

CPSC 481 – Fall 2020

Team Project

Stage Three

Tut04

TA: Philmo Gu

Team T

Alexis Lee (30063571)

Isabella Guimet (30040654)

Gabriel Bondad (30050828)

Jiro Go (30053470)

Repository: <https://github.com/isaguimet/CPSC481-TeamT>

Portfolio: <https://gbondad.github.io/481portfolio/index.html>

Project Description

Progress calendar is essentially a calendar application with project management features that will be available in web platforms. The app tracks the progress of a project and visualizes it in a way that is both informative and transparent to the user. Like any other calendar app, a user will be able to add scheduled events and tasks. However, it's in adding projects that this app shines. Users can automatically separate a project into manageable iterations that can easily be pinned to a date. Users can also see the number of tasks and projects left to do in chronological order along with its corresponding progress bar. Mainly, the user base will be people who want to keep track of their projects, this can range from students to project managers. Another unique aspect of the application is its "Rewards" feature. The user can achieve various kinds of rewards (e.g., completed 5 projects, spent 30 hours on a project, etc.). They can also connect with friends that are also users of the application and a leaderboard will be displayed to show how the user compares in their reward achievement to their friends. We expect this to be used in the everyday lives of our users, as a calendar and for helping them manage their work and stay motivated.

Updated User Tasks and Descriptions:

Vertical

- **Add a new project:**

User opens the web application and logs in. User clicks on a pencil icon located on the main page (note that this is the monthly view) or they can click on any day in monthly view or weekly view. Then a small window for filling in the details of a new project will show up. They will then fill in the information - title, description, # of iterations, tags, deadline. Then they will click the "Create Project" button. Doing this will make another pop-up window "Create Iterations" show up. Here, the user will enter information about the iterations – deadlines, descriptions, etc. Finally, clicking on the "Create Iterations" will add the project and iterations to the appropriate dates.

- **View their progress done on the project:**

User opens the web application and logs in. User will click on the "Progress" tab on the navigation menu at the top of the screen. Displayed by a progress bar, user will see the progress made on each project, and clicking on the project title will display details about the project (e.g., iterations left, completed iterations, etc.). Users can also view their progress by the statistics section, where a line graph and a table are presented displaying information such as hours spent on a project, workload left, etc.

- **View rewards (and use the other features - Share, Connect, Rank):**

User opens the web application and logs in. User will click on the "Rewards" tab on the navigation menu at the top of the screen. User will view rewards earned in two different modes (by projects and by completed/in-progress). User can also click on a specific reward icon to view

details about the reward. Then the user can click “Share” tab to share their progress on the rewards by the generated share link or to specific social media sites. Next, to add a friend, user will click on the “Connect” tab and either enter the email address of the person that they wish to add or use the “Quick Add” section that displays users with mutual friends. Then the user will click on the “Rank” tab that will take them to a leaderboard page displaying their rank compared to their friends.

