RAPID

A smart calendar tool that learns and tweaks your daily plans for a more efficient and healthy schedule.

Team

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Problem and Solution Overview

Stress is something every student encounters throughout their college career. Our target users face overwhelming schoolwork and don't have clear directions for the future. To help them alleviate the stress and understand themselves better, we decide to design a smart calendar tool that records user's' thoughts on daily events. Users can later review the diary-like thought recordings to understand what makes them stressful, relaxed and things they want to continue to pursue academically and career-wise. RAPID users will become more aware of their stressors which can result in stress relief and better, healthier, and more efficient schedule planning.

Initial Paper Prototype

Overview of Initial Prototype
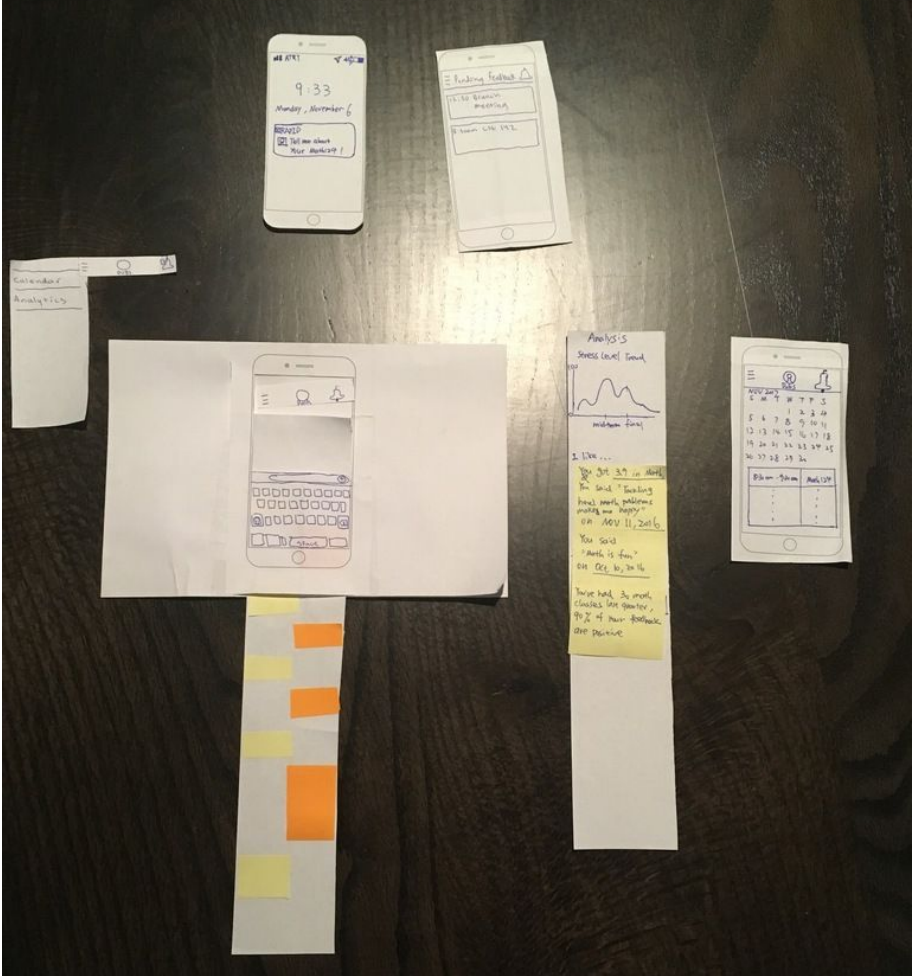
Task 1: Tracking thoughts and ideas
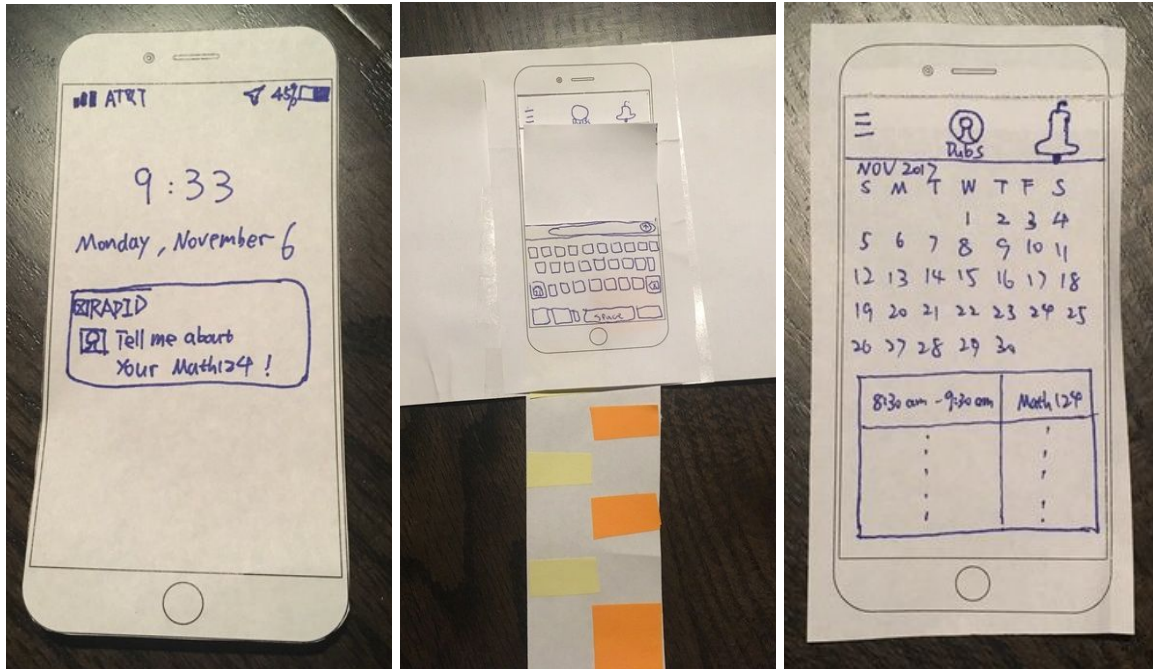
The notification pops out on the lock screen after the user finished taking Math 124. RAPID is notifying the user that it's time to record something about the class. The first task of tracking thoughts and ideas is facilitated after the user clicking the notification and unlock the screen.

