User Research

- **Objectives**

❏ We want to understand how people usually manage their tasks
❏ We want to identify key pain points in their task management process.

- **Participants**

❏ The target user for our app are college students who multitask and hope to better organize their timeline when doing large projects. We reached out to Cornell students via social media and ten of them responded. The interviewees are Cornell undergraduates from different majors, including Computer Science, Maths, and Information Science, and Economics.

- **Interview Questions**

❏ Have you ever worked on a group task / assignment / project that takes you several days / weeks?
❏ If so, how do you feel about working on such a group project that takes you relatively long time. If not, how would you feel if you need to work on a large project?
❏ When you work on this large project, how do you usually track your progress? / Image you are working on this large project, how would you track your progress?
❏ How do you feel about tracking your progress this way?
❏ Have you ever worked on multiple tasks at the same time?
❏ If so, how do you feel about that? If not, imagine that you are working on multiple projects for different classes at the same time, how would you feel?
❏ Have you ever missed any deadline for an assignment / project / etc. ?
❏ If so, what was the reason (why did you miss the deadline)? If not, what do you usually do to make sure you are on track / don't miss any deadline?
❏ Do you use any scheduler apps? If so, what are they and how is your experience?

- **Findings and problem statement**

- ❏ More than half of our participants use or have used scheduler apps on their mobile phone. We found that the most common option people have is sharing google calendars among team members. Users receive the google calendar invitation and add it to their own schedule to keep track of meeting times and task deadlines. They found it helpful because they don't need to type all the information about the timeline on their own. By accepting others' calendar invitations, they will have all the important timelines automatically appear in their schedules.
- ❏ However, one complaint people have towards this calendar scheduler is that it's sometimes confusing and time-consuming to group multiple time/deadlines/tasks that belong to the same category together. Categorization requires additional efforts, so many of our users said that they are just too lazy to do so. As a result, people found it hard to visually keep track of their progress / timeline towards several tasks for a specific project while using the app.
- ❏ Another major complaint people have is the confusion in tasks assignments among team members. People usually only track tasks that are assigned to themselves in their calendar to avoid information overload. But many projects require communication and collaboration among team members. So when they need help/communication with other members who work on other parts of the project, it takes them additional time and effort to feature out who they should reach out to, making them less efficient in completing the large project as a whole.
- ❏ Some users prefer keeping physical records of their timeline to make sure that they stay on track. They write them down on post-it notes, or to-do lists on their scheduler notebook to remind themselves of important time and deadlines. They found it visually organized because they can customize and arrange all of timelines in their own way.

To reflect on the above research findings, we define the **people problem** as following:

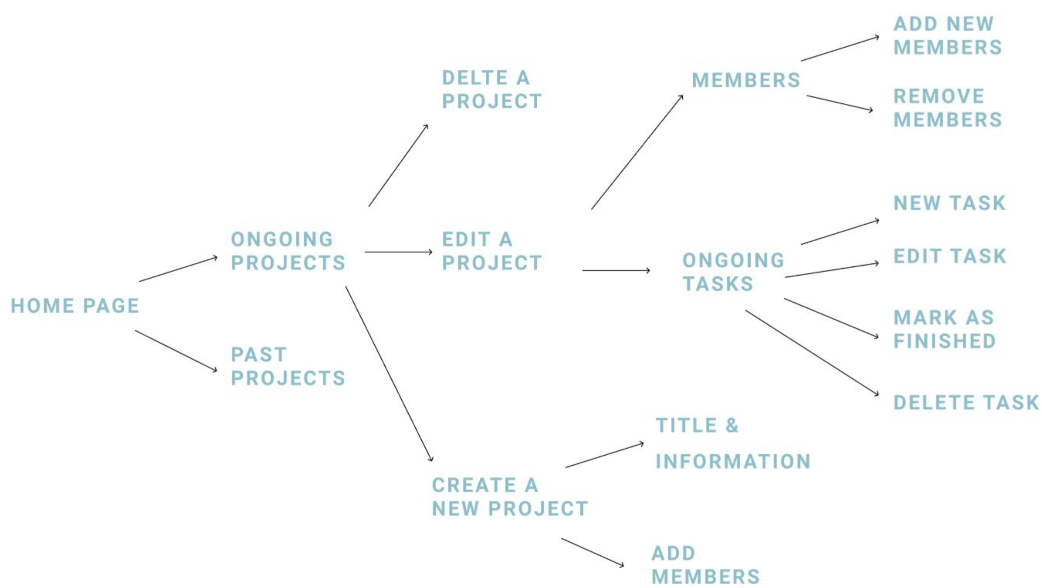
When I work on multiple group projects at the same time, I want to finish all the tasks that are assigned to me as effectively as I can, and to keep track of the progress for group projects as a whole. I can't do this well because:

1. All timelines for differents projects are mixed in a single page so it takes me additional efforts to figure out my progress towards one specific project;

2. I only track tasks that are assigned to me, so I don't know much about our progress for the project as a whole;

Information Hierarchy

This information hierarchy diagram illustrates all the features in relation to the app as a whole.