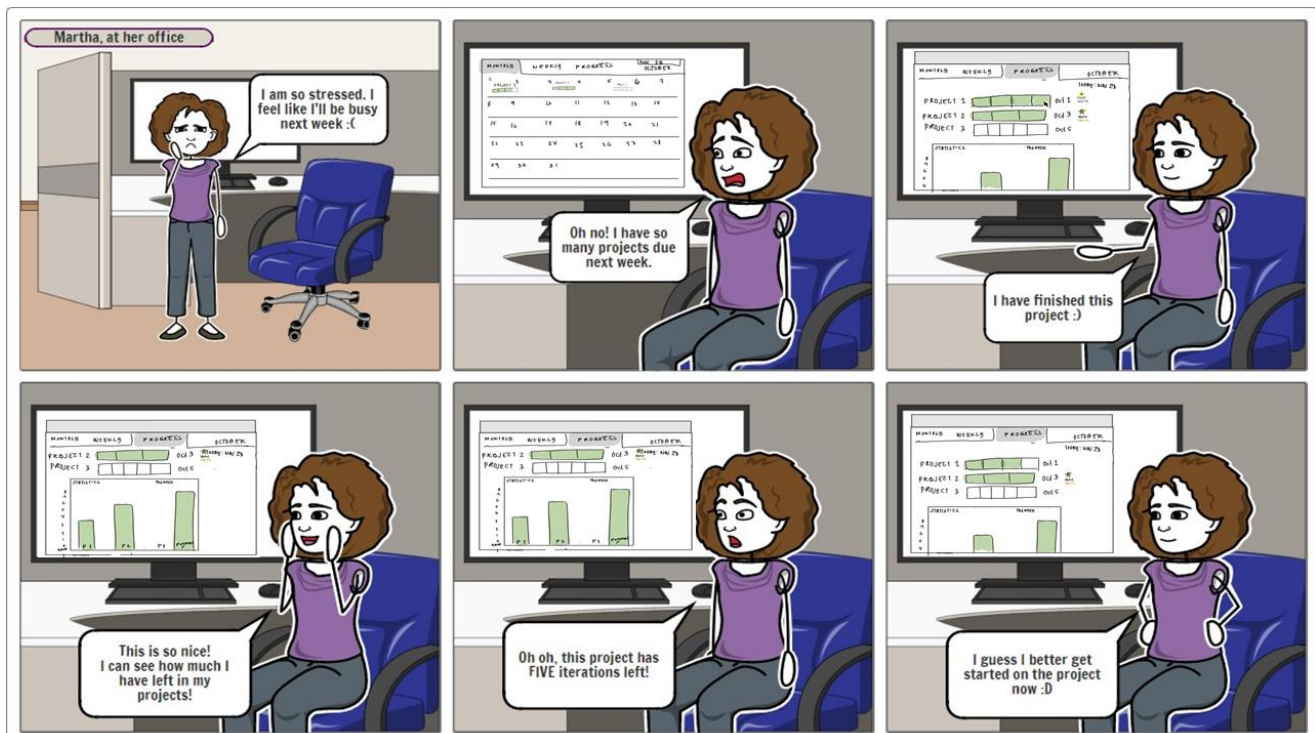
Horizontal

- **Complete their project:**

User will click on the “Progress” tab on the navigation menu at the top of the screen. Then next to the progress bar for a particular project, they will click the “Complete” button. The project will now be shown under “Completed projects” and a star will be displayed next to the bar to indicate completion.

- **Log-in to the application:** The user enters their username and password to log in to their saved profile. If the user does not have an account, they can register.
- **Edit / Delete an event:** The user can edit and delete their events (project, tasks, iterations) at any time by clicking on an event and editing or deleting it.
- **Create tags for projects:** The user can create “tags” that represents different groups for their projects and tasks
- **Filtering events (projects, tasks, iterations) using tags:** Using the different tags on the event, the user will be able to filter the events that they want to see in the calendar. The user will click on the filter option and from a dropdown, click the tags of the event that they want to see.

Storyboard



Our storyboard illustrates how our user can use our web application to track iterations in her projects so that she can be more motivated to complete them by having a visual representation of the work that's left. The storyboard begins by our user feeling stressed because of a high workload for the following week. Our user then goes over the progress project view and see how many projects she has completed and is in the process of completing. With the convenient visualization of our web app, she can see what she needs to work on next. Finally, she leaves the web app to work on her project. This storyboard showcases the functionality of our app and how it could be helpful to users who want to manage their projects. By showing the user their projects and their progress on each one relative to each other, our app would help users prioritize and maximize their own productivity. The storyboard also portrays the motivation behind using our app. With the popularity of apps like forest, we know that users are eager for apps that keep track of their progress. In this case we modeled our character, Martha from these users.