After users click on the notification and unlock the screen, they will see the chatbot. It's a natural way to gather feedback about previous events from users.

After users tell the chatbot "I want to end this talk", "finish recording" or anything imply that users want to end the conversation, user will be sent back to the home screen - the calendar.

Task 2: Analysis of feedback
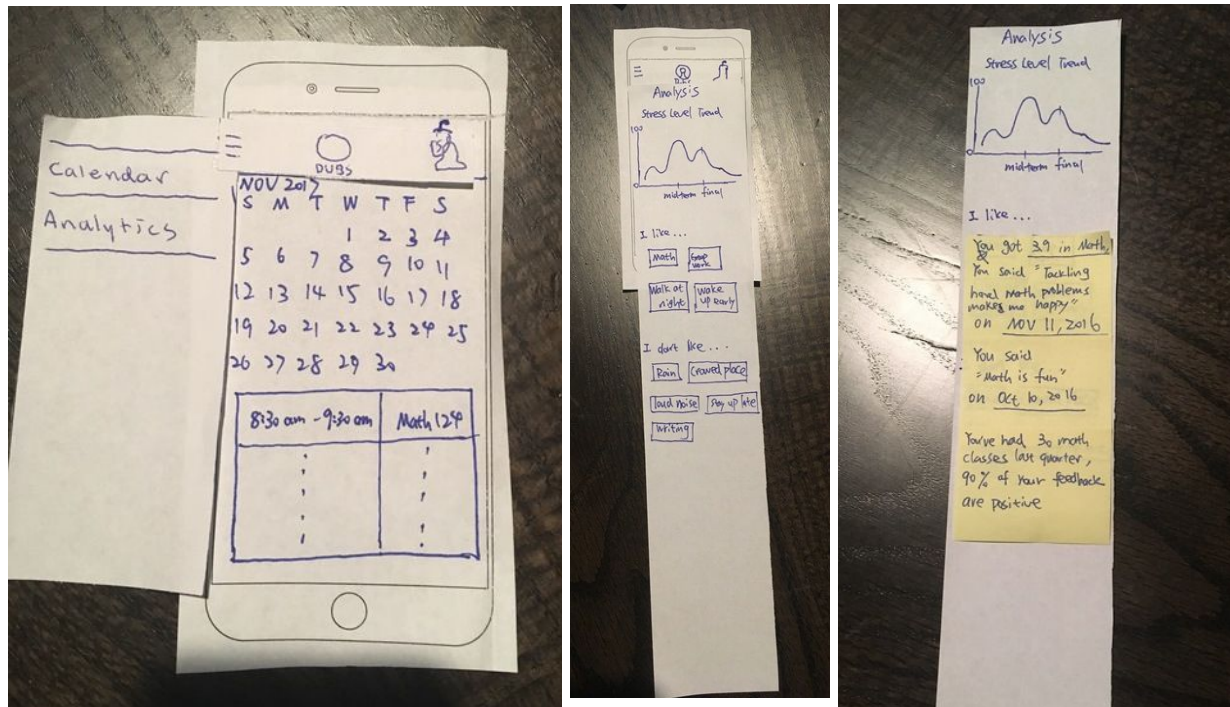
User can click the hamburger button to view more options. After collecting the feedback for a while, users decide to click on Analysis to see the results/summary.

