



## **DEUI Design Specs (CA2)**

**Academic semester: AY22/23 Semester 2**

**Module Name:** ST0277 Design for User Interaction (DEUI)

**Module class:** DIT/FT/1B/10

**Group Name/Number:**

**2**

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**Date of Submission:** 17/01/2023

**Name of Module Tutor:** Ms Janny Chan

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# 1.Updated Sitemap

## Current & updated

Changes we made and why

### **Friends**

- Login and registration shifted to under friends – to allow the users to use other features without frequently logging in and out which is more convenient for the users.
- Removal of Friends - It gives users over who their friends can be

### **To do list**

- Addition of priority and category to To Do List - Allows user to customize their task more specifically enhancing user experience .

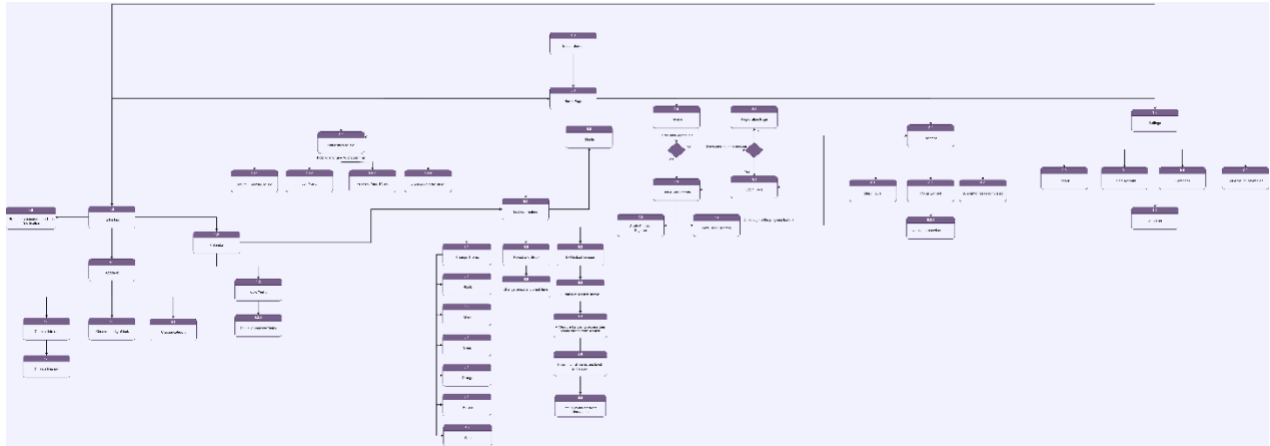
### **Profile Settings**

- Addition of about us page – Let users know more about the student+ team

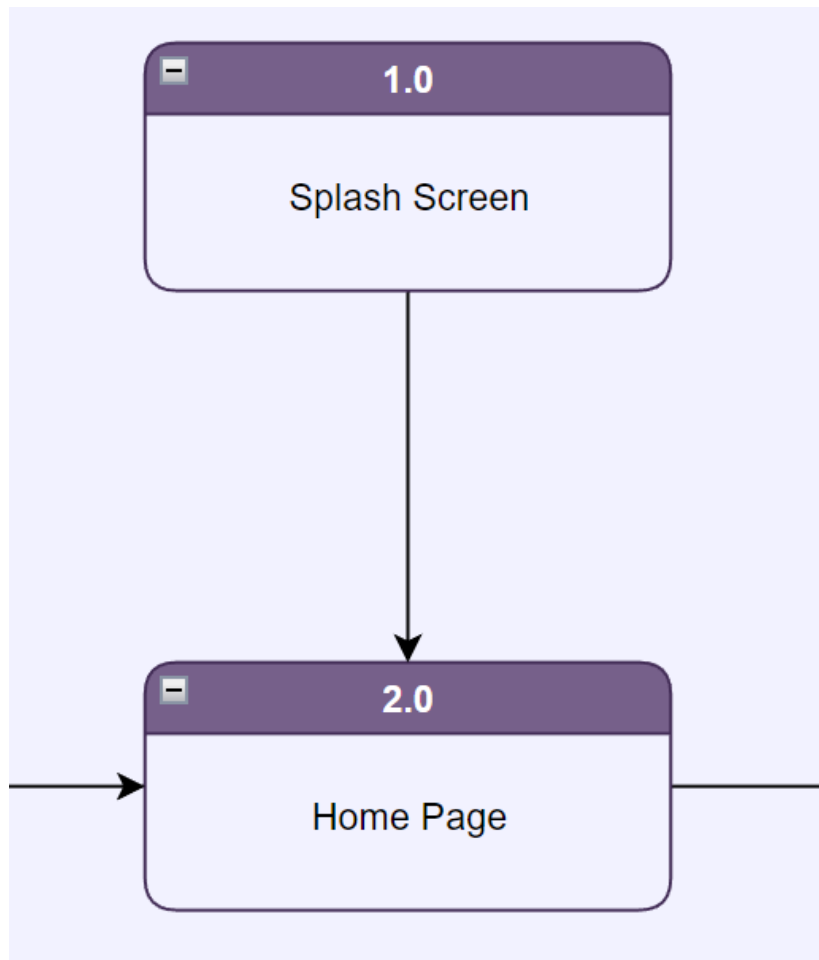
### **Lockout**

- Themes- Change the color of the screen to the preferred color they like (Black, Grey, Green, Orange, Purple, Blue)
- Period and break duration- Extends or reduce their period and break duration to their likings