Discussion of Cognitive Evaluation

For our cognitive evaluation, we followed the following process. We evaluated each of our 3 vertical prototyped tasks step by step. The vertical tasks are adding a new project, viewing and updating progress of projects in Progress view, and viewing rewards (and using other features such as Share, Connect and Rank). One of our main functionalities is to be able to add iterations to a project. Below are the findings we found while doing the cognitive evaluation:

The cognitive walkthrough evaluation showed us that the user might be confused on how to create iterations when creating an event. So, we added a text whenever the user hovers over the iterations text, so they know when they'll be filling in their details for the iterations.

We also noted that when a user creates multiple iterations for a project, the user might want to see what they just created, so we are highlighting all their newest created events for ease of visibility. We also found that some of our icons in our web application wouldn't motivate the user to click on them and they could also be confused on what function these buttons have. So, we added extra text on top of the icon and hoped to add some hovering features such that when a user hovers a progress bar the iterations to be completed can be highlighted in a color to represent it can be clicked on.

One flaw that was increasingly apparent in our lo-fi prototype was that some functionalities were not clearly accessible to the user (links that are not obvious) which would negatively affect the user experience. Since we used Balsamiq for our implementation of our low-fi prototype, we noticed it did not have a hovering feature (link is highlighted upon hovering mouse), thus it was hard to fix these design problems. However, the cognitive walkthrough served well to inform our future design where we will be able to use better tools for prototyping.

Lastly, we learned that as the developers of this interface, we know best how to interact with the interface but a new user completing a task step-by-step might not know how to go from step A to step B. This cognitive walkthrough was very important to us to see how we can motivate our user base better in a way that makes their user experience memorable and efficient.