Identify Necessary Interactions

1. **Creating a new project**
    - ❏ Navigate to entry point
    - ❏ Click on "add" button and direct to an add subpage
    - ❏ Give project title and information
    - ❏ Add members
    - ❏ Finish creating

2. **Creating a new task in a project**
    - ❏ Navigate to entry point
    - ❏ Select the project and see a list of tasks in this project

- ❏ Click on “add” button and direct to an add subpage
- ❏ Give task name and note (optional)
- ❏ Give the deadline for this project
- ❏ Assign member(s) to this task
- ❏ Finish creating

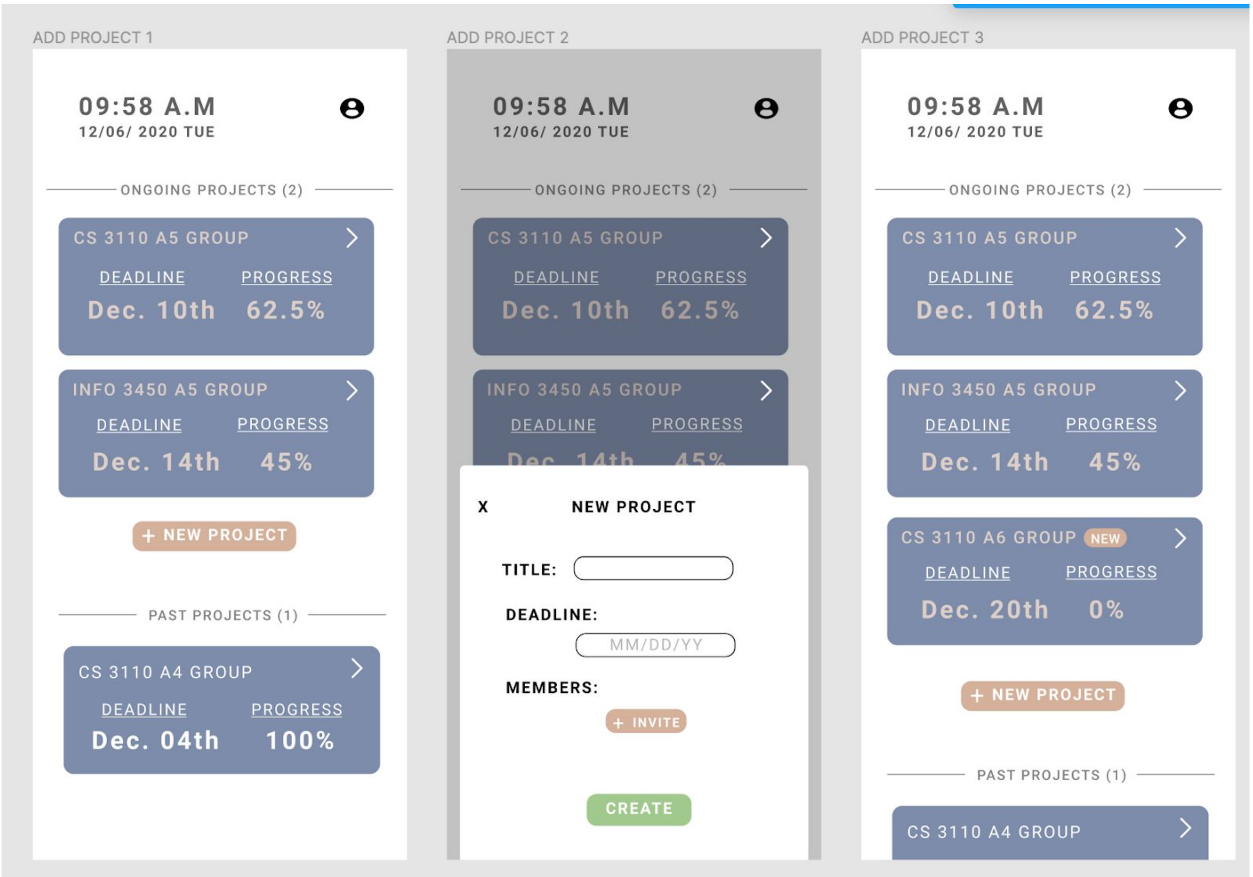
3. **Adding new members to a project**
    - ❏ Navigate to entry point
    - ❏ Select the project and see a list of group members in this project
    - ❏ Click on add button
    - ❏ Add new member by entering their email addresses
    - ❏ Finish adding

