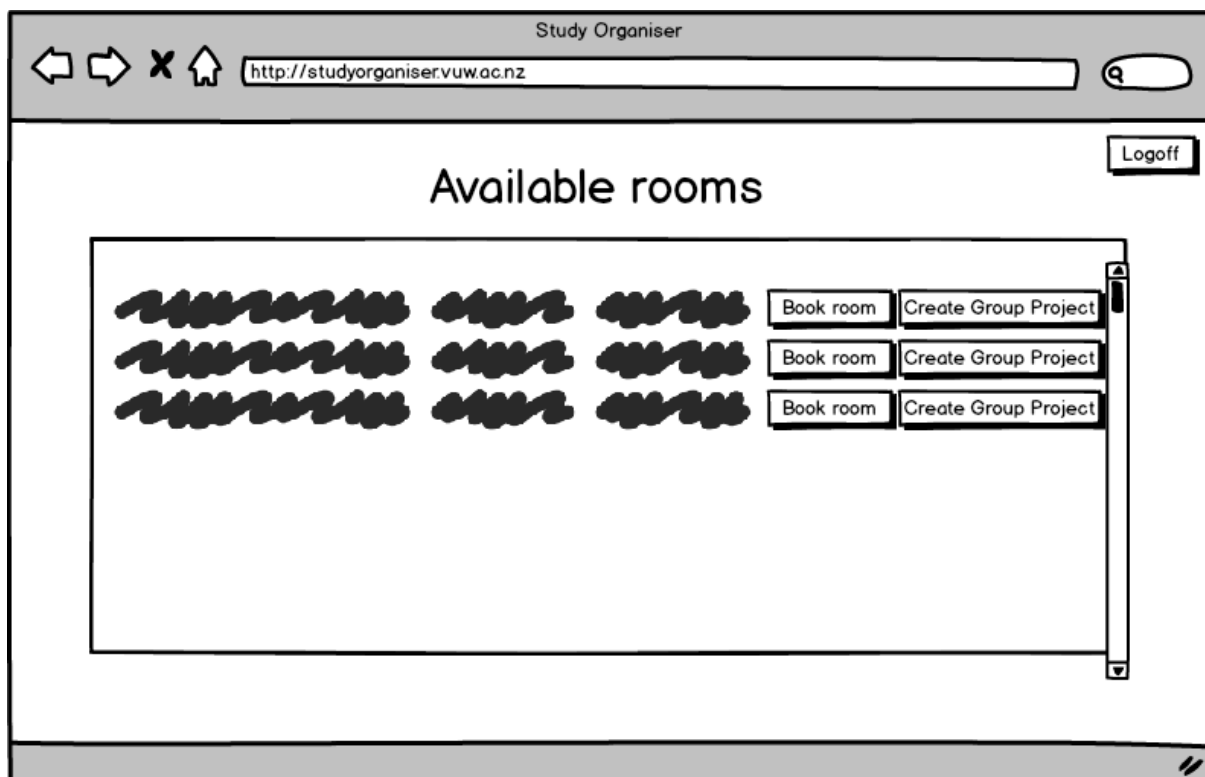
The main page will give the user the options to find a room depending on the situation (group project, room code, course code or availability wise).



This page will show the options to find a room and the option for managing group project, if the user is the team leader. There is also a logoff button when their done with the system.

Find available rooms

This page will find every available room in the database and show it to the user. The user then chooses a room.



The user may then book the available room or create a group project room.

Find room by room code

This page is for finding a room by the user's input room code.

The screenshot shows a web browser window titled "Study Organiser" with the URL "http://studyorganiser.vuw.ac.nz". The page has a "Logoff" button in the top right corner. The main heading is "Find room by room code". Below the heading, there is a "Room ID:" label followed by a "Search" button. A large black scribble obscures the main content area. At the bottom of the page, there are two buttons: "Book room" and "Create Group Project Room".

On the top, the user is required to search for the room code they want to see, in the big window it'll return the status of the room. If it's available, the system allows the user to book the room or create a group project room, if it's occupied the buttons will be locked, not letting the user press the button.