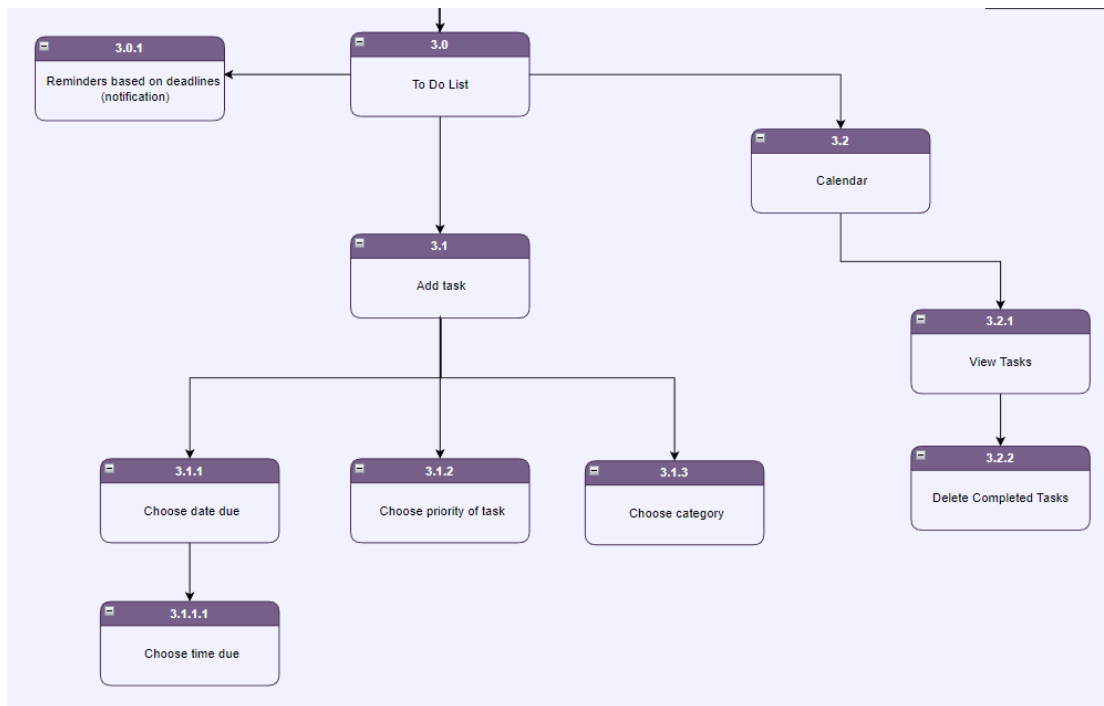
## Overview of Sitemap



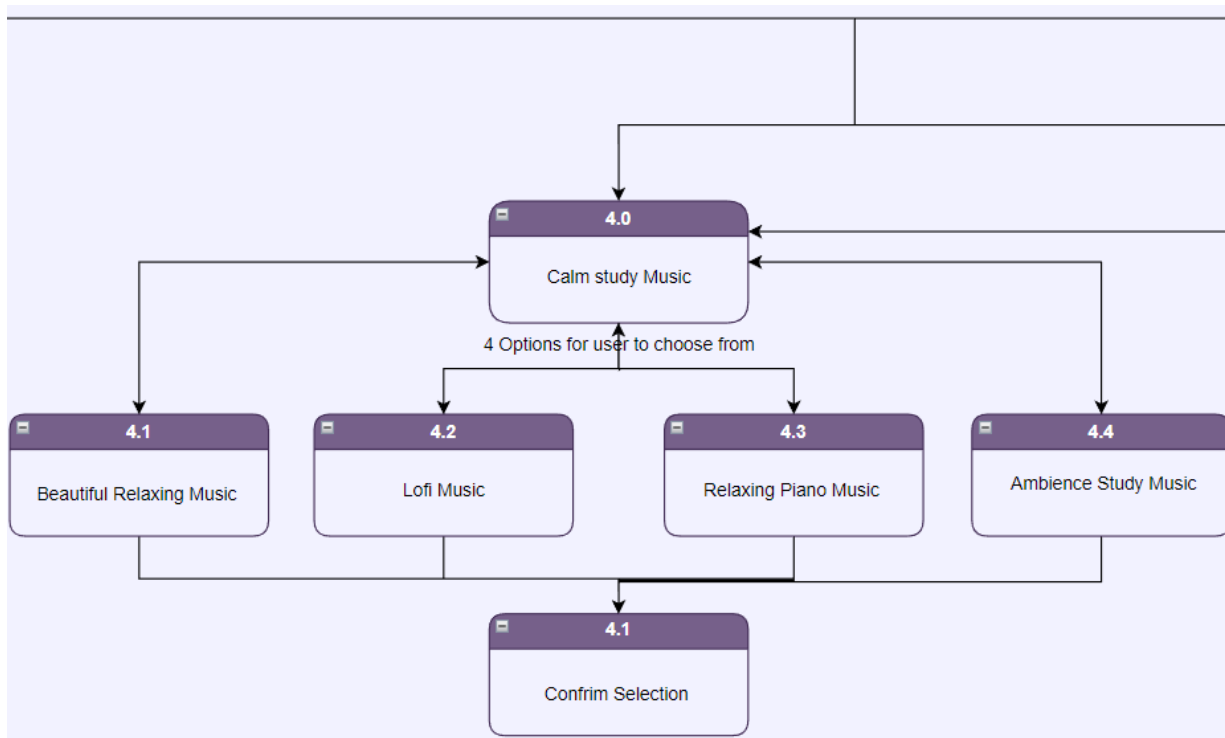
## Splash Screen -> Homepage



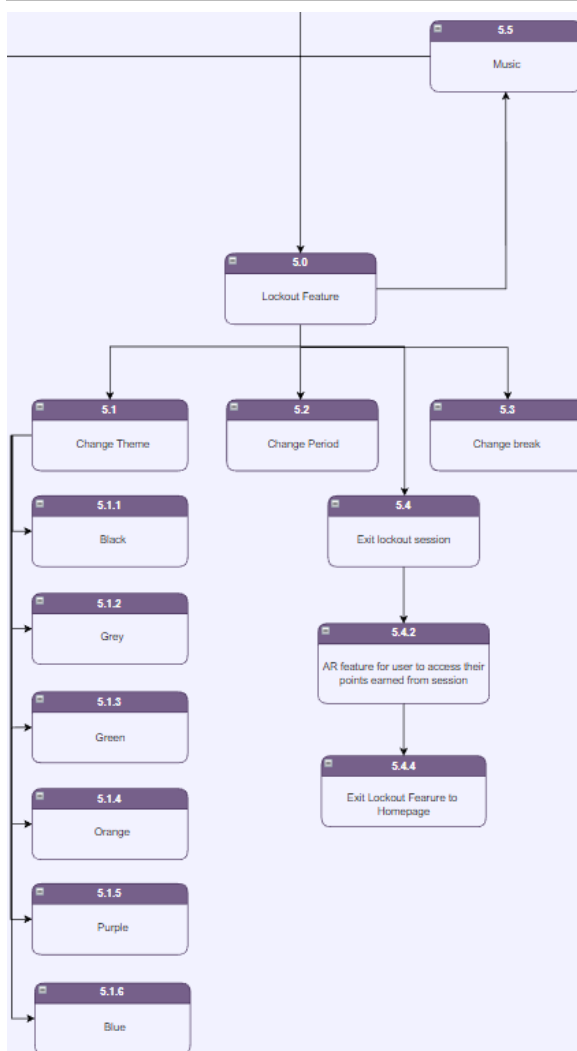
## Homepage > To Do List



## Homepage > Calming Music

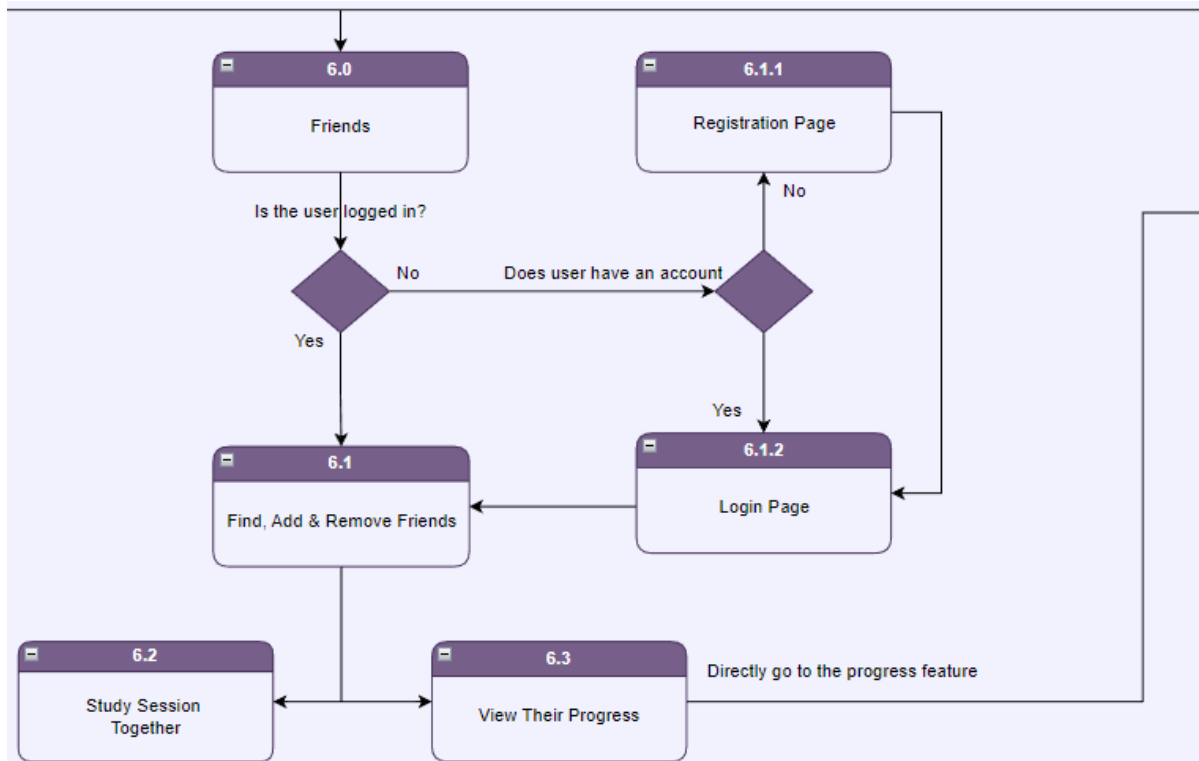


## Homepage > Lockout Feature

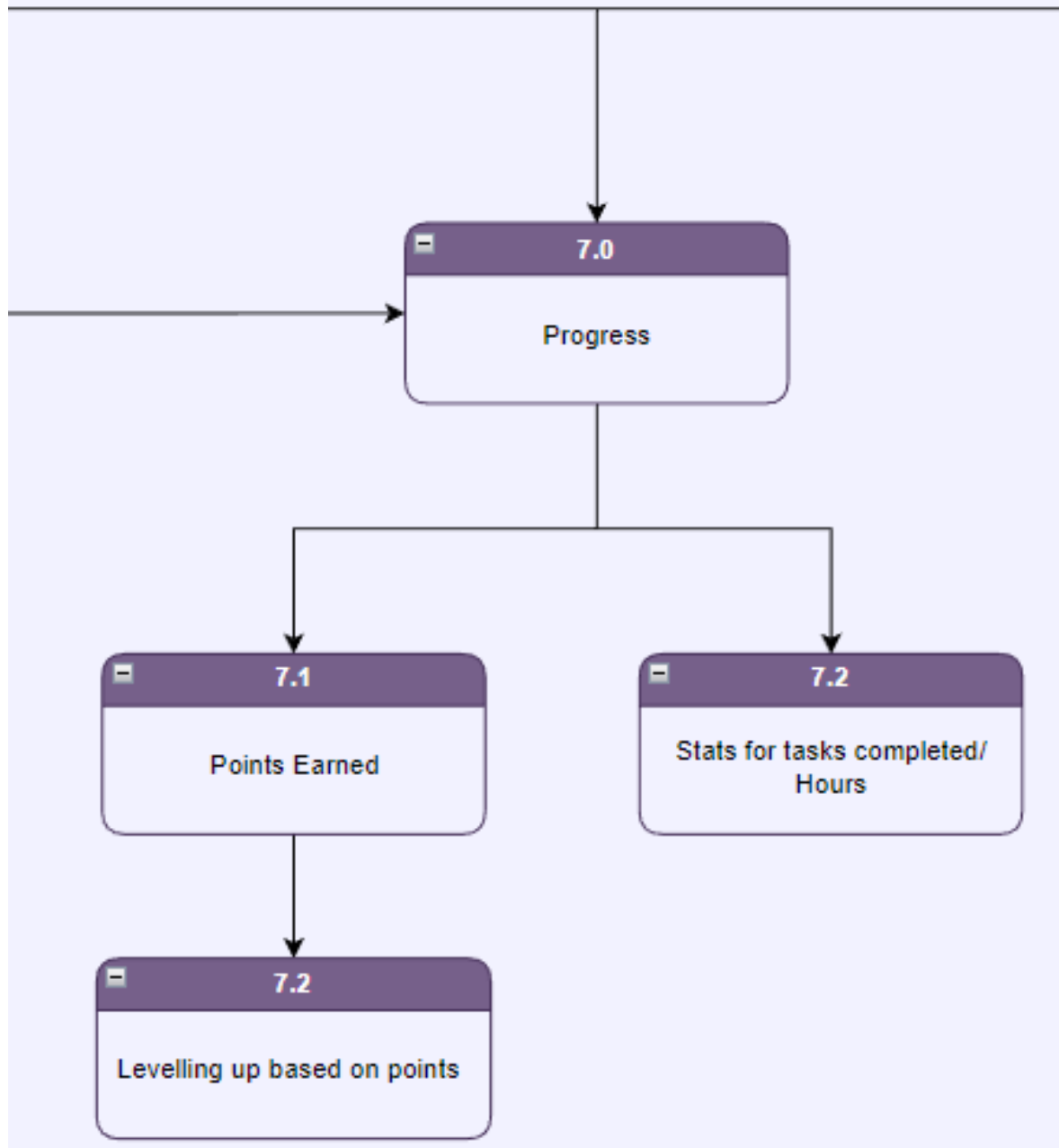




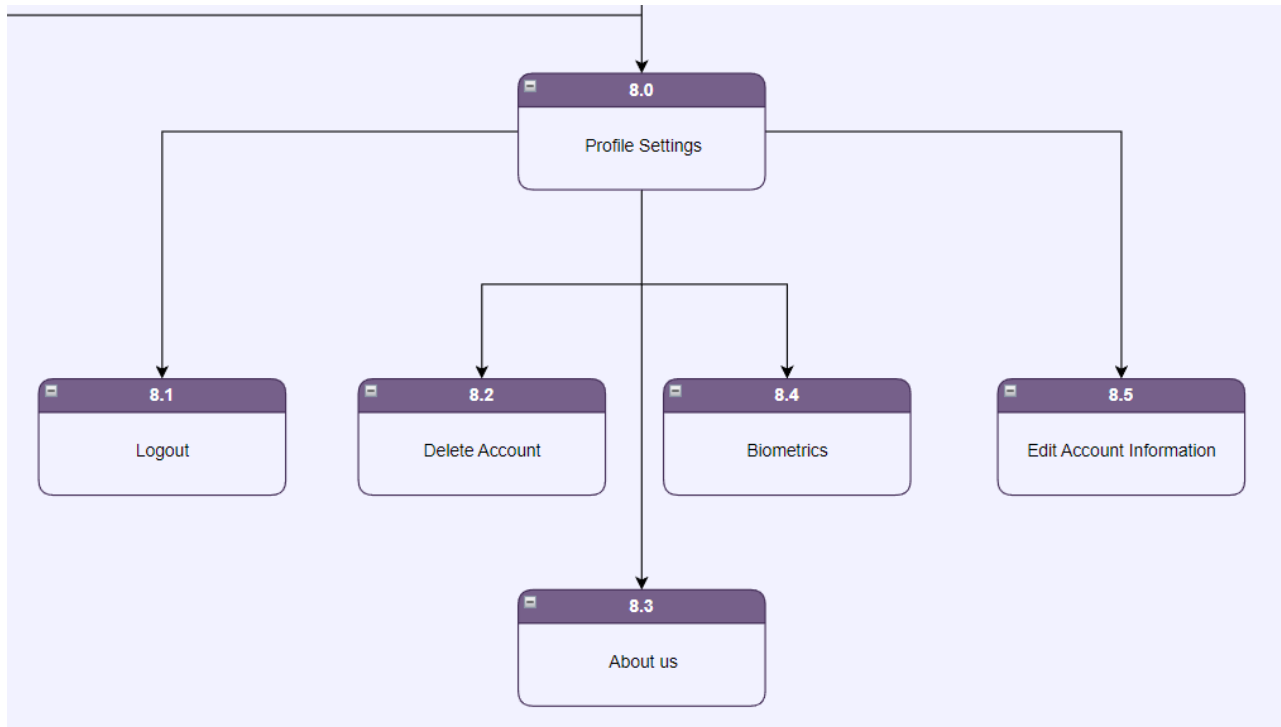
## Homepage > Friends



## Homepage > Progress



## Homepage > Profile Settings



## 2. Prototype

We are using Figma to prototype our application, as we used Figma to design our wireframes as well, therefore it will be easier for us to use Figma to prototype. Figma has different tools such as UX design tools which help us in creating our wireframes. Additionally, for Prototyping, Figma is good for showing user flows between static screens and allows users to view their prototype on both mobile and desktop.

The link to the prototype.

Click the flow 12 to start prototype

<https://www.figma.com/file/6rnWt0BrfbfnJ4bQM3sfgJ/PROTOTYPE?node-id=0%3A1&t=GaN3GD8KdHk2FQGD-1>

## 3. Usability Test Plan

### Overview

Upon proposing our solution Student+ to boost students' overall productivity by helping them manage their tasks and spending time doing what they like as well. We created a prototype with our app features to conduct usability tests and receive feedback from users. T

This report first describes our methodology used to conduct our tests. Firstly, our planning such as our venue, participants and our roles during the interview. Secondly, the conducting of the interview which is through and detailed expected timeline of the interview. Thirdly for test case and scenarios, there will be a participations task list . Not only that, observer task lists to follow through the user navigating the app as the observer recording notes. The rest is followed by the logistics, set up overview, feedback survey and wireframes .

Based on the findings we will get in the future, we plan to make modifications that will help users experience . We believe that conducting the usability tests and receiving feedback will improve the **perceivability, predictability, learnability and consistency** of our app . Therefore, improving the experience for users

### Methodology

To understand our users' experience when they use our mobile application, Student+, we are going to conduct usability tests to capture their thoughts and reactions so as to gather their opinions. The series of test include video recordings to capture how users feel and their thinking in the process of discovering and screen recording to take down the steps the user takes while navigating through our app. With this, we will be able to see if the functions of our application meet the users needs. Furthermore, to get feedback there will be a survey form for the users to fill . The feedback form will be useful in picking out flaws that we may not be able to recognize. From these feedbacks, we can identify areas of improvements and make the necessary changes to enhance the users experience with Student+.

## Planning

### Roles and Responsibility

During the interview, the leader will be the observer who will also be in charge of the screen recording, the interaction designer will be video recording and lastly the writer will transcribe the interviewees loud thoughts on a document.

### Interview Planning

- This usability testing will be held within Singapore Polytechnic.
- It will be conducted at a quiet and conducive area.
- Interviewees will be timed to see how long they will take to navigate through our app.
- this will show us if our prototype is efficient and easy to use.
- Face of the users will be recorded to see if there is any facial expression such as confusion.
- When the user will be navigating through our app, the phone will be screen recording and taking down the steps along with the recording
- Task list for participants and observer recording notes will also be done during the interview.
- There will be 3 interviewees testing our app.

### Participants List

Name:	Description:	Venue:
Ancey	A student in SP who has troubles focusing to do work and is easily distracted but wants to do well.	Spectrum
Mathew	A student in SP. Describes himself as a procrastinator	Spectrum
Sidi	A student in SP. Gets easily stressed	Spectrum

## Conducting

- Interviewees will be asked for consent one week prior the interview for video recording.
- On the day of the interview...
  - Interviewees will be told the purpose of this test.
  - A printed task list will be given to the participant for reference when using Student+ prototype to complete while using our app.
  - Interviewee will be sat according to the (*Set Up Overview as stated on page 18*)
- Interviewees will have to navigate through themselves.
  - Interviewees will not be allowed to ask testers on how to navigate through the prototype.
- Interviewees will be encouraged to think aloud.
- Interviewees will be asked for consent again for the video recording and interaction designer will start the video recording.
- The screen recording on the prototype will start simultaneously with the video recording
- When Interviewee is ready, there will be a timer/stopwatch to time them.
- Interviewees can discover how to input and submit tasks through the buttons while referring to the task list.
- Encourage interviewees timely when they manage to complete a task.
- The writer will note down interviewees expression and what they think for further research.
- Once interviewee is done...
  - Timer, screen recording ,video recording will stop.
  - A google forms survey link will be given for them to complete.