Then users will see the Analytics page above. It contains the stress level trend, keywords about what users like and dislike. Those keywords are **clickable**. Users can click them to see more details.

For example, the user clicks on *Math* keyword. The analytic page then shows why *Math* become a keyword.

Other Aspects: Alert
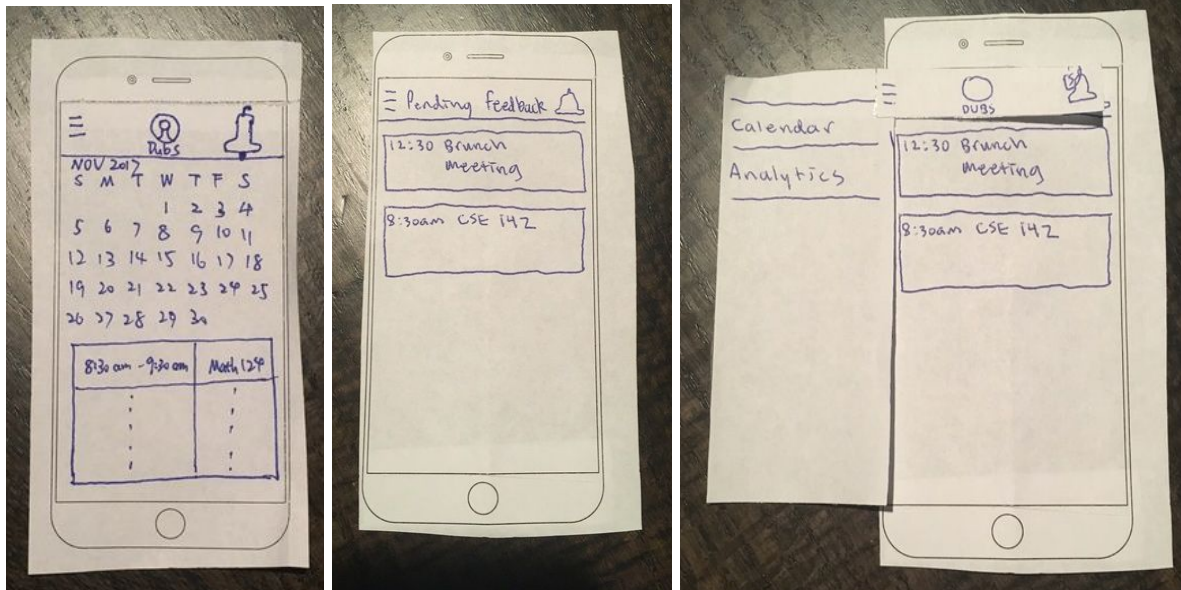
By clicking on the right most alert button, user will go to *alert* page which contains events that users have not given feedback (users ignored the notifications and want to come back later to give the feedback). Users can click on each event and then add the feedback through the chatbot.

