# CPSC 481 Group Project

Stage 3 Deliverables

Group 2.4 - Ivan, Karen, Louise, Nathan, Osa

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### **Brainstorming Session**

To kick off the ideation phase, we first brainstormed our ideas and sketched them out on pieces of paper individually.

#### **Sketches**

We came up with different ideas of how we visualised the user interface of *U-Collaborator*. Below are some examples of the sketches that we came up with:

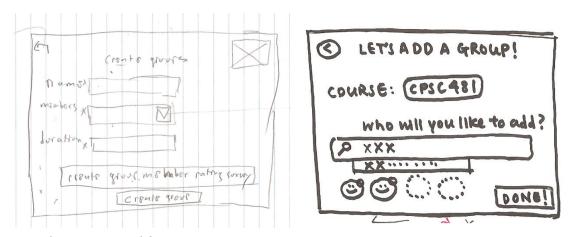


Figure 1: Ideas generated for creating a group

Figure 1 shows two examples of how our team visualised the interface of the app when it comes to creating a group. The image on the left takes into account the duration of how long the group will be created for and also a group member rating survey. On the other hand, the sketch on the right just focuses on adding group members, but the search bar comes with an autofill suggestion feature.

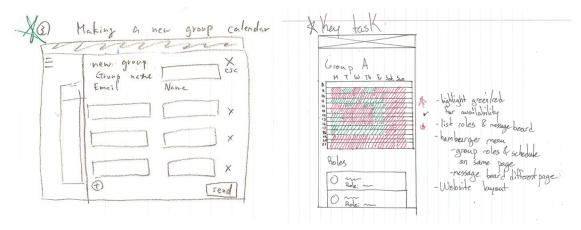


Figure 2: Ideas generated for creating and displaying a group calendar

Figure 2 shows two sketches from two different team members, but they can be combined to form one feature - which is to create and display a group calendar. The sketch on the left shows how one may create a group schedule and send invitations to members via email, while the sketch on the right shows how the group schedule generated will be displayed. The green timeslots indicate timings that most group members will be free to meet up, and red timeslots indicate timings that most members in the group are busy.

The following link includes all the sketches the group has come up with: <a href="https://drive.google.com/open?id=1Tb4WVbyYaoKrPikiShY26-OguDl">https://drive.google.com/open?id=1Tb4WVbyYaoKrPikiShY26-OguDl</a> 7fzl

#### **Affinity Diagram**

After coming up with the different ideas, we reorganised our ideas with the help of an Affinity Diagram. We ended up being able to group these under 5 umbrella features: Study groups, group contracts, crash courses, and profiles & data collection.

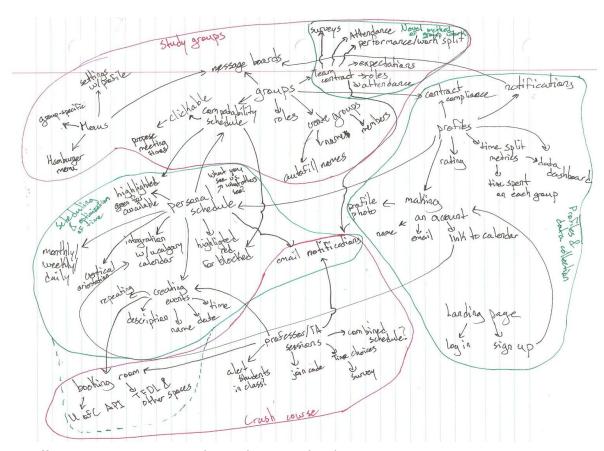


Figure 3: Affinity Diagram Generated Based on our Sketches

### Most Promising Ideas

Out of the different ideas we generated, some of the more promising ideas include:

- Creating a group with the option of creating a team contract
- Group Scheduler to help facilitate common timings to meet
- Direct booking of facilities for group meetings through this app

## Storyboard

This storyboard will focus on illustrating the task of creating a group and team contract. We think that this task is essential as the user would have to create a group before they can use the other features in *U-Collaborator*.

Here is the link to our storyboard:

https://docs.google.com/document/d/1CnnOmXql1En-NgaFn0icFxQecJselQ8swN2TbmvAAh 0/edit?usp=sharing

### Lo-fi Prototype

We used our storyboard as a reference to proceed creating our Lo-fi prototype using Balsamiq.

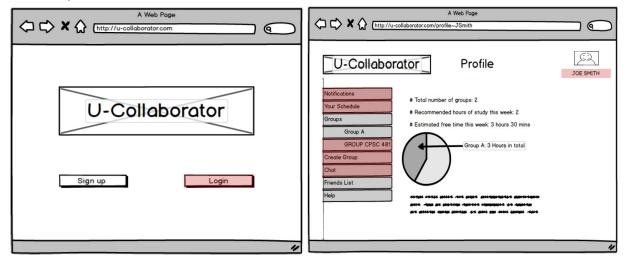


Figure 4: Screenshots of our Lo-Fi Prototype

Some of the core tasks that is featured in our prototype include:

- Creating a group/team contract
- Adding external calendars to your personal schedule
- Chat feature

## Task-Centered Design Walkthrough

We evaluated three tasks step by step to see how the application system behaves and how the users would react with the system. We chose tasks of creating a group and a team contract, adding external calendars to your personal schedule, and chatting with someone for task-centered design walkthrough, since they are the tasks that we chose for Lo-fi prototype and they all involve task steps from users.