## Test Cases/Scenarios

### Participant Task List

S/N	Feature	Task	Required Data	Success Outcome
1	To do list	Navigate to the to do list, insert a task with a due date, the task priority, and the category.	"Do math homework" "Do chapter 2 to 5 for next week"	Task added with deadline
2	Calendar	View "Today" and "Completed" tasks in the "Calendar" function related to the dates	nil	Users able to see tasks inserted and completed tasks
3	Calendar	Mark "Buy grocery" as completed. View completed task.	nil	"Buy grocery" marked as complete.
4	Calendar	View All Task	nil	Viewing all task
5	Music	Play music of your choice in the music function	nil	"Music" being played for focus
6	Locking out	Go into focus mode (locking out of phone) either from homepage or from the "Focus" function in the tab bar	nil	Locking out from apps
7	Locking out	Use the different themes, change music, and adjust your break and focus duration	Change theme to "Orange". Adjust focus duration to 60 min. Adjust break duration to 5 min.	
8	Augmented Reality(AR)	End your session. Aim camera at laptop for AR feature, to show points earned , Press home to return to homepage.	A laptop in front of you.	AR feature showing the total points at the end
9	Account	Go to "Friends" Feature. You will be asked to login/create an account.	Details of login already given.	Successful login
10	Friends	Add friend	Friend's iChat email: James@ichat.sp.edu.sg	Successful adding of friend
11	Friend	View Friend's profile/progress	nil	Able to see friend's progress
12	Friend	Start study session	nil	Started study session
13	My Progress	View your own progress, levels and duration	nil	Able to see your progress



14	My Progress	View the details of study session	nil	See details
15	Settings	Explore settings, change account name	Change name to "Martha Hays"	Successful name change

## Observation reading Notes

### Observer Task List

S/N	Task	Observer Notes	Task Questions
1	Recognize the different functions in the homepage	This task is intended to see whether user knows how to navigate the homepage.	Are they able to notice the different icons symbolizing the different features.
2	Continuing from Task S/N – 1  From homepage navigate to the to do list, insert a task with a due date, the task priority, and the category.	This enables users to input a task and customize specific date , time , category and priority to their task which enhances their user experience with Student+.	Are users able to recognize the three button icons and tap on it to cu customize their task?  Is the additional task button in a different color effective for user to recognize to add more tasks?  Is the “X” button visible and understandable for them to tap on it?
3	Continuing from S/N 2  View “Today’ and “Completed” tasks in the “Calendar” function related to the dates and then view all tasks in index.	This task enables users to first see their tasks “Today” and “Completed” with the date shown above in the “Calendar”. Users can then navigate back to index to view all the task in one screen as a summary.	Are users able to understand the point of the scrollable calendar above in the ‘Calendar Function’. Is the contrast in colors helpful?  Are users able to recognize that Today and Completed are buttons that lead to show the respective task? Do users find the index helpful as they can see all the tasks?
4	Continuing from Sn//3, Change “Buy grocery” to completed.	This task enables users to check an uncompleted task to completed.	Are users comfortable with clicking the circle beside to check off the task to completed?

			Are users able to recognize that they can check change a task to completed?
5	Go into focus mode (locking out of phone) either from homepage or from the "Focus" function in the tab bar.	This task is intended to see whether user knows how to navigate the homepage.	Are they able to recognize the focus (lockout feature ) from the navigation bar or Homepage?
6	Continuing From S/N 5, Use the different themes, change music, and adjust your break and focus duration	Provide users the convenience to customize their lockout session with different choices of music, themes and control their duration to optimize their productivity which enhances their user experience with Student+.	Can they spot and recognize there is a navigation bar below with the different settings?  Is the navigation bar easy and convenient?  Do the different variety of choices of music and themes give a sense of excitement and uniqueness to the users.
7	Continuing from Task S/N - 6 End your focus session	Allows the users to leave lockout session halfway should they do not want the whole duration.	Can they recognize where to tap to leave the lockout halfway?  Do users find the confirmation feedback to stop focusing useful?
8	Continuing from Task S/N – 7  Aim camera at laptop for AR feature, to show points earned. Return to homepage after.	This task is for users to earn points after their lockout session. Points will be shown on the book or laptop they scan.	Can they recognize the function of the AR camera?  Are they able to recognize tap on the Home icon button to return to Homepage?
9	Continuing from Task S/N – 8  Go to the "Friends" function from homepage	This task is intended to see whether user knows how to navigate the homepage.	Are they able to recognize the friends feature from the Homepage?

10	Continuing from Task S/N - 9  Create an account and add friend or remove friend.	This task is intended to see whether user can create an account easily.	Do they find it convenient create and account with the sign-up details.
11	Explore settings, change account name	The task is intended to see if users can successfully change name .	Is it easy and convenient for users to change name

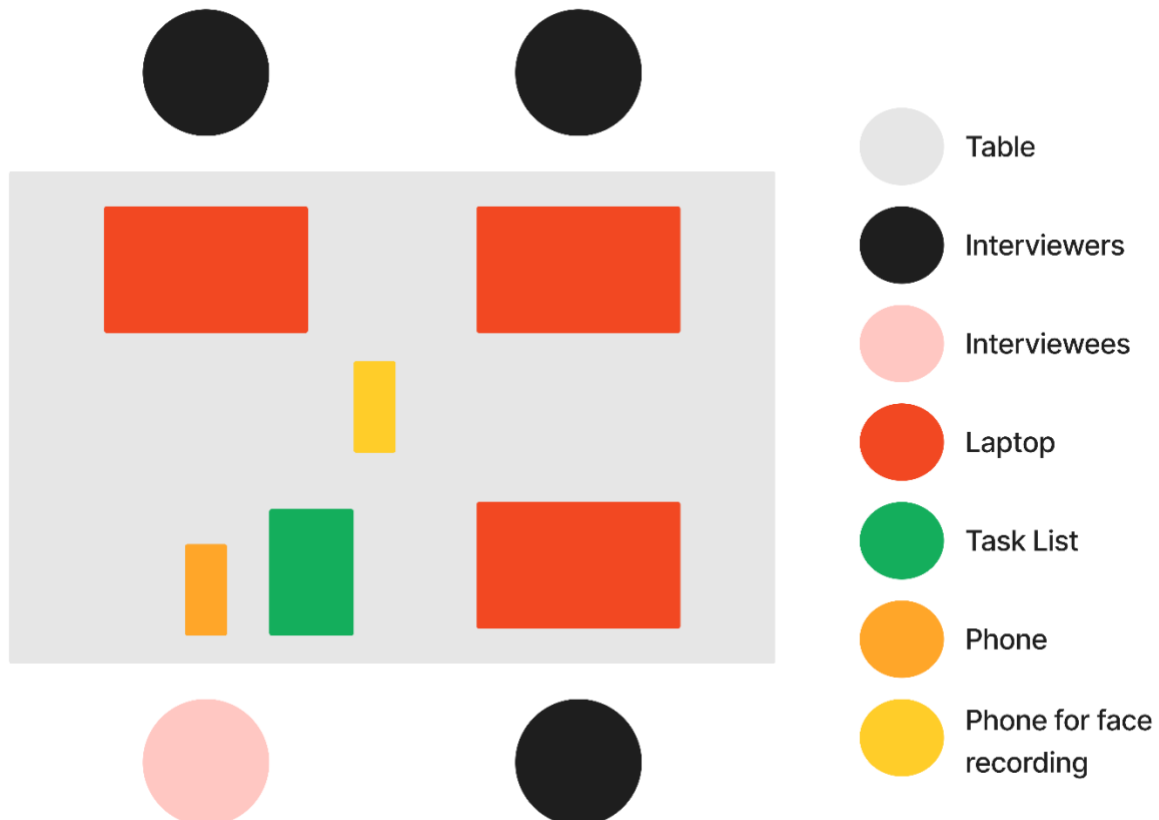
## Logistics

What will we need?

Item	Quantity
Laptops	3
Phones	2
Paper	2
Table for 4 people	1
Chairs	4
Stopwatch	1

## Set-up Overview

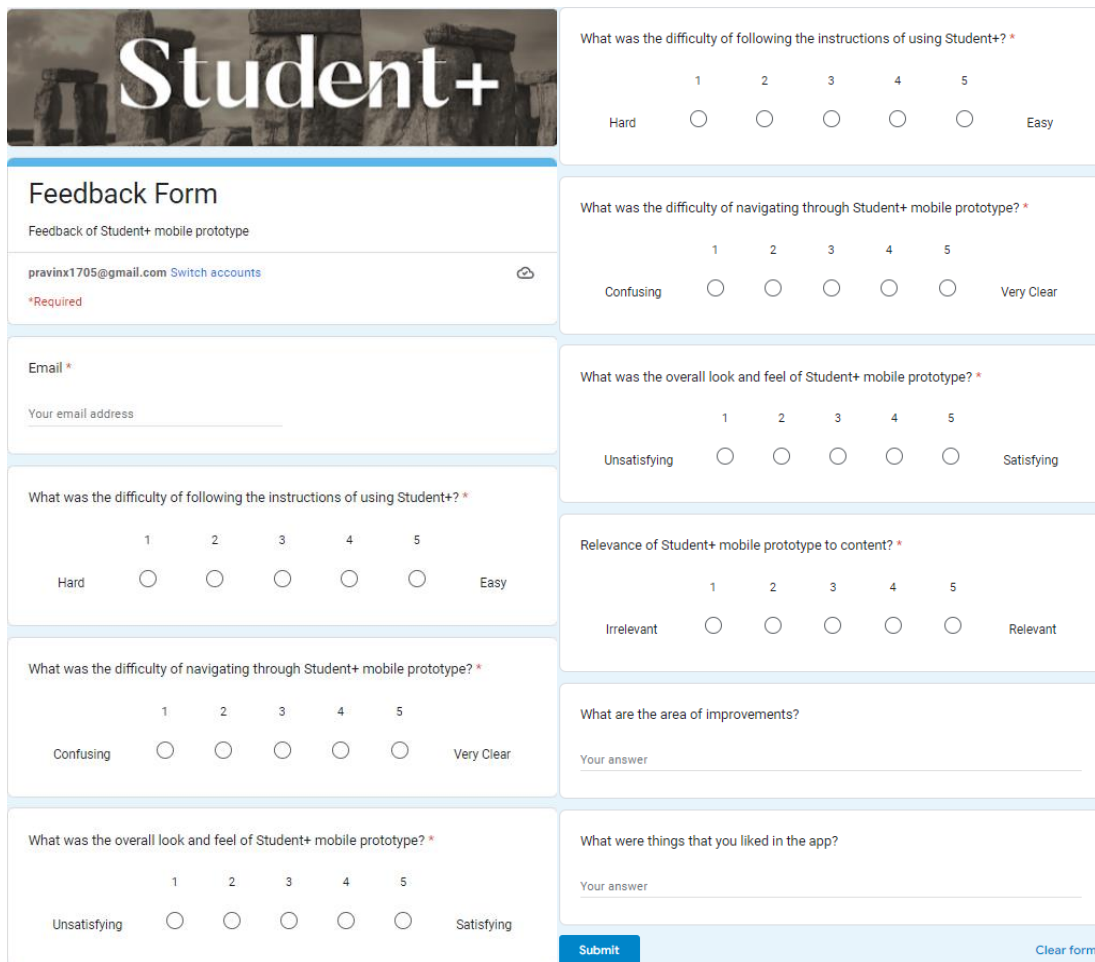
- Laptops are for Student+ team to take down notes and follow through the interview.
- 1 phone will be our prototype
- 1 phone will be for the face recording of user
- 2 printed papers for participation task list and observer task list respectively



## User Feedback form

The feedback form is an important segment as it gives us insight on how the interviewees perceive our app that we may not have noticed. The feedback form could give us critical user experience points to include in our app to enhance our user experience. This will help us pinpoint areas of improvement and cater to our user's needs.

Link: [https://docs.google.com/forms/d/e/1FAIpQLSerTsf3DVxUR4QTkOnyTiNbt7TsolIniyRiuLZd0G2btX2htKQ/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSerTsf3DVxUR4QTkOnyTiNbt7TsolIniyRiuLZd0G2btX2htKQ/viewform?usp=sf_link)



**Student+**

**Feedback Form**  
Feedback of Student+ mobile prototype  
pravinx1705@gmail.com [Switch accounts](#)  
\*Required

Email \*

Your email address

What was the difficulty of following the instructions of using Student+? \*

1 2 3 4 5  
Hard ☐ ☐ ☐ ☐ ☐ Easy

What was the difficulty of navigating through Student+ mobile prototype? \*

1 2 3 4 5  
Confusing ☐ ☐ ☐ ☐ ☐ Very Clear

What was the overall look and feel of Student+ mobile prototype? \*

1 2 3 4 5  
Unsatisfying ☐ ☐ ☐ ☐ ☐ Satisfying

Relevance of Student+ mobile prototype to content? \*

1 2 3 4 5  
Irrelevant ☐ ☐ ☐ ☐ ☐ Relevant

What was the difficulty of navigating through Student+ mobile prototype? \*

1 2 3 4 5  
Confusing ☐ ☐ ☐ ☐ ☐ Very Clear

What was the overall look and feel of Student+ mobile prototype? \*

1 2 3 4 5  
Unsatisfying ☐ ☐ ☐ ☐ ☐ Satisfying

What are the area of improvements?

Your answer

What were things that you liked in the app?