4. **Remove a member from a project**
    - ❏ Navigate to entry point
    - ❏ Select the project and see a list of group members in this project
    - ❏ Click on edit button
    - ❏ Select the member
    - ❏ Click remove button
    - ❏ Finish removing

Crafting the Prototype

Here are some initial ideas of the core interactions necessary for how the user might enter, complete, and complete several tasks.

1. **Adding a new project**



- **Entry Point:**

The entry point is the home page. It is the first thing users will see after they enter the app. There is a list of ongoing projects on the home page and an add button. The users can add a new project by clicking on this add button.

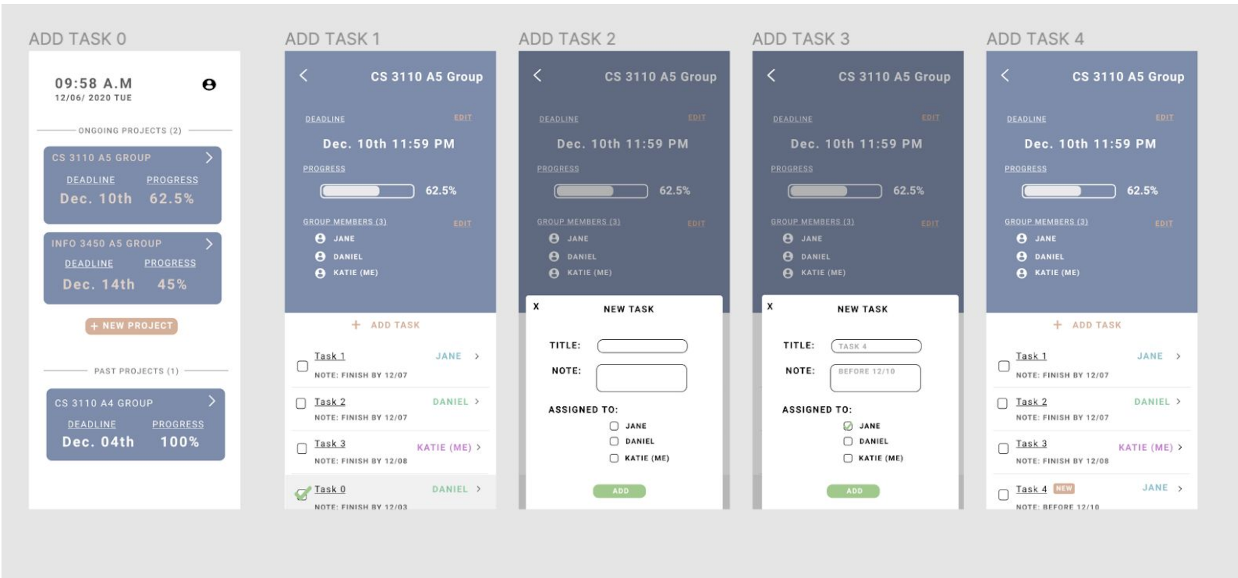
- **middle:**

Through the middle steps, the users will be directed to an add subpage where they can create a new project. They can enter the title and deadline of the project and also add members to it. They don't need to add a new task to it right now when they create the project (they can do it later, see exploration 2)

- **End:**

After finishing entering the necessary information and clicking on the add button a new project will be created and appear among the list of projects in the home page. It will be labeled as “new” so that users can know that they successfully create a new project and can quickly locate it among other ongoing projects.

2. Adding a new task in a project



❑ Entry Point:

The entry point is the home page. It is the first thing users will see after they enter the app. There is a list of ongoing projects where users can decide and select which project they would like to add this new task in.

❑ Middle:

Through the middle steps, the users will find more details about this project they select. In the project subpage, they can add a new task by clicking on the add button. An add subpage will pop up, where they can enter the title of this task and assign team members to it. Both of these two fields are required. Users can also describe some requirements (such as the deadline) of this task in the “note” field, but this part is optional.

❑ End:

After finishing entering the necessary information and clicking on the add button a new task will appear on the project subpage and will be labeled as “new”, so that users can know that they successfully create a new task and can quickly locate it among other tasks.