After viewing the alert page, users can click the hamburger button to go to homepage or Analytics.

Testing Process

We first conducted two heuristic evaluations on our initial prototype. These studies were conducted with members from other design teams in CSE 440 class. We used their feedback to quickly identify interaction issues with the prototype and make changes to improve our design before conducting full usability tests. We then conducted three usability tests to evaluate the ease at which our main tasks could be executed on our paper prototype. During the sessions, we did not answer any questions about how to complete a task. Questions about the application and the scenario in general, however, were answered. We were focused on learning how the participant thought the application should work, rather than how it does work.

For the usability test, the first participant is Meredith and she is a senior in HCDE. The second participant is Kevin and he is a junior in CSE. The third participant is Hy Nguyen and he is a first year student in HCI+D. They are convenient choices as participants in terms of proximity and they were all very thoughtful in their feedback. They had no previous background or knowledge of our project, and so would be able to provide fresh, unbiased feedback. We conducted the first usability test in the student lounge of Sieg Hall and the rest two in Share Tea, a bubble tea store near campus. We chose these locations because they are convenient and they have tables which are large enough to lay out our screens and switch them out.

To keep variables in the usability testing low, we maintained the same protocol and process for all three testing sessions. We first asked the basic information about the participant and then introduced ourselves and the project we are working on. We addressed the purpose of test and emphasized on we are testing designs but not people so if participant makes any mistake, it's not their fault but the flaws in design. Then we told participant to finish two tasks: recording feedbacks and reading analytics about those feedbacks. If user made any error, we only gave out limited hint to make sure the participant can continue the test. We encouraged participants to think out loud during the process because we want to understand thinking process about the interaction that is not easily observable. After the testing, we asked users for additional feedback and explained the mistakes users made. Afterwards, we said thank you to participants and ended the testing sessions.

After our heuristic evaluations, we realized we needed to better explain the purpose of our application so that the participants had some context before using the prototype. Also, it was hard to explain a task to the participants without giving away too much. So

when we conducted our usability tests, we prepared to give tasks in a more scenario-based form. And after we finished our first usability test, we found it difficult to understand thinking process of participants about the interaction because it is not easily observable. So for the rest two tests, we encouraged participants to think out loud during the process.

Testing Results

Based on the results from heuristic evaluation, usability testing, and design critics, we've been able to iterate and refine our designs. The final design looks quite different from our initial paper prototype. In the next few paragraphs, we will list major design changes in terms of testing results. The more detailed testing results can be found in the appendix.

Heuristic Evaluations: Through the heuristic evaluations, we found out issues in four major areas: Aesthetic and minimalist design, Consistency and standards, User control and freedom, and Visibility of Systems Status. All the issues only have 1 to 2 severity level. We addressed those issues and made design changes before proceeding to usability testing.

- Aesthetic and minimalist design: User wants ability to collapse calendar into week or day view to get more details rather than having everything mushed into one screen. As a result, we broke the one screen into multiple where the user can get more details in a less cluttered way.
- Consistency and standards: The pending feedback had its own button to get to a first level screen whereas the calendar and analytics were both within a hamburger menu. As a result, we added the pending into the hamburger menu.
- User control and freedom: In the feedback chatbot, it was unclear how to exit the conversation and return to either home (if entry point was notification) or previous screen. As a result, we added a done button, the user can then exit the conversation at any moment.
- Visibility of System Status: User wasn't sure if the calendar screen was for viewing schedule or for finding/viewing feedback from dates in the past. As a result, we changed the design in a way that users can see their feedbacks if they are on an individual day's event and schedule page.

Usability Testing 1: During the first testing, we found out that "Hamburger" menu was not necessary and it made the system functions less visible.