Ideation Process Reflection

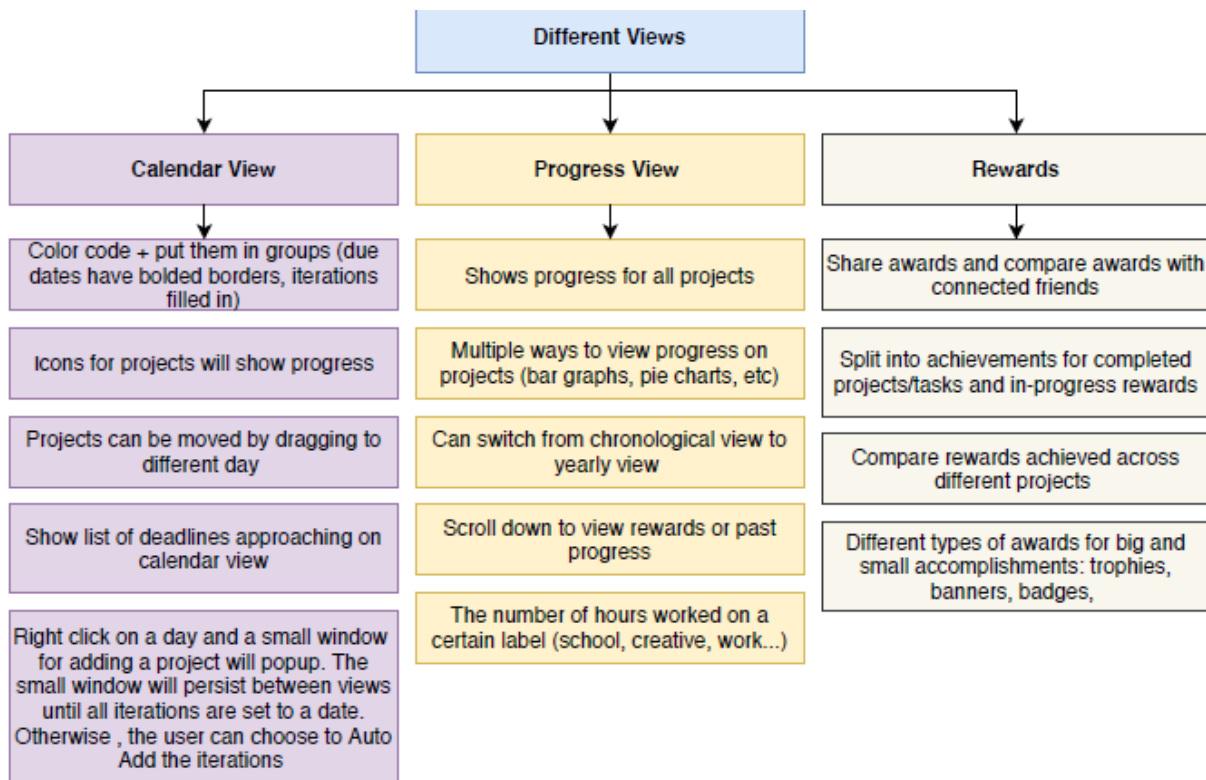
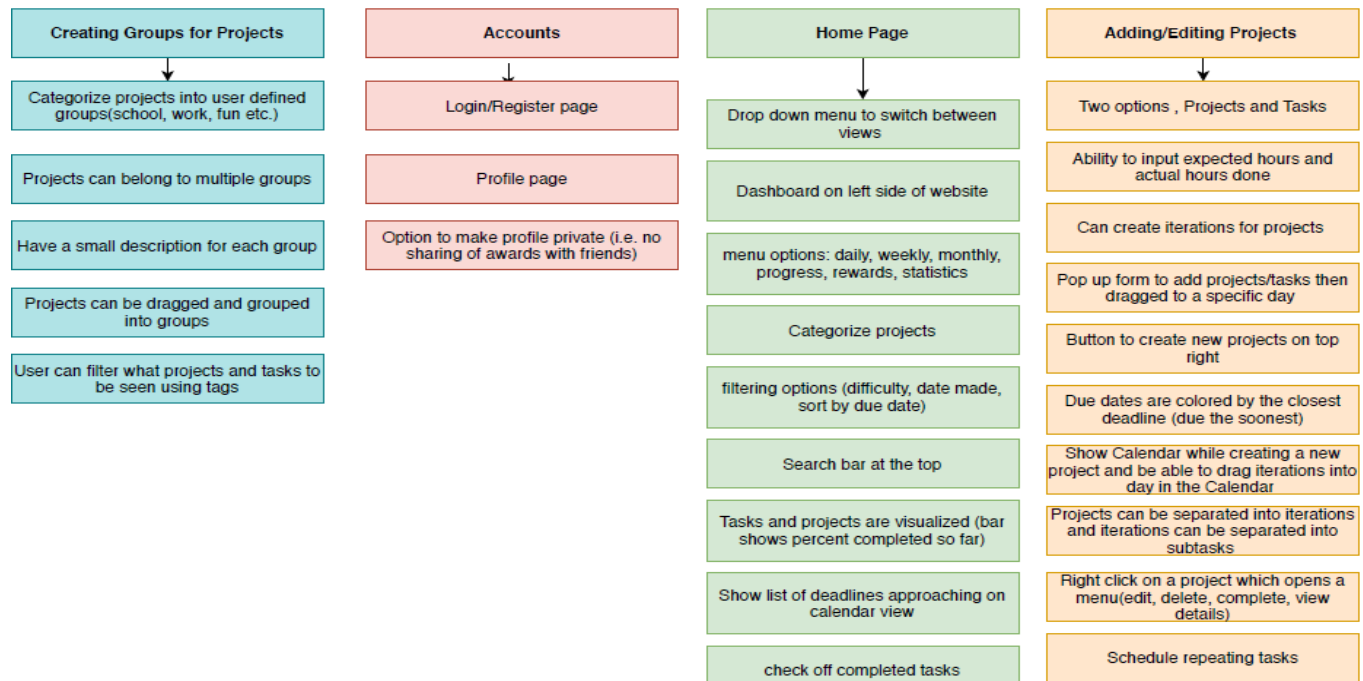
For the ideation process we started off with brainstorming sessions and each of us created sketches of what the application would look like. Then we went over them and took note of the most notable ideas from each sketch. These sketches revealed that we had some similar ideas for general functionality and user features that we want to include in the application. From these ideas we organized them into groups and created an affinity diagram. We then narrowed down the three best ideas and decided on the essential features we would implement in our prototype. We selected one of the three ideas and created a storyboard to illustrate its use. After this we discussed with the TA and selected the user tasks that we would vertically prototype. Finally, we did a cognitive walkthrough of our tasks and revised our prototype based on our evaluations.