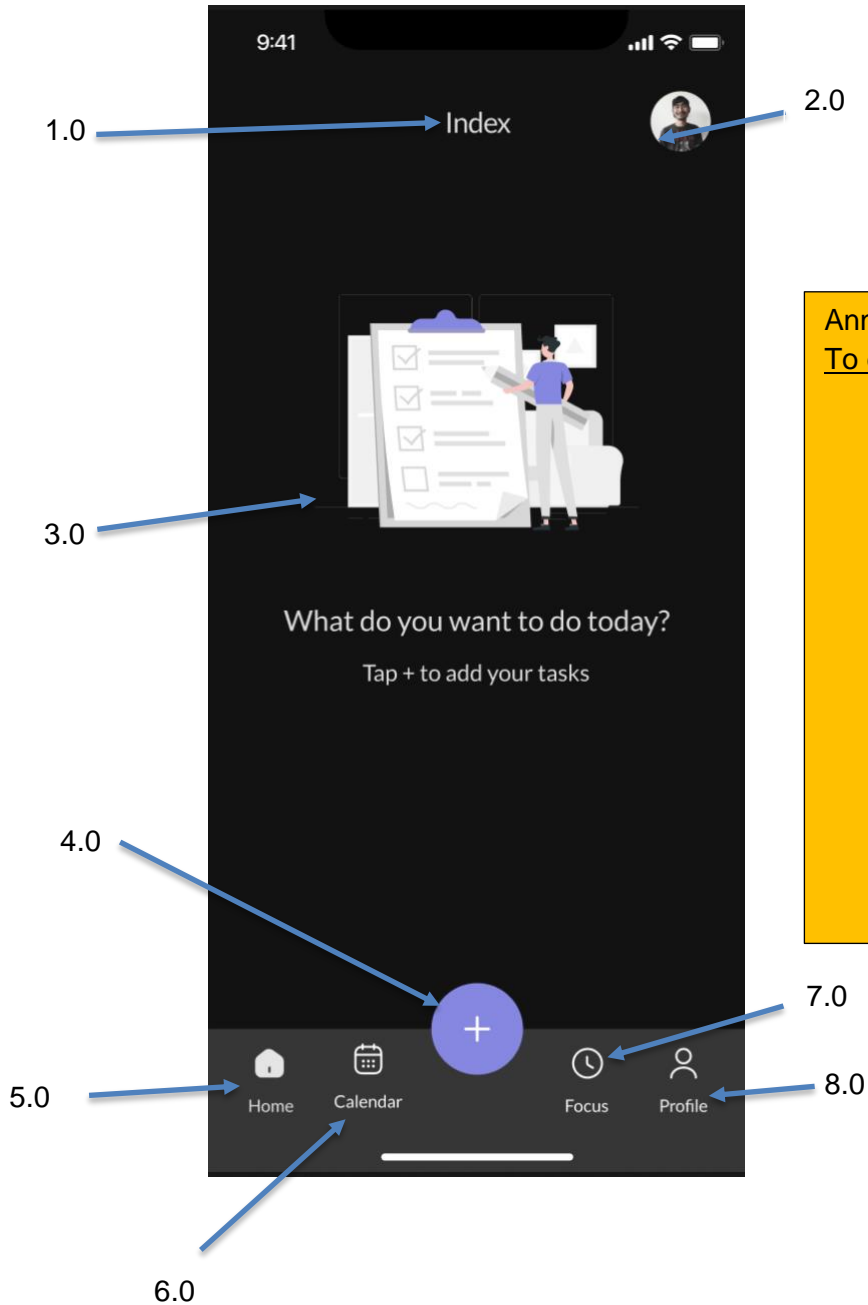
Your answer

**Submit** [Clear form](#)



## WireFrame (Singh Sakshi)

To do list Home-screen 3.0



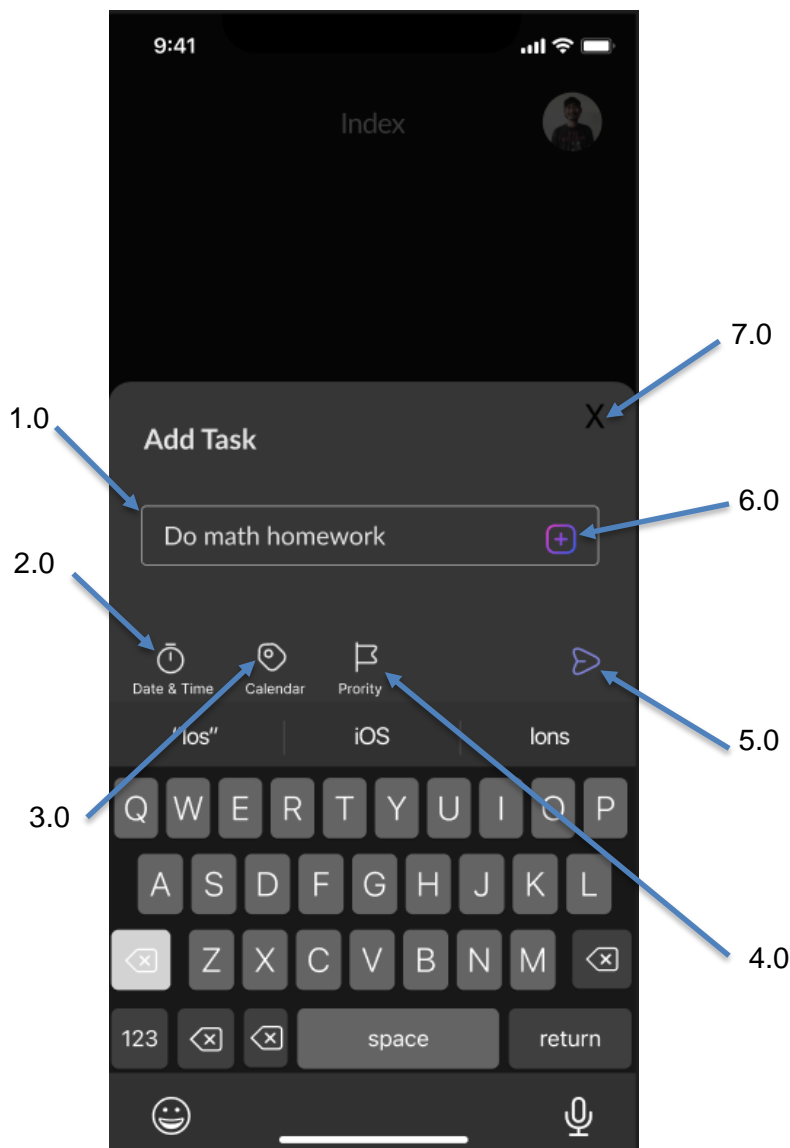
### Annotations

#### To do list Home-screen 3.0

1. Index
2. Profile Pic
3. Show current Tasks that are inputted by user. Default Screen shown if no input task .
4. Add task, on click *navigates to* . 3.1
5. **Home Button** : On click , *navigates to Home Screen 2.0*
6. **Calendar Button**: On click , *navigates to Calendar 3.2*
7. **Focus/Lockout Button** : On click , *navigates to Focus (Lockout) 5.0*
8. **Profile Button** : On click , *navigates to User Profile 8.0*



## Add Task Screen 3.1



## Annotations

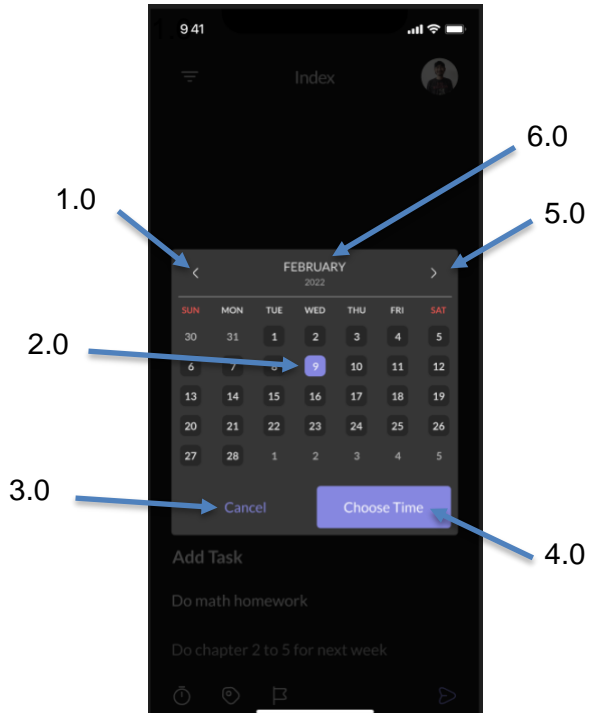
Add Task Screen 3.1

1. **Task Input** : First , user add task by input .
2. **Date and Time Button** : On click , first navigates to *Date Selection 3.11* for user to choose Date deadline and then secondly navigates to *Time Selection 3.12* for user to choose Time deadline.
3. **Category Button** : On click , navigates to *Category 3.13* for user to choose the category of their task ranging from work , school and personal tasks.
4. **Priority Button** : On Click , navigates to *Priority 3.14* for user to choose their level of priority from 1-10.
5. **Completion of Add Task Screen** : User can move on to next screen *Calendar 3.2* which shows the completed and current tasks . *Feedback on completion 3.15* will be shown before confirmation to move on to the next screen.
6. **Add task Button** : Add additional task shown in. 3.16
7. **Cancel Button** : Returns to screen *To Do List Screen 3.0*

The following screens that are *italicized* in the annotations Add Task 3.1 are shown on the next page .

The following screens that are *italicized* in the annotations for Add Task 3.1 are shown on this page .

### *Date Selection 3.11*

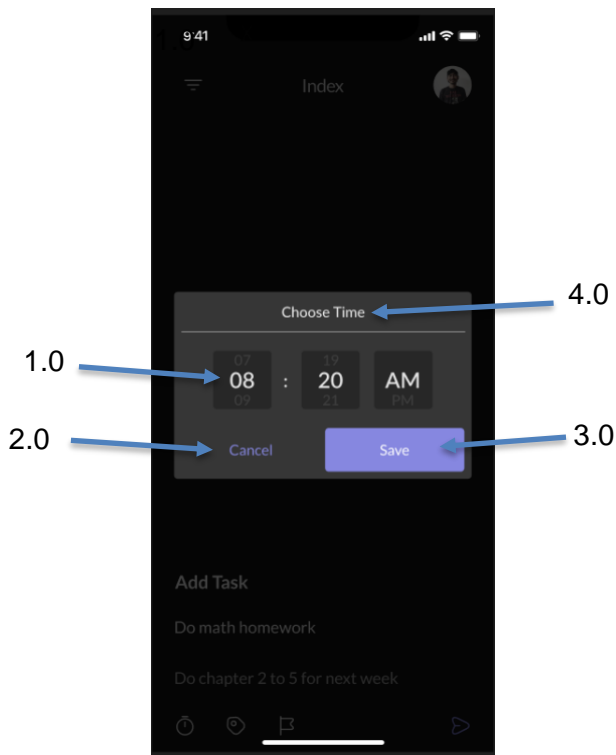


#### Annotations

##### Date Selection 3.11

1. **Back Button** : On click , navigates to previous month for example January.
2. Dates available have *dark background* and unavailable dates are *translucent*. Chosen date turns *purple* .
3. **Cancel Button** : On click , Returns to *Add Task List 3.1*. as user terminates date deadline selection.
4. **Confirm Date Button** : On click , date is selected and navigates to *Time Selection 3.12*.
5. **Front Button** : On click , navigates to next month for example March .
6. **Title** : Month and Year to let users know what they are doing.

### Time Selection 3.12



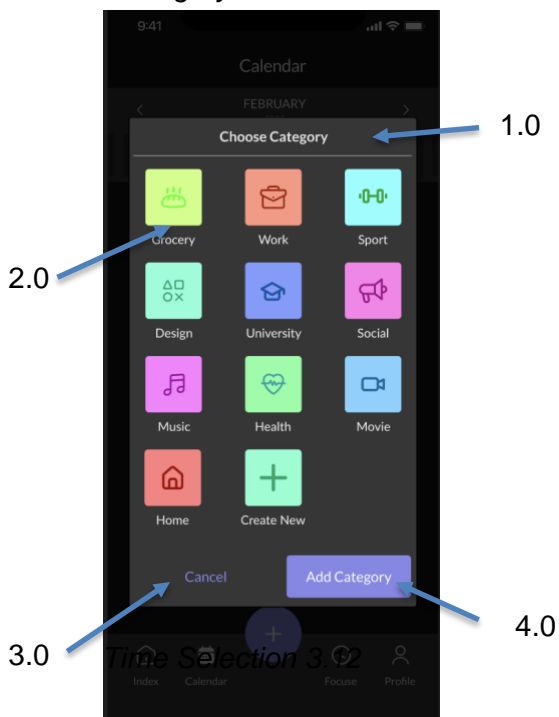
#### Annotations User

#### Time Selection 3.12

1. **Time Selection** : can *scroll* to choose time in 12 hour clock .
2. **Cancel Button** : On click , Returns to *Add Task List 3.1* as user terminates time deadline selection.
3. **Confirm Time Button** : On click , date is selected and navigates to back to *Add Task Screen 3.1* to carry out other functions.
4. **Title** : “Choose Time” to let users know what they are doing

The following screens that are *italicized* in the annotations for Add Task 4.1 are shown on this page .

### Category 3.13



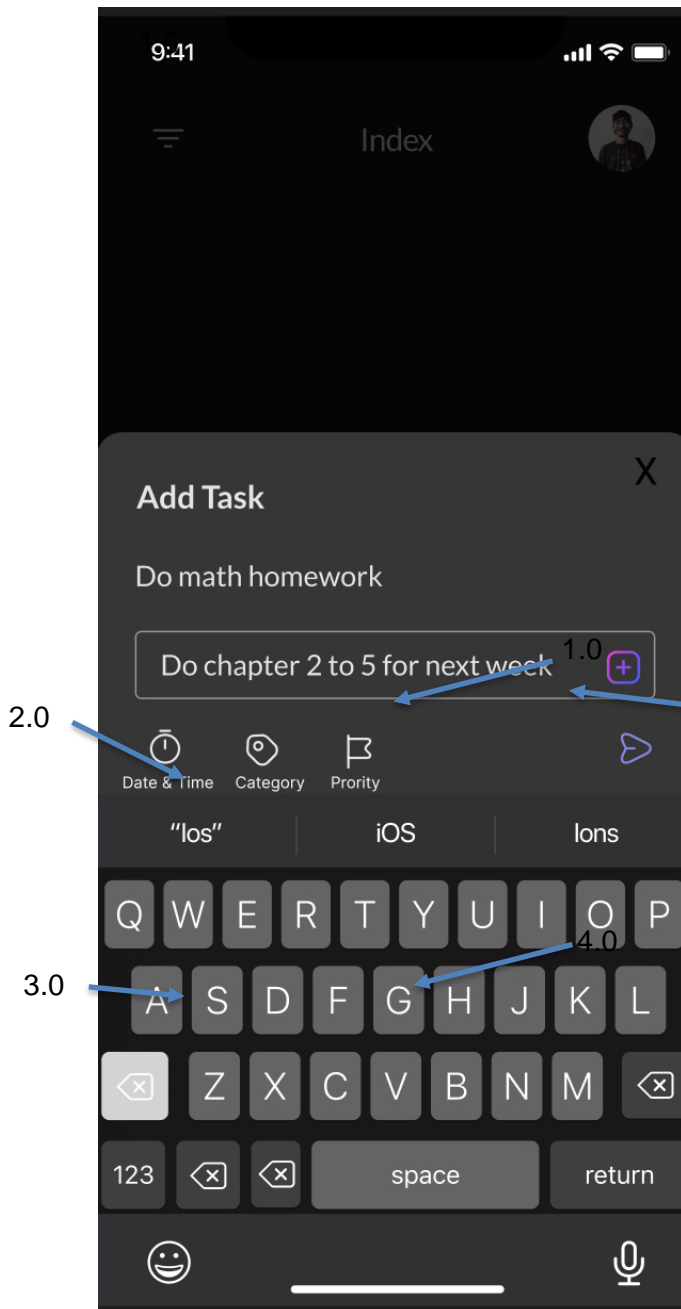
#### Annotations

#### Category 3.13

1. **Title** : “Choose Category” to let users know what they are doing .
2. **Categories** : Different Categories for user to choose from to manage their task ranging from, school/work to personal .
3. **Cancel Button** : On click , Returns to *Add Task List 3.1* as user terminates time deadline selection.
4. **Add Category Button**: On click , confirm the category and navigates to back to *Add Task Screen 3.1* to carry out other functions.