- **"Hamburger" button removal:** After the first usability testing, we made one major design change by removing "Hamburger" button. Participant reflected that we do not need a "hamburger" button since there are only 2 to 3 items in the list. Therefore, we removed the "hamburger" button and implemented the extended list at the bottom of the page. This change led to fewer clicks and clear interface design.
- **Add Community feature:** participant wished this app could be more about the community and she wanted to see what's the stress level of other UW students in different majors and classes. The she could feel better about herself because she could understand that she's not the only one who feels stressful. Therefore, we added a community feature that shows overview of stress level of people from different groups.

Usability Testing 2: During the test testing, we mainly discovered that user was confused on the landing page. The results motivated us to redesign the landing page in a minimalistic way that communicated well what user can do on the page.

- **Landing Page Redesign:** When the second user landed on the homepage (originally a calendar), he was confused and did not know how to proceed to finish the first task. Therefore, we redesigned the homepage to contain only three parts: app usage records. Pending feedback quick link, and customized tips.
- **"+" Button Meaning Redefine:** Participant did not use "+" button in an intended way to add feedback because the user thought "+" button meant adding a new event. Therefore, we changed the function of the "+" button from adding a new feedback to adding a new event that matched user's mental image.

Usability Testing 3: The last user helped us find out issues on the analytics page.

- **Analytics Page Redesign:** When user landed on the Analytics page, user was confused about what each button and category meant. He had no idea what he would see after clicking on each button. Therefore, we redesigned the Analytics page to include a more straightforward line graph that illustrates the trend of the stress level. Furthermore, we added a recommended events and classes section based on feedback we gathered from users.