A lot of things went well for our group. In our brainstorming session we were able to come up with many sketches. For the affinity diagram since we have come up with lots of different sketches, we had lots of ideas to choose from for our groups. We were also able to split up tasks very well and complete them quickly. Next, here are some aspects that went poorly – most of our sketches were layout sketches, which made it harder to design the flow of our application. Another thing that went poorly was confusion on affinity diagrams, we had trouble figuring out what an affinity diagram was and how we should group our ideas. We also had difficulty in selecting the user tasks we would vertically prototype. Lastly, these are some of the steps that we would do differently. Next time, it would be a good idea to spend more time on the brainstorm sessions, so that we can come up with more creative sketches and discuss about each other's sketches in more detail. Also, we might have a longer discussion about how the overall layout and design of the prototype would look like before we start working on the separate parts of the application individually, so that there is less confusion later.

Appendix

Affinity Diagram

Our affinity diagram contains 5 different groups organized by the types of views we will have in our web application and unique functionalities.



Sample of team sketches

Drop down menu

Projects

Rewards

Completed Projects

Stats

Welcome, _____!

Deadlines approaching:

P1 Due: _____

P2 Due: _____

OR

CALENDAR VIEW

Clicking on Rewards View

Drop down menu

Rewards ~~Stats~~ see all trophies

P1

Completed on: _____

Trophies:

☐ on time!

☐ Good grade!

scroll down

P2

Completed on: _____

Trophies:

☐ _____

☐ _____

You could also compare rewards across projects to see how well you did in relation to other projects

Clicking on Statistics View

Projects | Rewards | Home |

Statistics View

Project to do

Completed Projects

Side by side

P1

75%

Hours worked: _____

tasks completed: _____

tasks to complete: _____

scroll down

Completed Projects

100% ✓

hours worked: _____

by week: _____

side by side

days at week

Whenever we click on the button, we jump to appropriate header label

can click on labels / text to write / see diff graph charts

Adding Task / Project

Search

+ Add

Today

Weekly

Monthly

• Task

• Task

• Task

add project

info

task

Red = due soon

pop up form

Viewing Project

Search

Proj Name

☒ Task 1

☒ Task 2

☐ Task 3

+ Add Task

date

date

date

due Date

Awards

Alexis Lee
Student
e-mail

Inspirational Quote

Achievements

In-progress

10 completed projects
11/18 completed

Not completed

Share...
Connect...
Rank...

Can connect with friends
 Compare records with connected friends

Now Project

CREATE A NEW PROJECT

title...

Iteration #1...

Subtask #1...

Subtask #2...

Iteration #2...

Subtask #1...

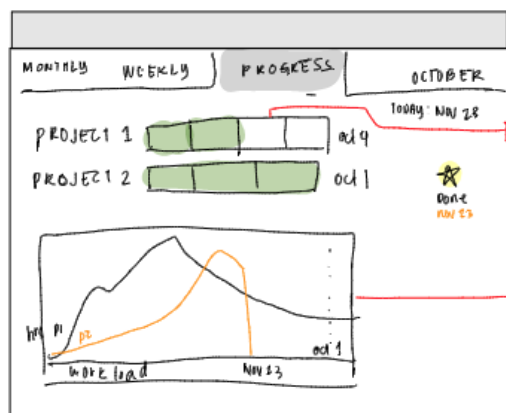
Subtask #2...