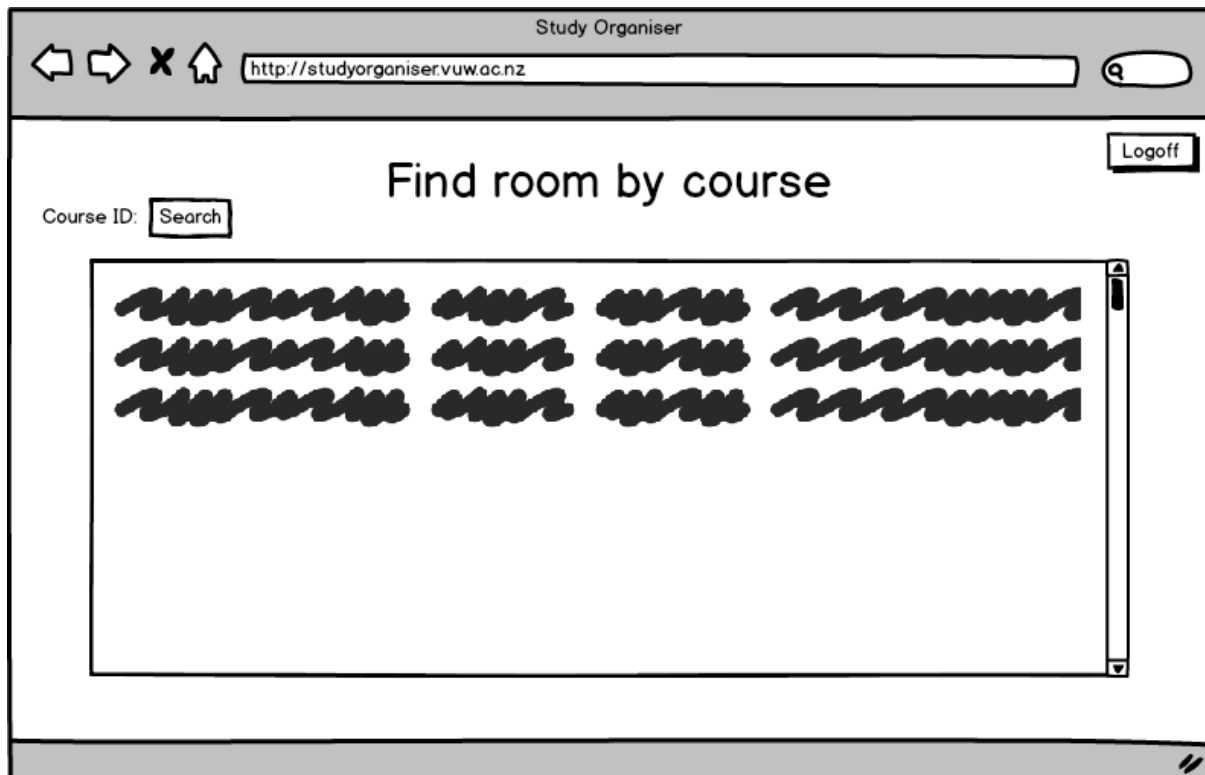
Find room by group project

The screenshot shows a web browser window titled "Study Organiser" with the URL "http://studyorganiser.vuw.ac.nz". The page has a "Logoff" button in the top right corner. The main heading is "Find room by group project". Below the heading, there is a "Group Project name:" label followed by a "Search" button. To the right of the search area, there is a label "Group project assigned to" followed by a dropdown menu. A large black scribble obscures the main content area. At the bottom of the page, there are two buttons: "Book room" and "Create Group Project Room".

This page finds the room which the user's input of the group projects name. The user also have an option to find the projects assigned to them, if they have been added in the project by their group leader. In the big window, it'll display the room that has the associated group project name and what the status of it. The user will then be able to know where the room is located.