Design Critiques: We also received feedback from Friday section and made design changes accordingly. The most common feedback we received is to combine the Community feature with Analytics. Community feature could be a third task and it would be too much work to focus on at this point of the course. Therefore, keeping the minimal Community feature in Analytics page was a viable solution. We did not implement this suggestion for the final paper prototype but we did for the digital mockups.
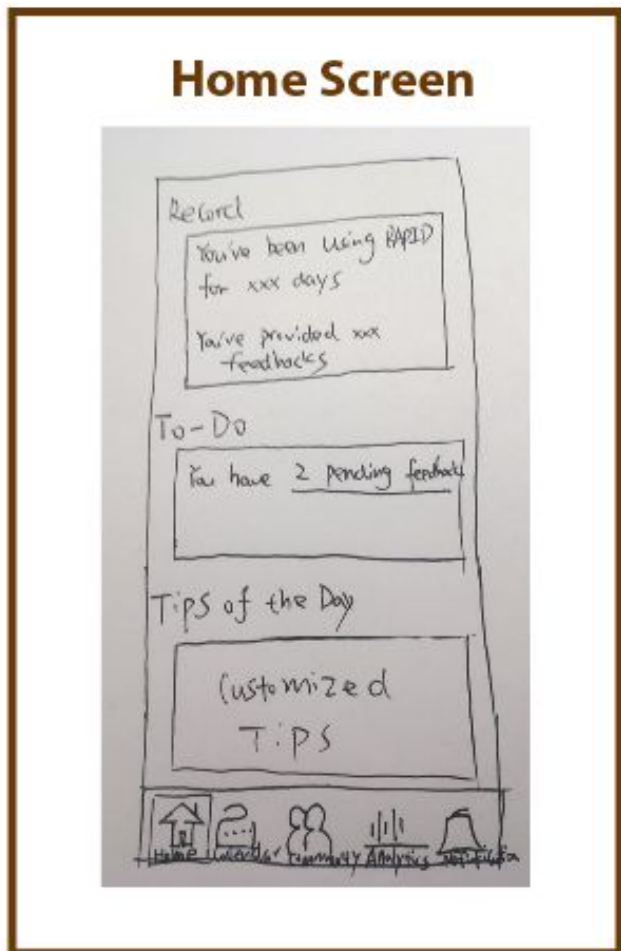
# Final Paper Prototype
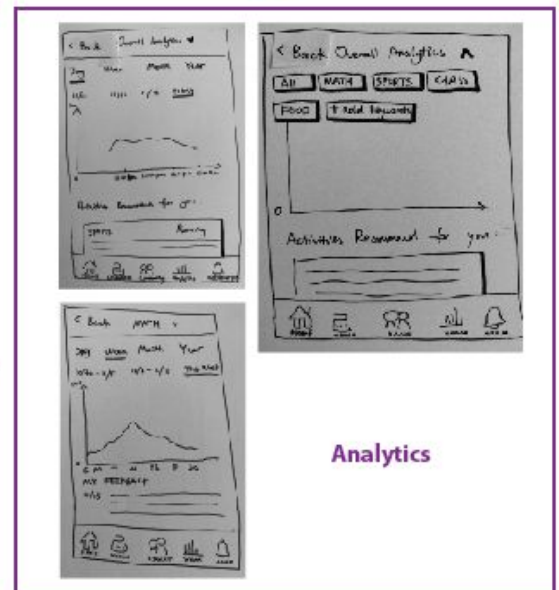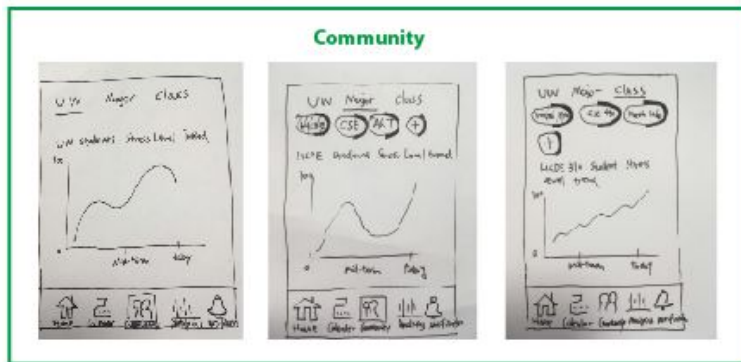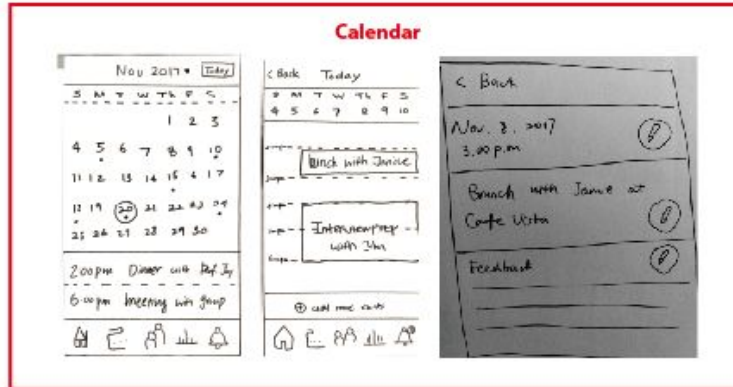
Overview

Paper Prototype Overview

Task -- Home Page

The homepage contains three parts: app usage record, pending feedback quick link, and customized tips. App usage record is for users to see their statistics and history of using RAPID. Click on pending feedback quick link will direct users to the Notification Page. Customized tips are provided based on users' feedback about their activities. More detailed feedback provided, more specific tips the application will give. This function can also be found under the Analytics Page with more details.