The following screens that are *italicized* in the annotations for Add Task 3.1 are shown on this page .

Adding Additional Task 3.16 continued from screen 3.1.



#### Annotations

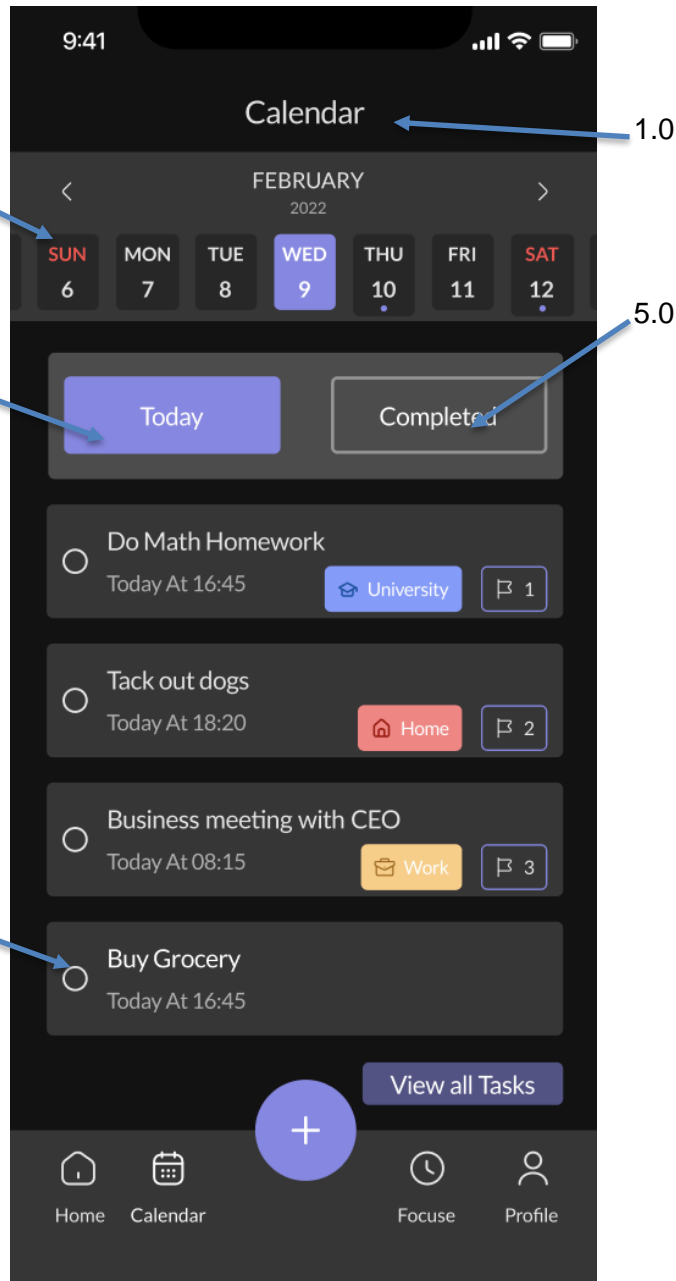
Adding Additional Task 3.16 ( screen to show continuation of adding one more task from screen 3.1)

1. Additional task added upon click of **Add Task Button**

not  
ne Selection 3.12

1. **Title** : "Task Priority " to let users know what they are doing .
2. **Priority numbers** : Different numbers from 1-10 for user to choose the urgency of the task .
3. **Cancel Button** : On click , Returns to *Add Task List 3.1*. as user terminates time deadline selection.
4. **Save Button** : On click , confirm the priority and navigates to back to *Add Task Screen 3.1* to carry out other functions.

## Calendar 3.2



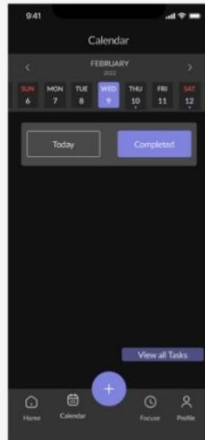
## Annotations

Category 3.13

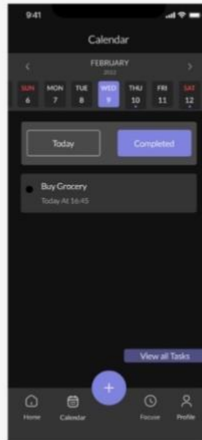
1. **Title:** Calendar
2. **Feature:** Scrollable Calendar to select dates and see tasks uncompleted and completed.
3. **Today Button;** On Click, Shows Tasks today(purple date box selected)
4. **Change Task to complete:** On click , confirmation overlay to change task to completed .
5. **Complete Button:** On Click, shows all completed tasks on Completed Screen 3.21

### Following screens related to Calendar Screen 3.2

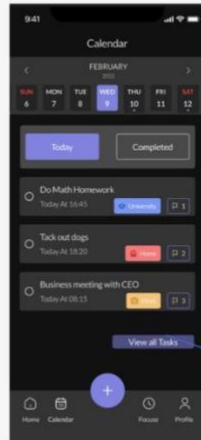
Tasks Left after grocery completed 3.21



Completed 3.22



Tasks Left after grocery completed 4.23

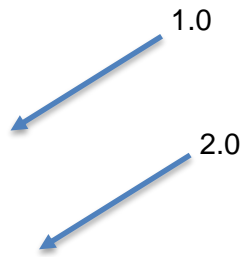


Annotations  
Calendar 3.21,3.22,3.23

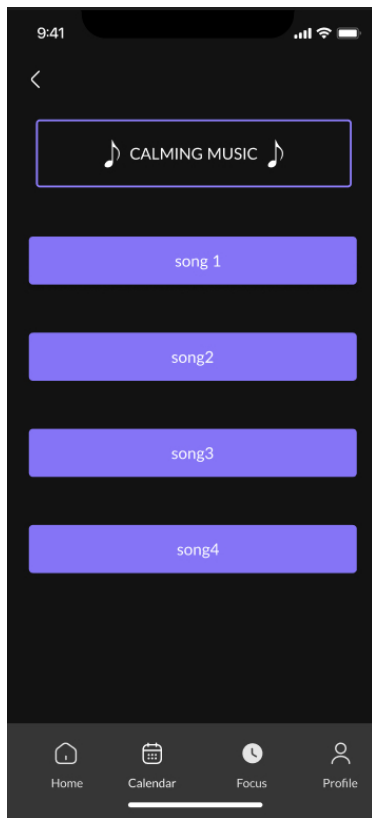
1. **View all tasks button** : On Click, navigates to *Index Screen* 4.3 which shows all the tasks.

1.0

Calming Study Music 4.0



2.0

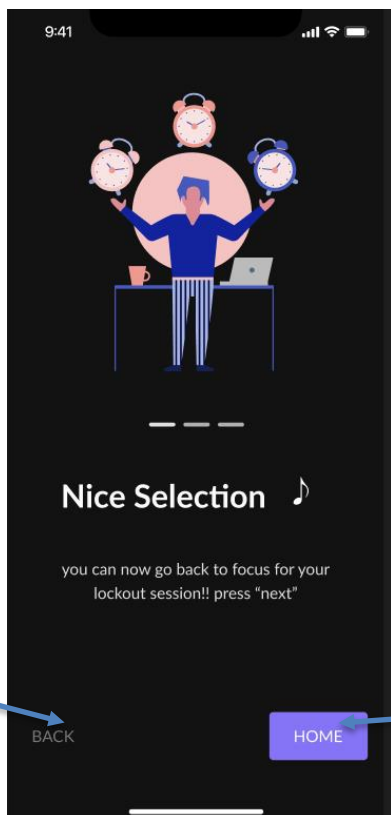


song confirmation 4.2

#### Annotations

##### Calming Study Music 4.0

1. **Title :** Calming Music
2. **Song 1/2/3/4 button :** On click , user is navigated to *song confirmation 4.2*



#### Annotations

##### Calming Study Music 4.0

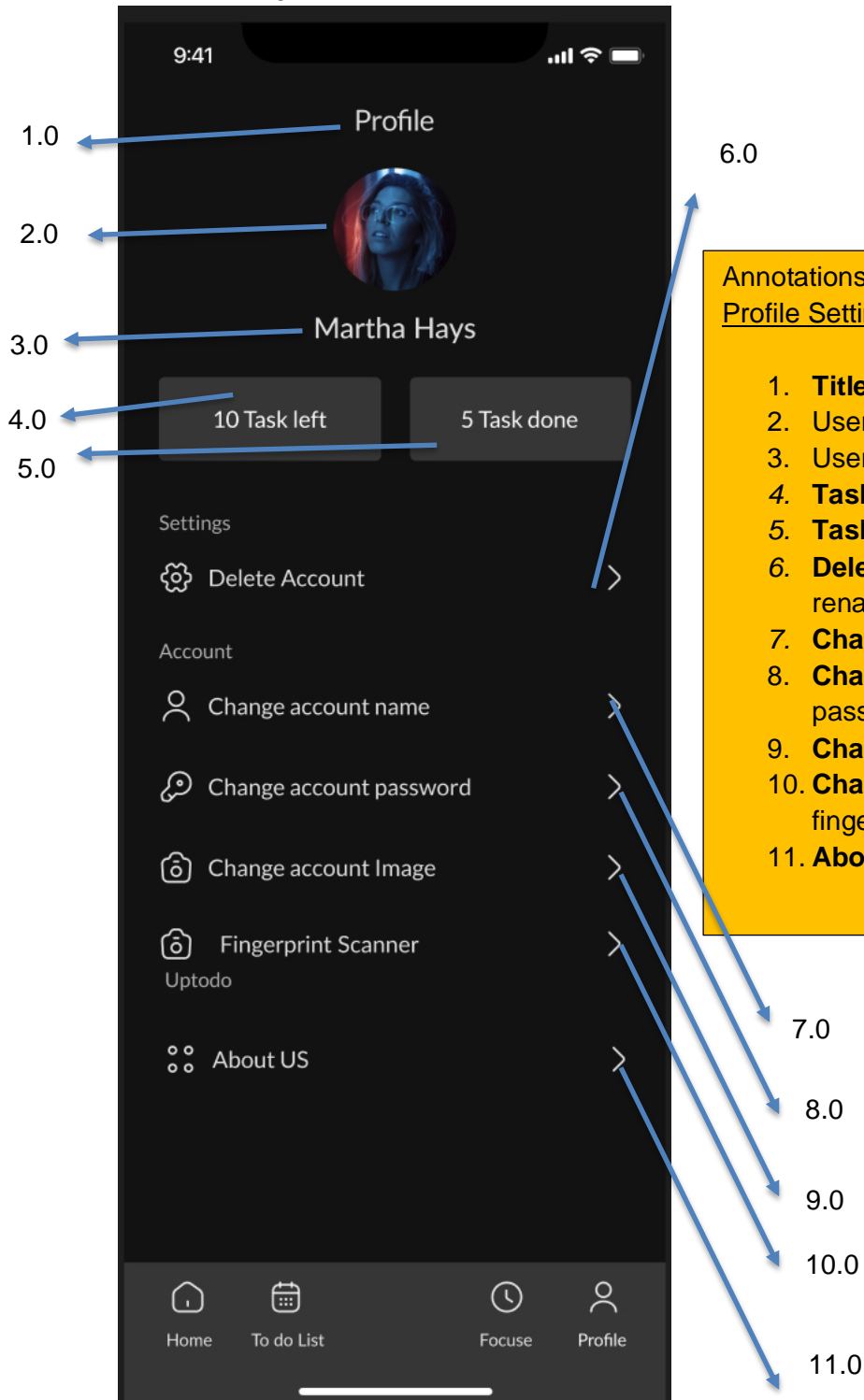
1. **Back Button:** On Click, navigates back to *Calming Study Music 4.0*.
2. **Home Button :** On Click , navigates back to *Homepage 2.0*.

1.0

2.0



## Profile Settings



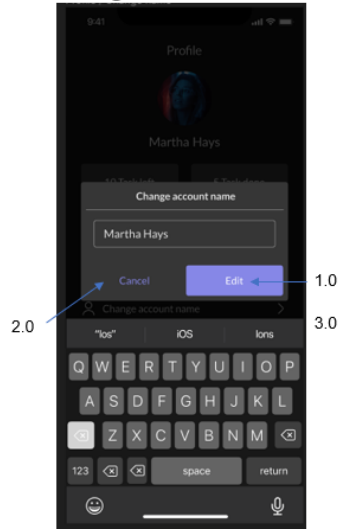
## Annotations

Profile Settings 8.0

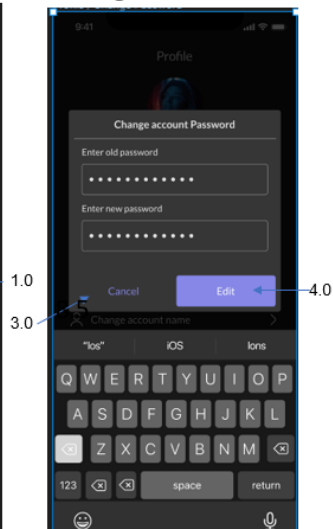
1. **Title** : Profile
2. User profile
3. User name
4. **Task Left** : Shows the number of tasks-left.
5. **Task done** : Shows tasks completed .
6. **Delete Account** : Function to delete account and renavigates to *Homepage*.
7. **Change Name** : Function to change users name
8. **Change Password** : Function to change users password
9. **Change Image**: Function to change Image
10. **Change Fingerprint**: Function to change fingerprint.
11. **About us** : More information on Student+ team .