#### Creating a group and a team contract

Description of task step	Does user have training or knowledge to do this step? Is it believable that they would do it? That is, are they motivated?	Comments (including possible solutions)
Logging into the system and navigate to the create group option in the left menu	The user should be familiar with this task from other applications, but may have to search for the create group button. It is believable that they would do it and would want to do it if they want to create a group & coordinate with other users.	Team contract is not an explicit part of the menu item. Could include the option to create a team contract after the group is created.
Enter group name and members, then click the create team contract button	The group name is fairly self-explanatory, and adding members allows the user to search for a name. This allows core functionality of a group, and therefore would be important to the user.	Searching for a name may not be intuitive at first. It will be important that the question mark box be clickable to aid the user's exploration.
Fill out group expectations, consequences, goals and roles, then click the continue to create team survey button	If the user has consented to creating a team contract, the user simply fills in all of the data needed for the team contract. This is an important step for the user because this step formalizes a team contract.	Types of roles may be confusing or even generating team goals, expectations and consequences might be a little difficult at first. By pressing the question mark box, there will be examples and

		explanations as to how to fill in a team contract
Create survey questions, then click the create group button	The create survey button should be labelled appropriately so that the user knows what it will do. It is believed that the user will be motivated to create survey questions such that they have established an objective measure of individual performance throughout the semester.	Help buttons should be available to guide the user through the creation process, in case this is not an intuitive step.

## Adding external calendars to personal calendar

Description of task step	Does user have training or knowledge to do this step? Is it believable that they would do it? That is, are they motivated?	Comments (including possible solutions)
Once signed in, you should land on your profile page. Then click on the "Your Schedule" button.	This should be an intuitive step, as the button in the left hand menu. The user will be motivated because he or she has to work with other people. In other words. Everyone in a group will need to update/post their schedule to coordinate as well.	This step should not be completely new to the user but if it is, then the user should just pay attention to the functions available on the left side or could just click on the help button for more assistance.
Import an external calendar by clicking on the "Import Schedule" button at the bottom right	Importing a calendar requires a link from a third party app. They may or may not have the knowledge to do this, but we believe that they would be motivated to figure it out as the convenience of an updating schedule is not to be understated.	This is a very straight forward command. The Import-external-calendar button explicitly gets the user started with this step.
Name the calendar, and then import it	After adding the link to your calendar, naming it should be straightforward. Since the user has put in the effort to	While the form is quite straightforward, finding the link in a third party

link their external calendar, it can be assumed that they would want to name it as well.

app might not be. Should explain how to do this for google calendars due to their popularity.

### Chatting With a Friend Through Direct Messaging

Description of task step	Does user have training or knowledge to do this step? Is it believable that they would do it? That is, are they motivated?	Comments (including possible solutions)
Enter the webpage, go to your profile and click on the "Chat" button	Most social media apps have a chat feature already and, since it's in the left hand menu with all the other options, should be fairly intuitive. The user will be motivated when they need to communicate with other group members.	There should be few problems with this step.
Search for desired user by typing their name, and then click on start chat button	As above, this is a common feature in most social media apps. This app didn't really change this feature since most users are already familiar with it. It is believable that the user will be comfortable and motivated because it is likely that the users has made this step before in other apps.	The question mark will assist the user if this step is new.
Switch conversations by clicking on another user's name to go back to conversation	Chatting with other users is a convenience feature for many applications. It is believed that the user will most likely be in a position where he or she will have to talk to multiple group mates independently.	The user just has to click on the other users' name when he or she desires to talk to them.

### Video Prototype

We also created a video showing how the user will navigate the interface whilst completing the core tasks we incorporated in our lo-fi prototype, which are:

- Creating a group/team contract
- Adding external calendars to your personal schedule
- Chat feature

Here is the link to our video prototype:

https://drive.google.com/drive/folders/1w-eYhUNe2t4WAkMDkXC86uhfZx3tqgPQ

## **Powerpoint Slides**

Last but not least, we created a set of Powerpoint slides describing all our Stage 3 Deliverables as well.

Here is the link to our Powerpoint slides:

https://docs.google.com/presentation/d/1JT6PvHYbQqvl2nytEMqruTazxkFun2HYqj-x6r5ma 20/edit?usp=sharing

#### Reflection

#### What went well

- **Brainstorming session** Helped us to show our individual design ideas for *U-Collaborator* to the other members and we were able to see how each of us had many different ideas with regards to the same concepts and tasks. By having many sketches, we were able to weave and incorporate our ideas together without incurring any conflicts.
- **Affinity Diagram** Was effective in helping us visualize the tasks from discussing the designs from sketches.
- **Lo-fi Prototype** Based on the storyboard, our Lo-fi Prototype was implemented well and we were able to see what could be changed to make it more efficient. This will enable users to be more motivated to use *U-Collaborator*.

#### What went poorly

- **Brainstorming session** Sketches were useful, but they did not create a cohesive whole. The storyboard still had to iterate on the generated sketches to create something which was more acceptable and had good flow.
- **Storyboard** Due to the limited time we had, the whole group was not able to do the storyboard together. This led to some confusion on the design and we did not

- notice some design flaws that made our walkthrough seem inefficient. Hence, we had to revisit our storyboard to edit the design after creating the Lo-Fi prototype.
- Task-Centered Design Walkthrough Walking through each step on a certain scenario helped us to focus more on the details for each task. However, the questions on the diagram for task-centered design were not really fitting with our application. For instance, "Does user have training or knowledge to do this step?" does not help with improving our design much since our app mainly targets students, who are familiar with these kind of applications already.

#### What would you do differently

- **Brainstorming session** We could have organized our sketches more naturally and generated more ideas off of each other's sketches. There were time constraints which
- **Storyboard** We could have set aside more time on doing the storyboard together in order to prevent any confusion from happening in the first place.
- **Task-Centered Design Walkthrough** In order to make it more useful and possibly have more thoughts on new solutions, we could have come up with different prompting questions that will fit better for our application.