Task 1 -- Calendar: Tracking Feedback [Main]
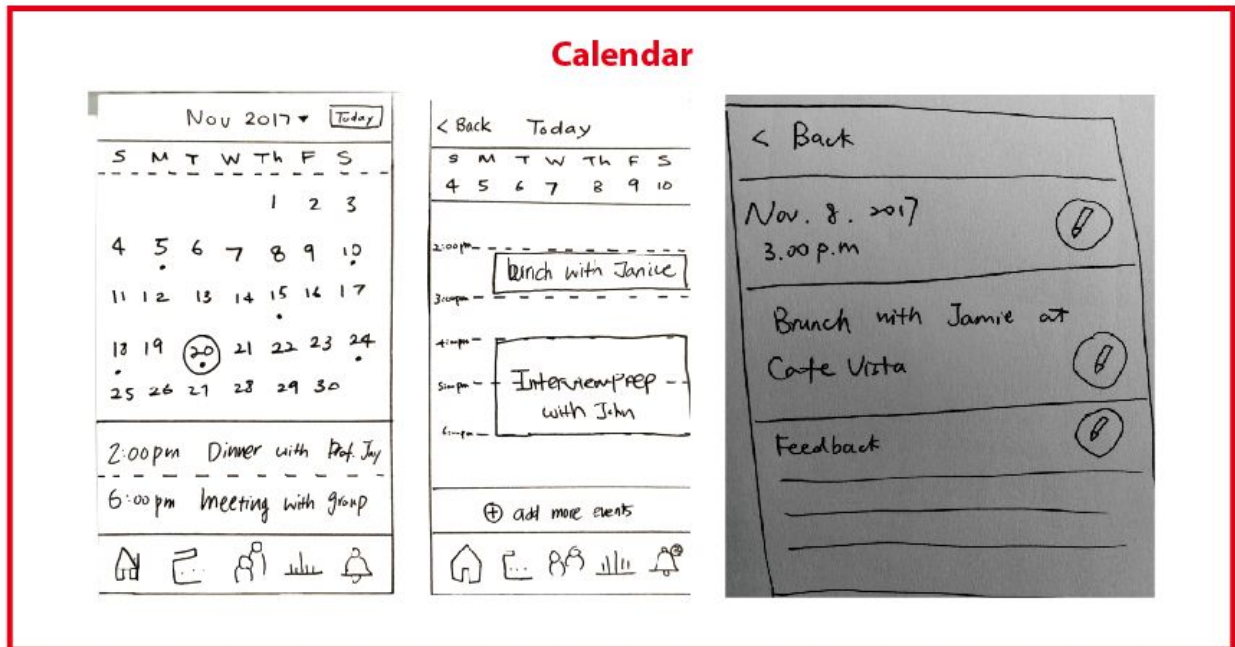
After clicking the calendar icon in the menu at the bottom of the page, the users can choose any date to see details of their schedules and feedback. By clicking the month/year on the top of the calendar, the user can choose different months and years. And if the users click on "today" button, he/she can go back to today.

Users can click on events in their schedules to edit the events and their feedback by clicking the "pen" button. Users can also click on the "add" button at the bottom part of the calendar page to add new events to their schedule.

Task -- Community: Data Statistics of Other Users
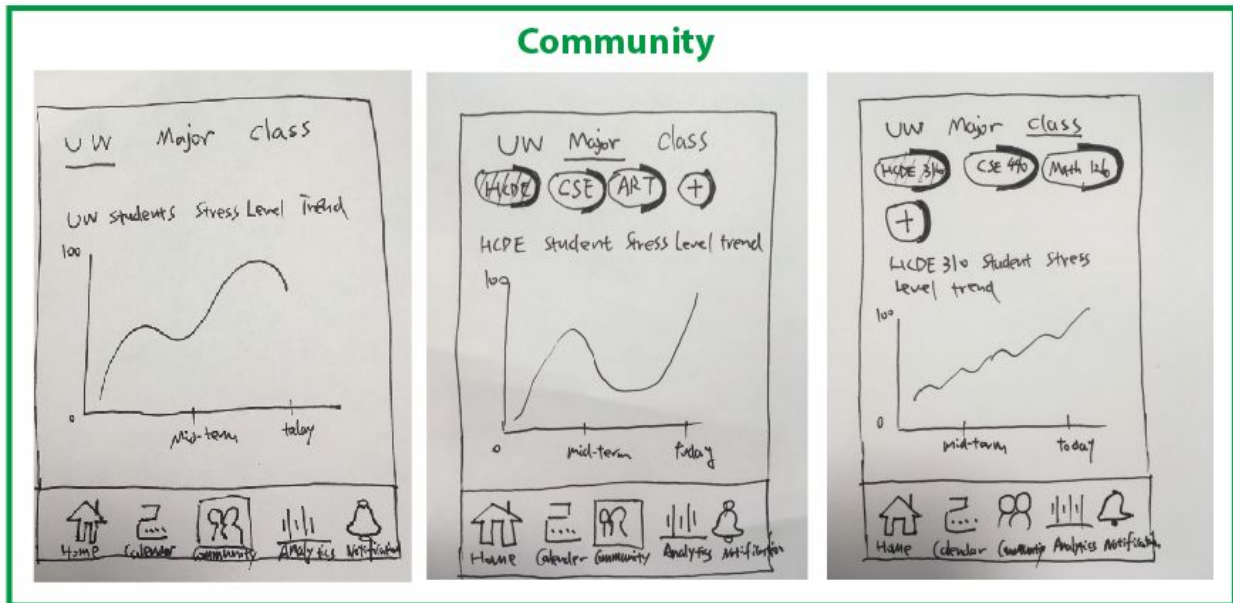
Click on the community icon will bring the users to these pages. By clicking on "UW", users can see what's the average stress level of other UW students over the quarter. "Major" allows users to see the average stress level of students from a specific major. The default major will be the user's own majors and the user can also click on other majors or add another major which is not in the selecting list to see the average stress level of students from those majors. Same about the "Class". The default classes will be classes the user takes for the current quarter.