add iteration

add subtask

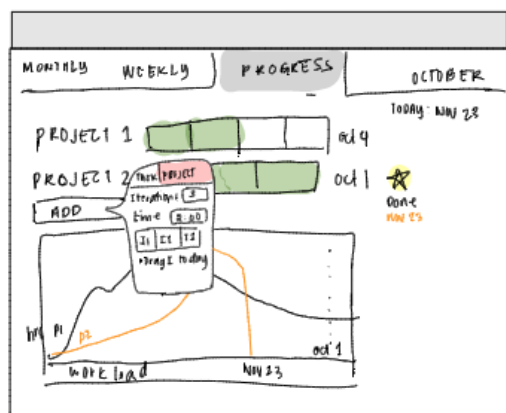
October

1	2	3	4	5	6



- when you complete an iteration just left-click a box and it will turn green

- statistics are updated everytime an iteration or project is done



ADDING A PROJECT

- by right-clicking at any a small window will popup

Note window is not fleshed out

Cognitive Walkthrough Document

Our cognitive walkthrough demonstrates three of our user tasks that we prototyped vertically.

Add Task/Project

Description of task step	Does the user have training or knowledge to do this step?	Is it believable that they would do it?	are they motivated?	Comments (including possible solutions)
1). User opens web application	This is a simple action for a user.	Yes, if they want to use the application, they must open it.	Yes	
2.) User logs in	Yes, they have logged in to websites before to save their profile	Yes, because their profile is saved by their username and password	Yes, they need to log in to see their projects and deadlines	
3a.) On the calendar view user clicks on a date in the Calendar	3a) If the user has used it before yes, but a new user may not know that you can click a date to add a project.	No, there is no indication that you can create a project by clicking a date.	Yes, in order to enter a deadline, task and iteration	There could be a functionality where if the user hovers over a date, there can be a change in the mouse cursor or a small popup that says "add"
3b). User clicks the pencil icon	3b) same as above	3b) No, there is no indication that the pencil will create a project	Yes	The pencil icon can have a text label above it that says this icon is used for creating an event or when hovering over it, can say "create"
4) Enter the event type, event name, description, tags, date and number of iterations.	The user would not have training on this, but this is a simple task of entering information	Yes, because the user would like their events to have as much as information as possible. (??)	Yes	
5) Click the "Create Project" button	Yes	Yes, they would want to create their event, so it shows in the calendar	No, they may get confused as to when they will enter the	Filling in the details for the iteration should either be accessed by having the user click on the text field and another popup show up

			information for their iterations	OR a light text below the iterations text field that says they will be able to fill in their information in the text field after they hit "Create"
6). Create iterations	Yes	Yes,	Yes	
7). Click the "Create Iterations" button	Yes, the user needs to be able to finish this task and create their event	Yes, they need to confirm their selections of dates of the iterations for them to show in the Calendar	Yes, they need to confirm their selections of dates of the iterations for them to show in the Calendar	
8). User sees their created project in the calendar	Yes, the user is simply viewing and verifying that the event was created.	No, if they have a lot of events it might be hard to find it at first glance.	Yes, because they want to see the event they created.	Maybe have some way to highlight a recently created event.

View/update progress of projects in Progress view

Description of task step	Does the user have training or knowledge to do this step?	Is it believable that they would do it?	are they motivated?	Comments (including possible solutions)
1. User opens web application	This is a simple action for a user.	Yes, if they want to use the application, they must open it.		
2. User logs in	Yes, they have logged in to websites before to save their profile	Yes, because their profile is saved by their username and password	Yes, because their profile is saved by their username and password	