## Following screens related profile settings 8.0

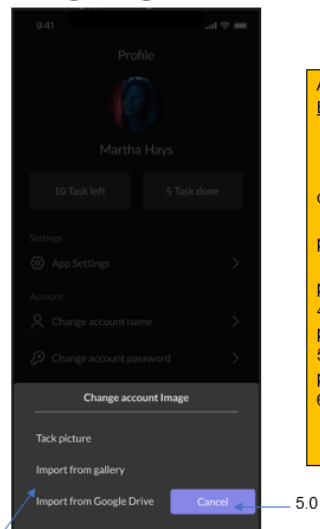
Change Name 8.5



Change Password 8.5



Change Image 8.5

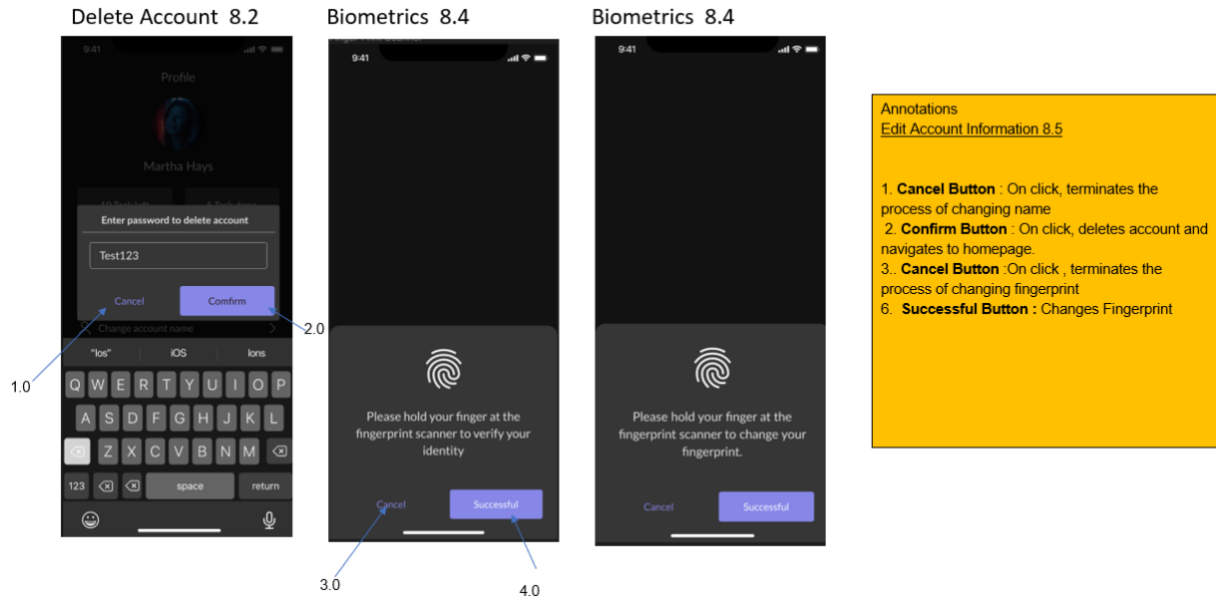


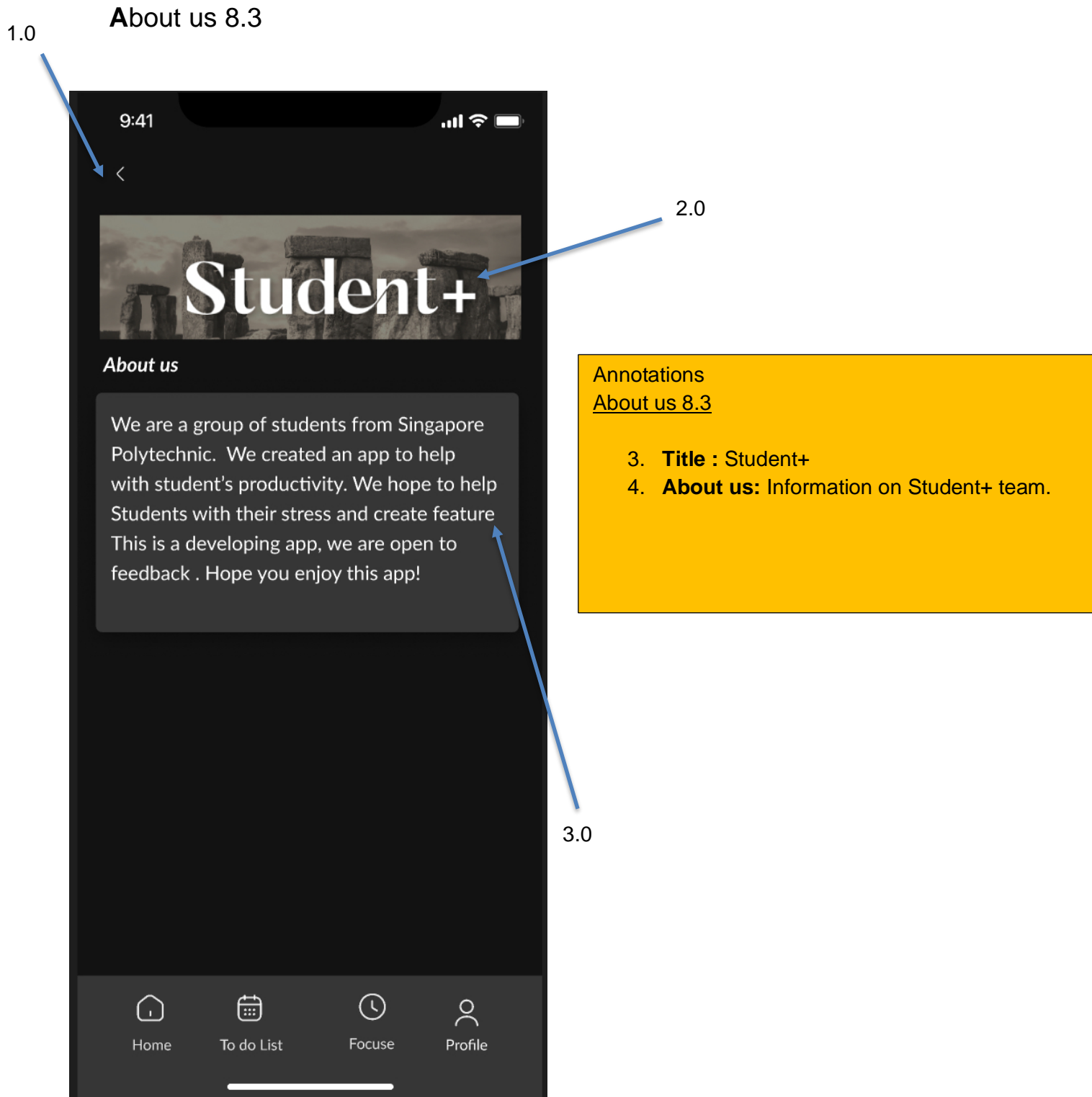
### Annotations

#### Edit Account Information 8.5

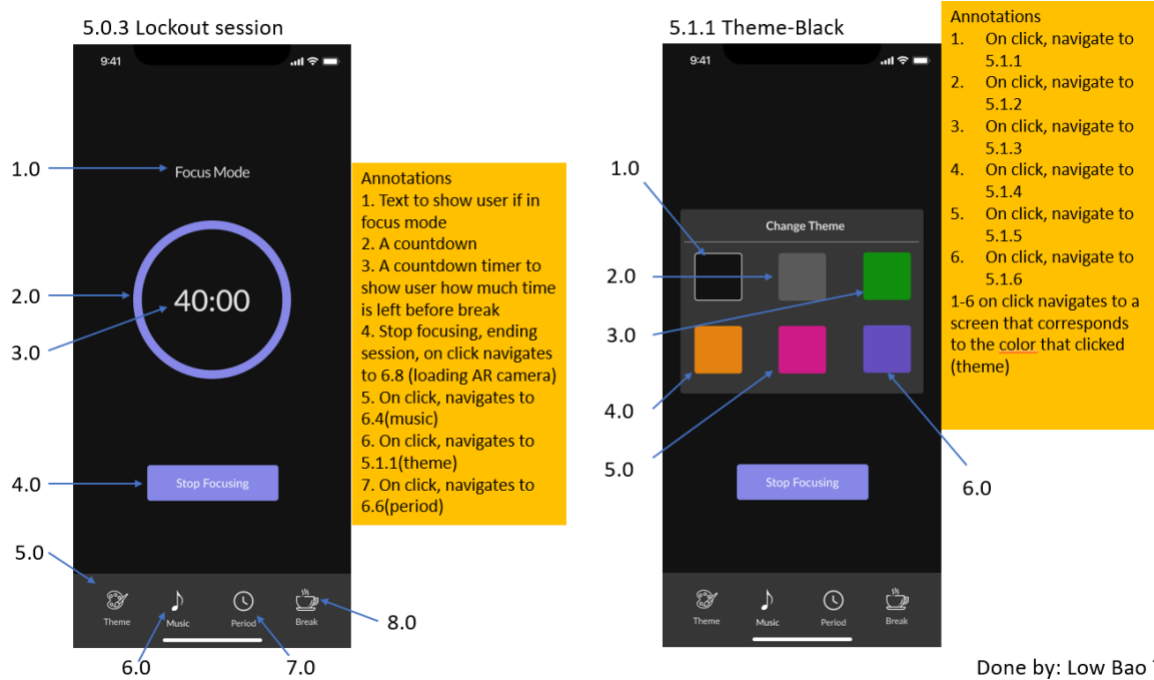
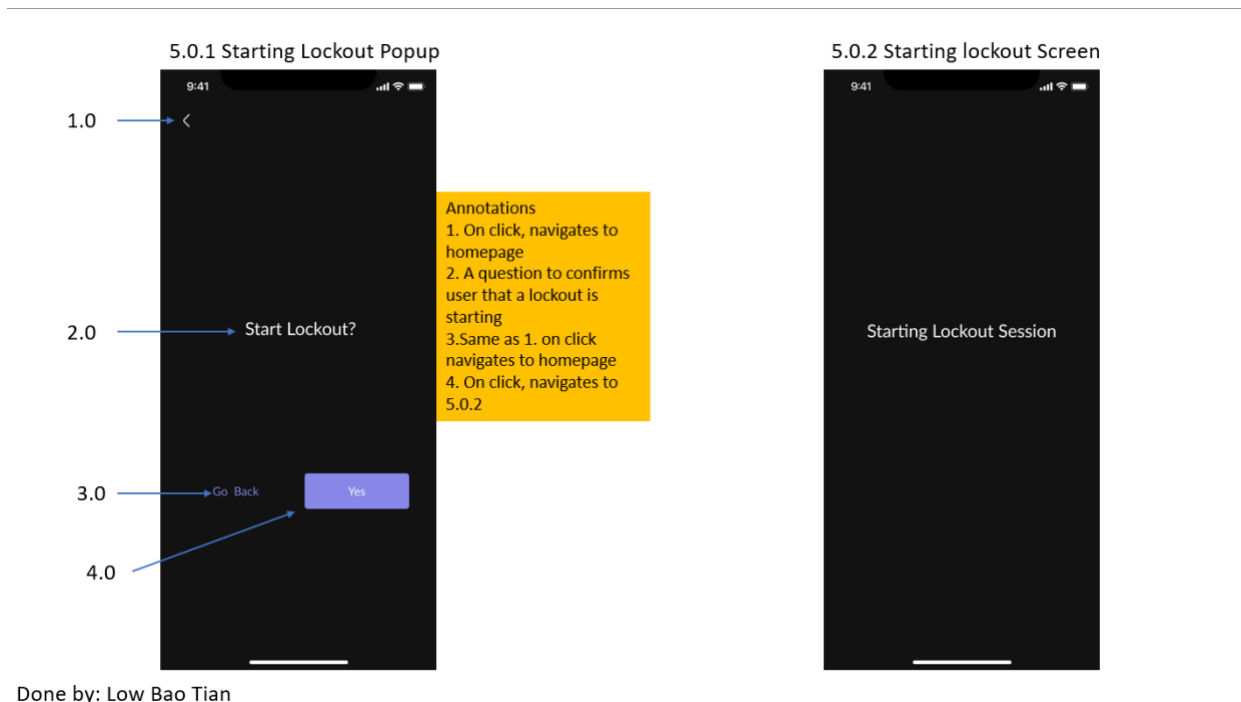
1. **Edit Button** : On click , confirms the changed name
2. **Cancel Button** : On click, terminates the process of changing name
3. **Cancel Button** : On click, terminates the process of changing Password
4. **Edit Button** : On click , confirms the changed password .
5. **Cancel Button** :On click , terminates the process of changing image.
6. Options to change image

## Following screens related profile settings 8.0

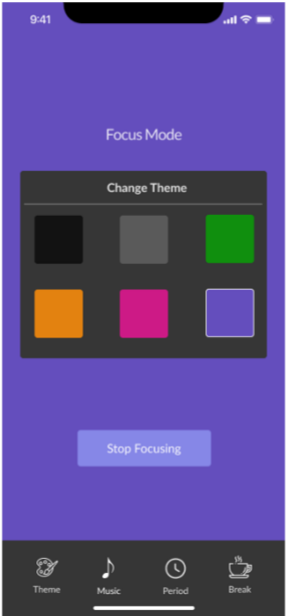




Wireframe (Low Bao Tian)