Find room by course

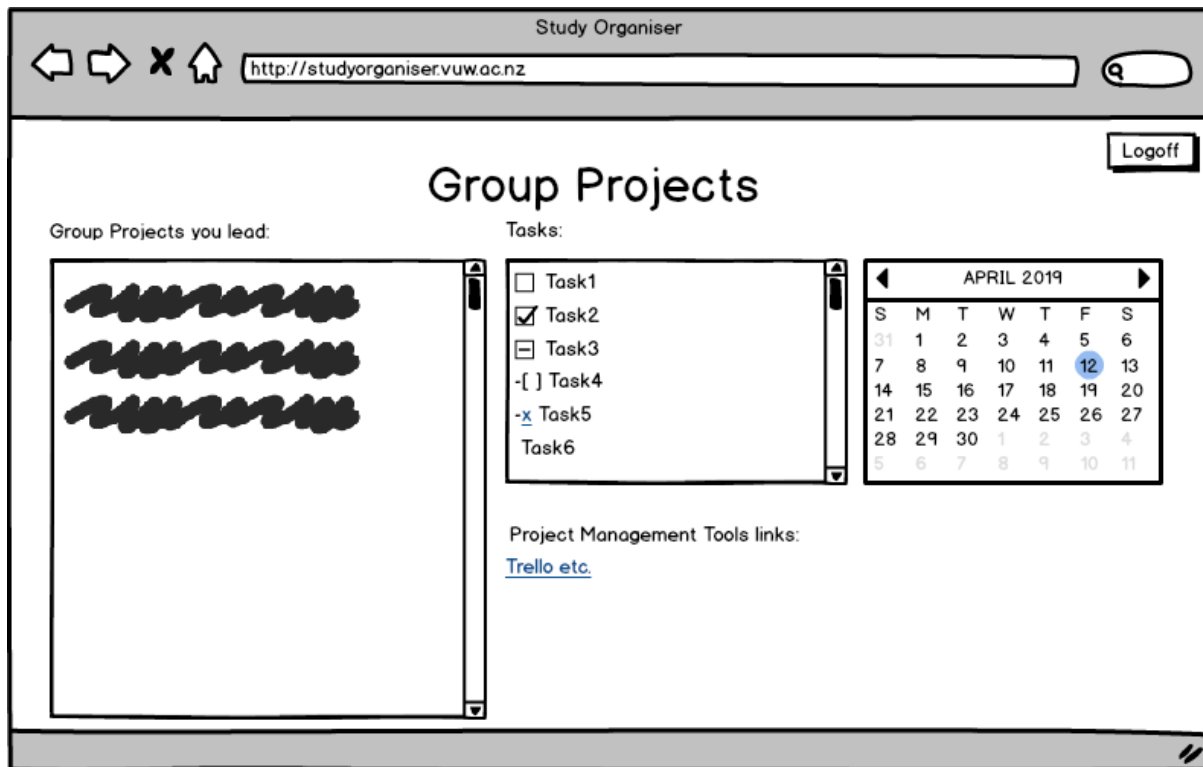
The page lets the user search for a room by the use of their course ID. It'll return all the room code that is associated with the course ID.



There will be a search box for the user to enter the course ID and in the big window, it'll show all the room code and status associating to that course ID. The user will then be able to locate the room they want to go to.

Group Project

This is a page solely for group project leaders to manage the project. The user, if they're a group leader, is able to see all the group projects they lead and the tasks that has been done and not been done. There's also a calendar for due dates and links for project management tools so they can easily manage their group project by using the tools that's optimized for group projects.



Updated reflection

Persona

I learnt that the users I created during the creation of the personas were finding out who would use the system I have created. I had difficulty creating the personas because of their personalities. I liked that my personas are quite different to each other, with their motivation, how they want to use the system and their personality. What I disliked though is that their all students. I was surprised though how nicely they worked out for making scenarios, making them easier because of their motivation to use the system. I believe that students that loves to study would use this system multiple times while I was thinking about the users who would use this system.

Scenario

I learnt that with the help of the personas I created, that the system is what the user would want to use. With the use of the personas, I was able to create scenarios in terms of how I believe users would use the system. Without the personas it would have been difficult to know what scenarios to create and it would be less effective. I liked that I was able to create scenarios effectively because of the personas, it helped it by the motivations of the personas and having purpose related scenarios for the system.

Design

The pros of this design is that it is pretty simple to navigate and choose what the user would want to do depending on what information they want to search, it could be the room code, course code or group project name. Their also able to create rooms easily by being shown all the available rooms to them or simply choosing a specific room, but only if the status of the

room is not occupied. The cons of the design, from what I have noticed, is that I believe have not optimally planned the pages and I could have done better with planning it. What I liked about the design though is the ability to find a room 3 different ways and provide the user the room code. I did not like the group project management part though, as I think that I have not done it nicely.

I made a small change to the personas with their general knowledge and system knowledge as they haven't used the system yet, previously I assumed that they have used the system. Also, minor change for D'Angelo for his personality. I haven't changed anything for the scenarios though.

References:

- [1] <https://www.brainscape.com/blog/2012/02/nerd-is-the-new-cool/>
- [2] <https://www.netsdaily.com/2017/8/2/16082192/dangelo-russell-attracts-a-millennial-fanbase-in-brooklyn-nets-fanbase>
- [3] <https://www.collegepineapple.com/study-tips/top-ten-study-tips-for-college-students/>