3. On the navigation bar User clicks on progress view	Yes, Navigation bar is structured so that it's obvious that it's clickable.	Yes, because it is easily accessible in the navigation bar.	Yes, because they want to view their projects.	
4. Views projects and the iterated progress bars besides them.	Yes, the information is displayed, and the user doesn't have to do anything.	Yes, to be able to see a general view of their progress.	Yes. The information presented shows the progress clearly.	
5. Clicks on an iteration in the progress bar (This would complete the iteration)	No. The progress bar is separated but it may not be clear that it is clickable.	No, it is not obvious that the progress bar is clickable.	Yes, they want to complete an iteration in order to finish a project.	Possible solution: The iterations box should highlight in a different color when the mouse hovers over it
6. Clicks on complete button	Yes. The complete button is clearly clickable.	Yes, if they want to complete a project	Yes, so that they can keep track of projects they have completed	
7. Clicks on the project to view more details.	No, it is not clear that the project name is clickable.	No, if it's not obviously clickable user may not do it.	Yes, they want to view more details on the project more information on a project	Possible solution: Make the project look more clickable. Instead of just plain text, there could be a dedicated button that the user can click to view more details on the project.

View rewards (and use other features such as Share, Connect, Rank)

Description of task step	Does the user have training or knowledge to do this step?	Is it believable that they would do it?	Are they motivated?	Comments (including possible solutions)

1. User opens web application	This is a simple action for a user.	Yes, if they want to use the application, they must open it.	Yes	
2. User logs in	Yes, they have logged in to websites before to save their profile	Yes, because their profile is saved by their username and password	Yes	
3. Clicks on "Rewards" tab on the navigation menu	Yes, the navigation menu is very visible and obviously clickable.	Yes, this the only tab from the main page that will take them to the "Rewards" page right away.	Yes, they want to see the progress on their rewards achievements so far.	
4. View rewards earned by "Projects" and by completed/in-progress	Yes, the layout is very simple, and it is safe to assume that the user has seen a similar layout in the past.	Yes, the page only displays awards.	Yes, this is their main purpose of visiting this page – to see different awards they earned.	
5. Click on a specific reward to view details about the reward	Yes, this is a very simple task of clicking on an icon to reveal more information.	No, they may be unaware that clicking on the icon reveals more details about the awards.	Yes, they want to know what the award was for (what did they do to earn it?)	Simply hovering over the award should reveal the detailed information.
6. Click "Share" tab to share rewards user earned to external social media sites	Yes, almost all applications nowadays have a same feature of being able to share to other social media applications.	Yes, the pop-up menu is very simple, and they just have to click on the social media that they want to share to.	No, the user may not want to share their rewards, but just simply view their progress on it.	
7. Click "Connect" tab to add a friend who is also using the application	Yes	Yes	No, the user may not want to connect with anyone.	Add a "Add User" icon so that the functionality of the "Connect" button is clearer
8. Enter email address of the	Yes, student users should	Yes, all that is required is an	Yes, if the user clicked the	Add a "Quick Add" section to

person you want to add or	be very familiar with the typical process of adding friends across social medias.	email address of the person that the user wants to connect with.	“Connect” button to add a friend, they would have the intention of adding a friend on the app.	show a list of suggestions of people with mutual friends, so that users can find/gain friends more easily.
9. Click “Add” button and see the confirmation message	Yes	Yes	Yes, after entering the email address they would want to add the person to their friends’ list.	
10. Clicks “Rank” button to be taken to the leaderboard page	Yes	Yes, in order to see the leaderboard to check their rank, the “Rank” button is the only clear, visible option.	Yes, if the user has friends connected on the application and would like to see how they are doing relative to their friends. However, no if the user does not have any friends on the app.	Make the button unclickable/deselected if the user does not have any friends on the app.
11. Views his/her rank compared to his/her friends	Yes, the layout depicts a very simple, standard leaderboard table, and the user’s rank is highlighted in the table and also displayed at the top.	Yes	Yes, if they clicked on the “Rank” button, they would have done it with the purpose of observing the leaderboard.	