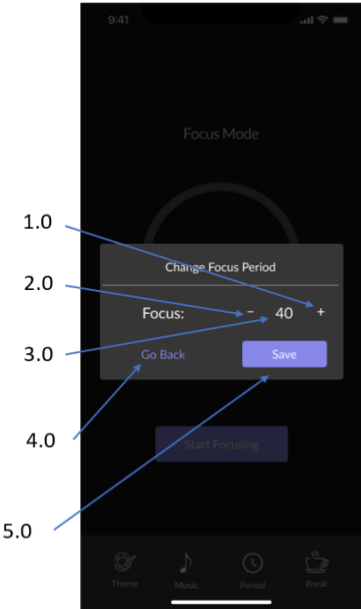


5.1.5 Theme-Blue



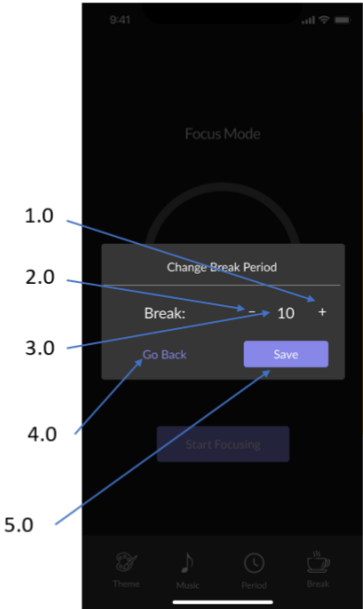
Done by: Low Bao Tian

5.2 Change period



Annotations  
1. This adds the focus period by 10min to 30min, overlays to 5.2.2  
2. This adds the focus period by 10min to 30min, overlays to 5.2.1  
3. Displays the focus period  
4. On click, closes overlay to 5.0.3  
5. On click, focus period will be saved, and closes overlay to 5.0.3

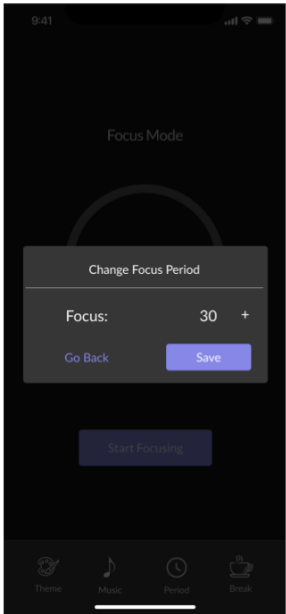
5.3 Change Break



Annotations  
1. This adds the focus period by 10min to 30min, overlays to 5.3.2  
2. This adds the focus period by 10min to 30min, overlays to 5.3.1  
3. Displays the focus period  
4. On click, closes overlay to 5.0.3  
5. On click, focus period will be saved, and closes overlay to 5.0.3

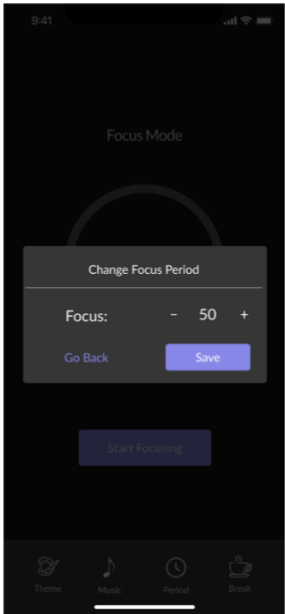
Done by: Low Bao Tian

5.2.1 Period-10

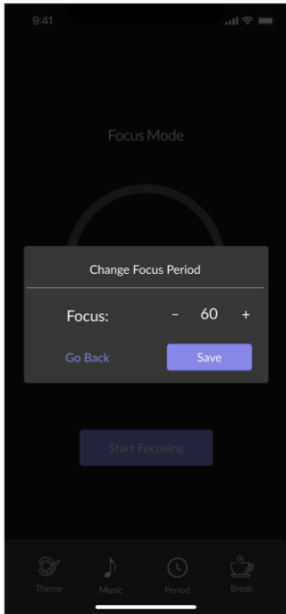


Done by: Low Bao Tian

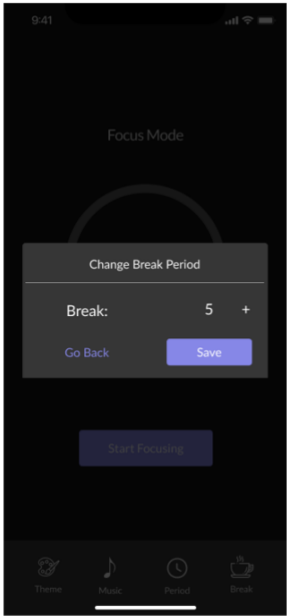
5.2.2 Period-10



5.2.3 Period-10

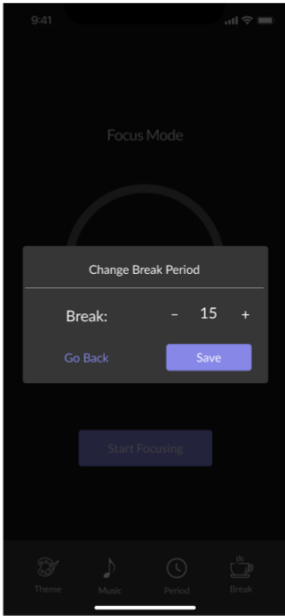


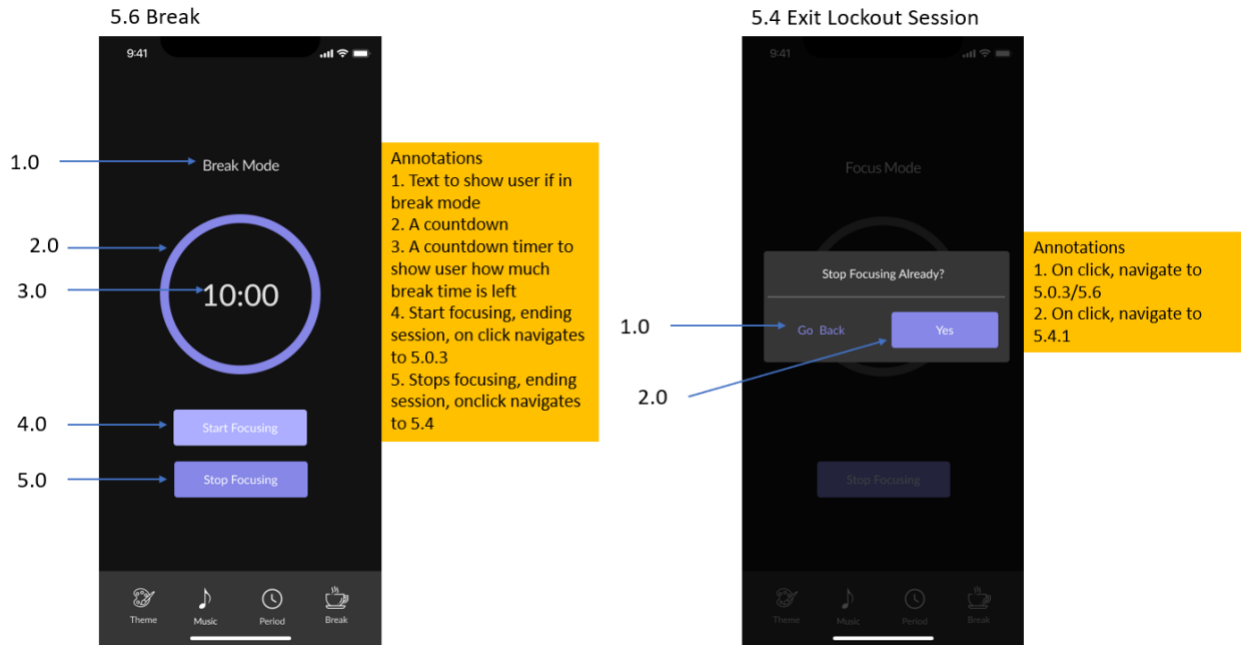
5.3.1 Break-5



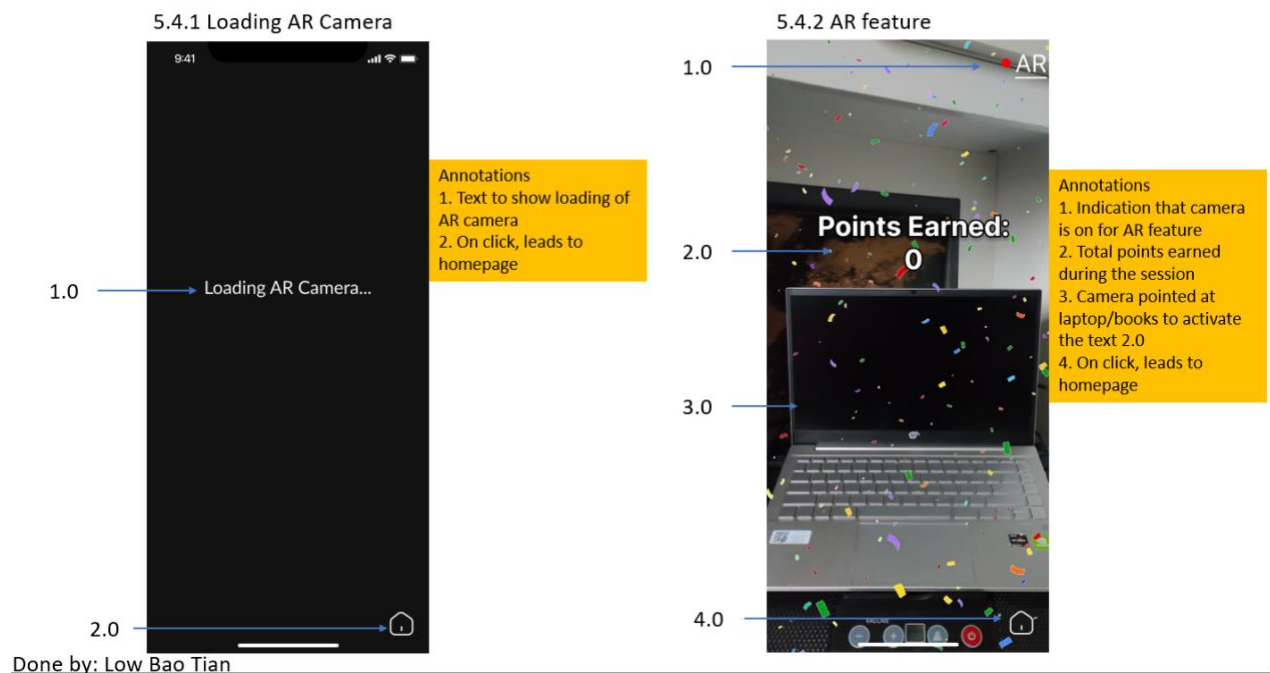
Done by: Low Bao Tian

5.3.2 Period-15



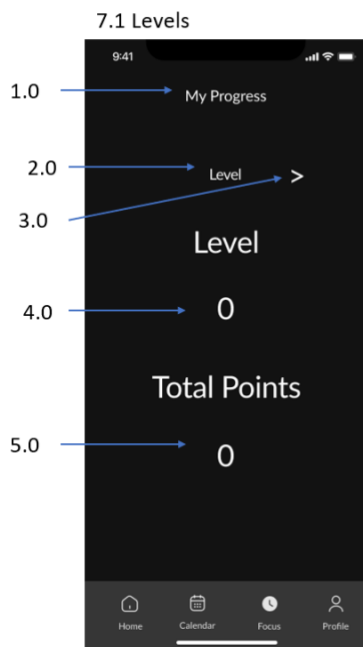


Done by: Low Bao Tian



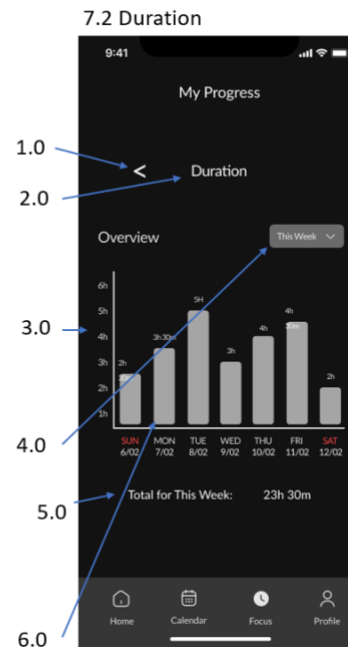
Done by: Low Bao Tian





Annotations

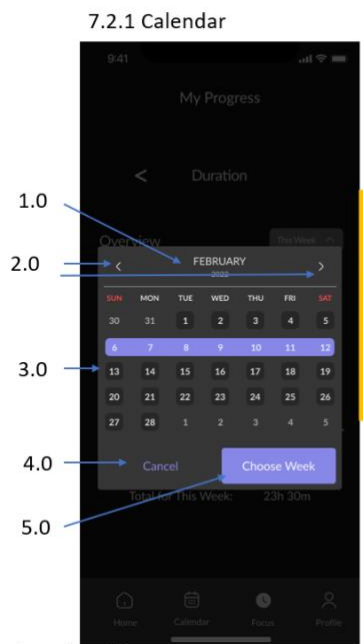
1. Text of "My Progress"
2. Text to let users know it is "Level" Screen
3. On Click, navigate to 7.2



Annotations

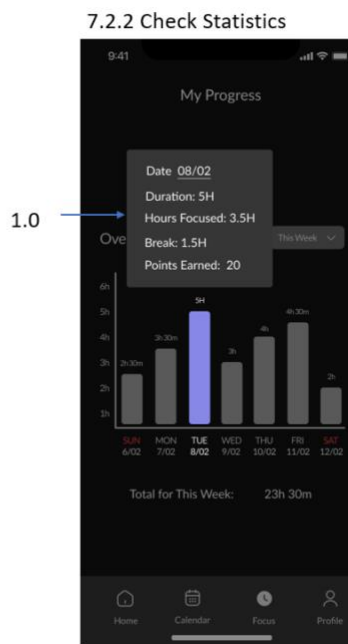
1. On click, navigate to 7.1
2. Text to let users know it is "Duration" Screen
3. Overview of the duration of lockout for each days
4. On click, navigate to 7.2.1, change the week
5. Shows the total duration done for the week chosen
6. On click, navigate to 7.2.2

Done by: Low Bao Tian



Annotations

1. Text to show month
2. Go forwards and backwards
3. Choose week
4. On click, closes overlay, navigates to 7.2
5. On click, saves week, closes overlay, navigates to 7.2

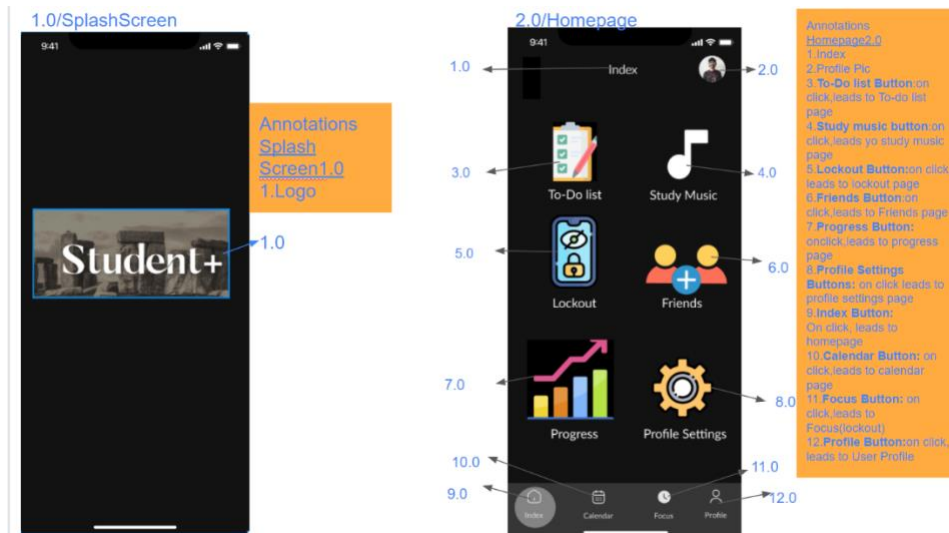


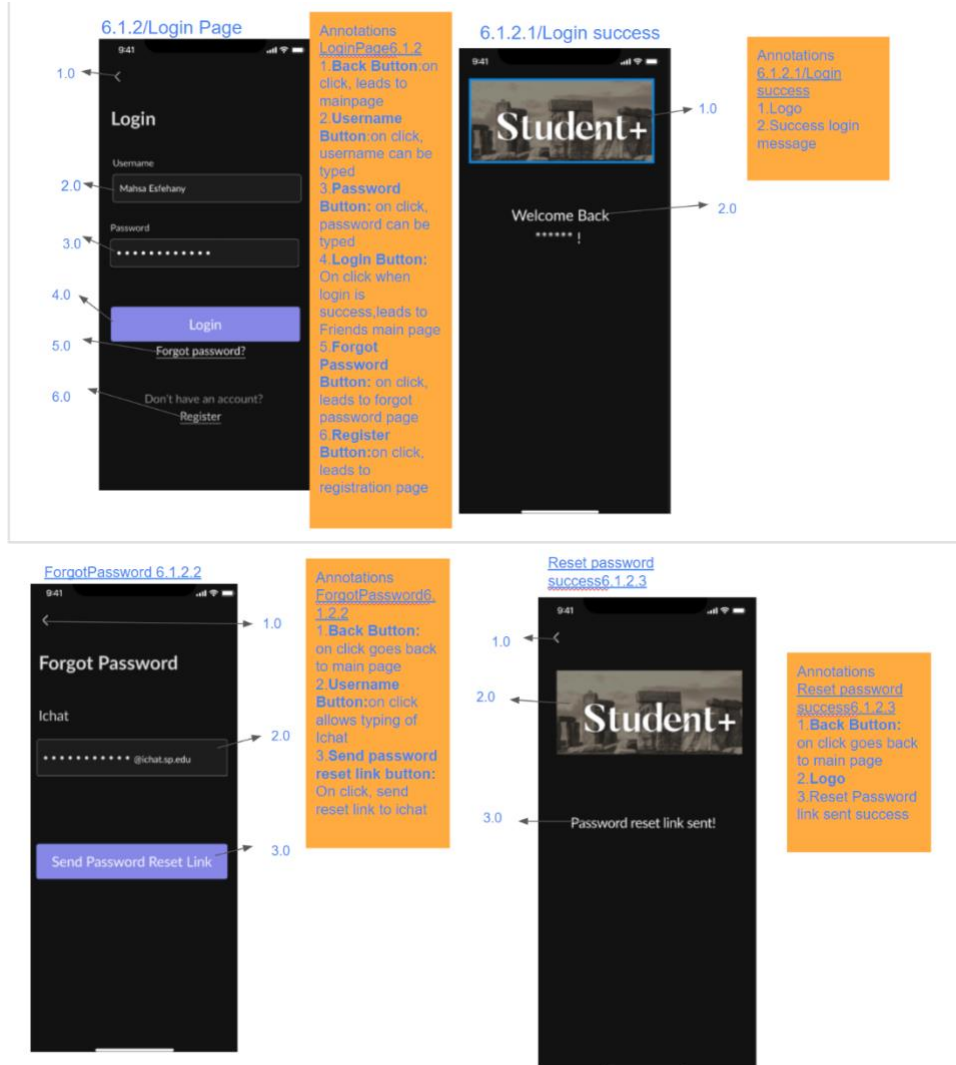
Annotations

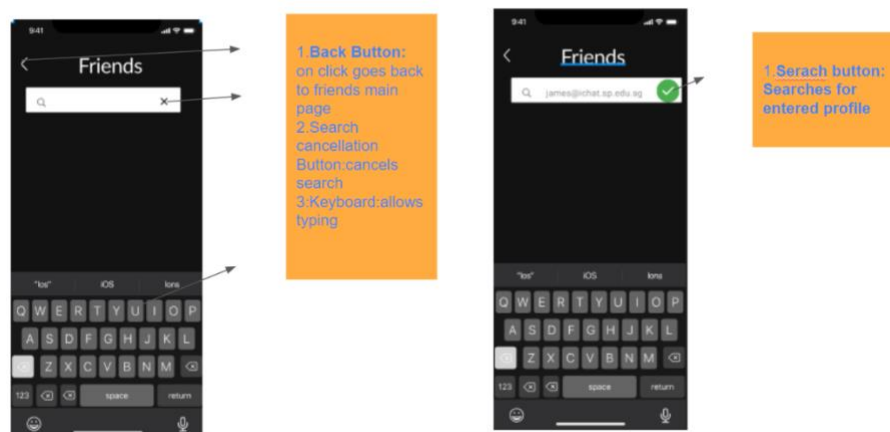
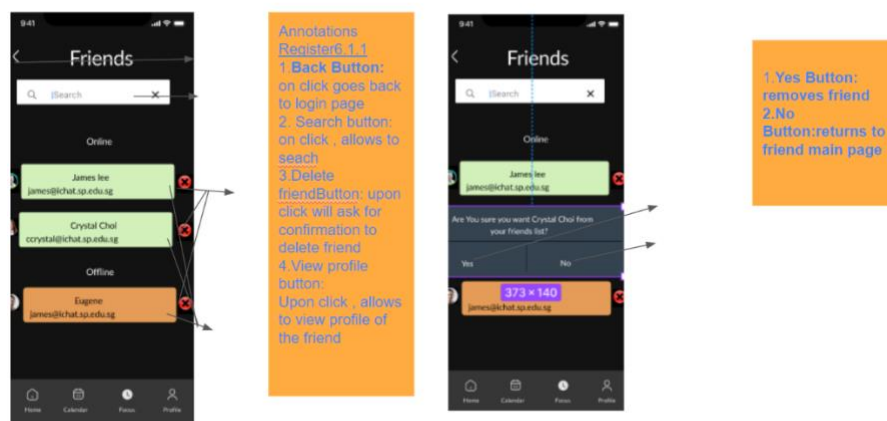
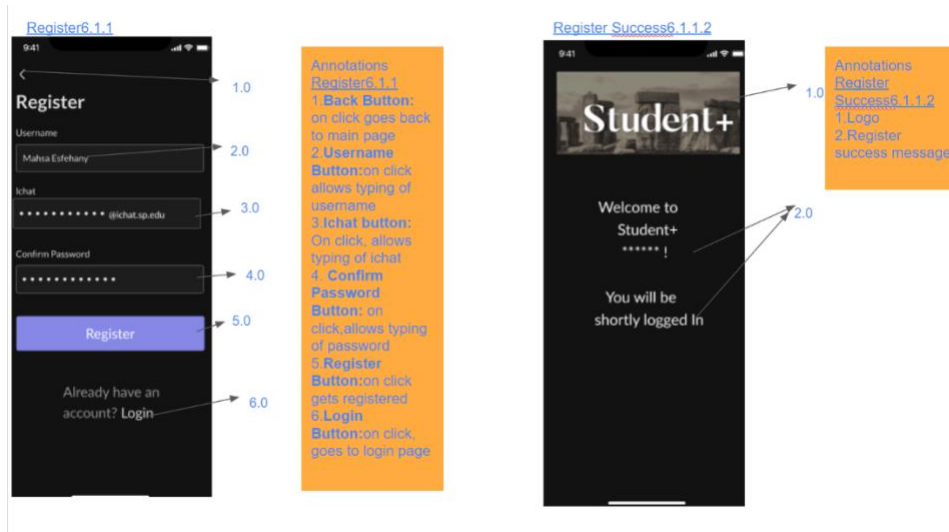
1. Shows statistics.

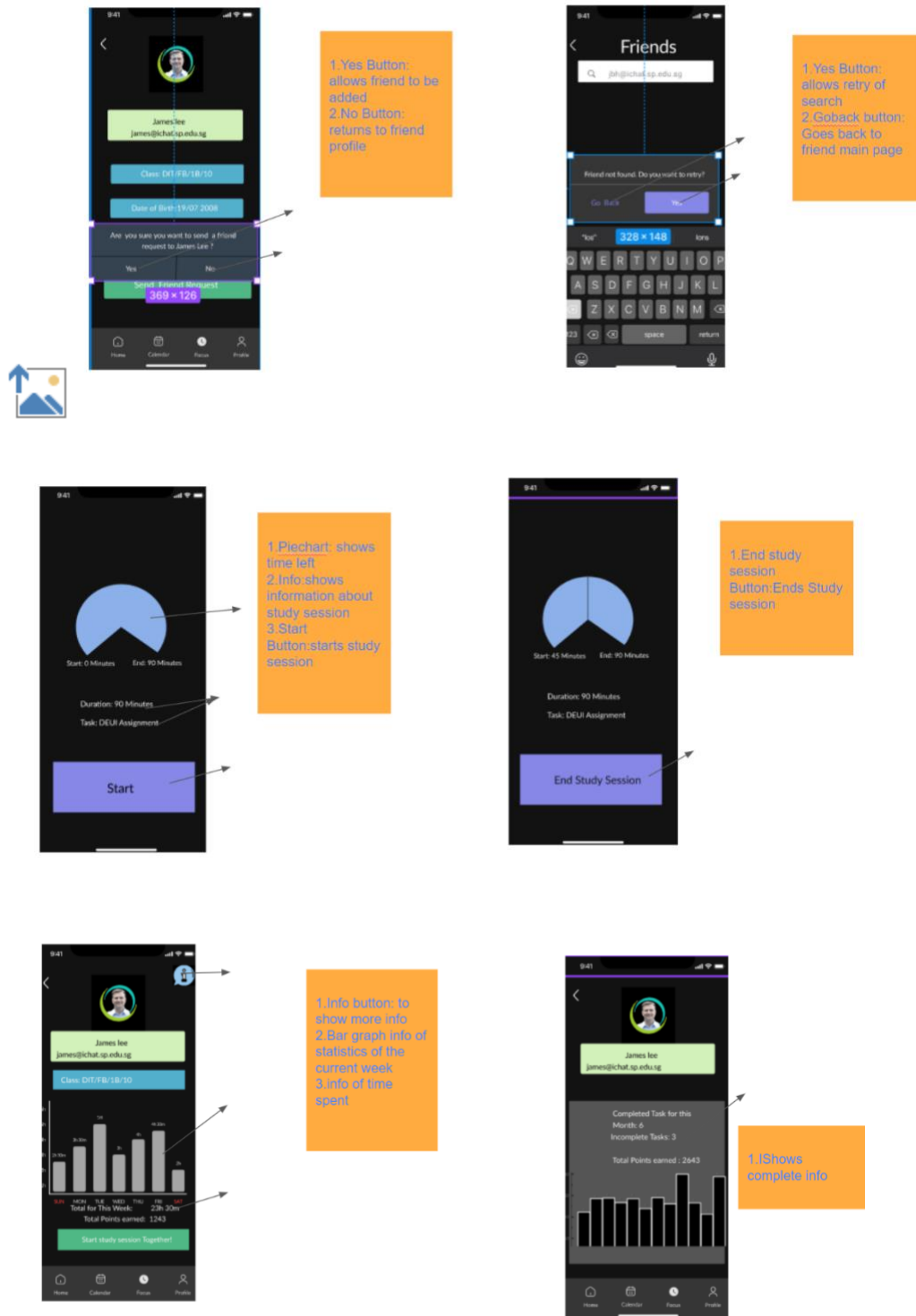
Done by: Low Bao Tian

## Wireframe (Ravuthasamy Pravin)











## References

Prototyping Tool : Figma

## Appendix

04