Task 2 -- Analytics: Analysis of Feedback [Main]

Analytics

"Analytic" allows users to see their feedback summary and analytics. Users can choose from "Day", "Week", "Month", "Year" to see their stress level trend over a chosen period. By clicking on the small triangle near the "Overall Analytics" at the top of the page, users can also choose keywords from list or add keywords themselves to see their stress level trend related to the chosen keyword over a chosen period. Their feedback related to the keyword will also be posted under the stress level trend chart.

The block of "Activities recommend for you" will allow users to see tips and recommendations of activities for them. These data are based on users' past feedback, so more detailed past feedback the users provide, the more accurate and useful tips and recommendations the application will give them. Activities may include sports, food, classes, and etc. Users can search for keywords to see recommendations after they choose to learn more by clicking the block.
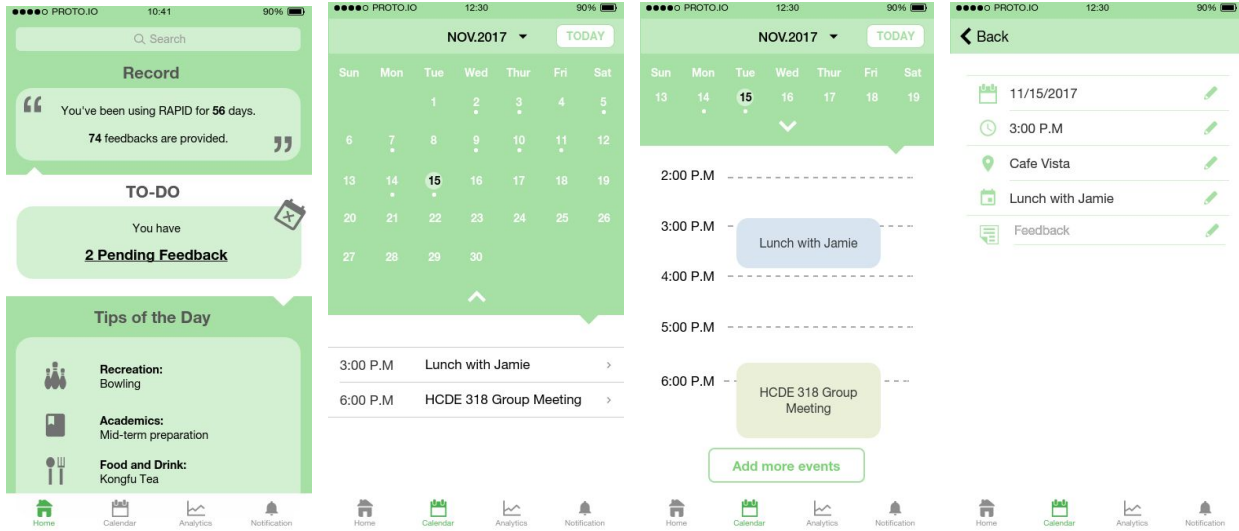
Task -- Notification: Pending Feedback
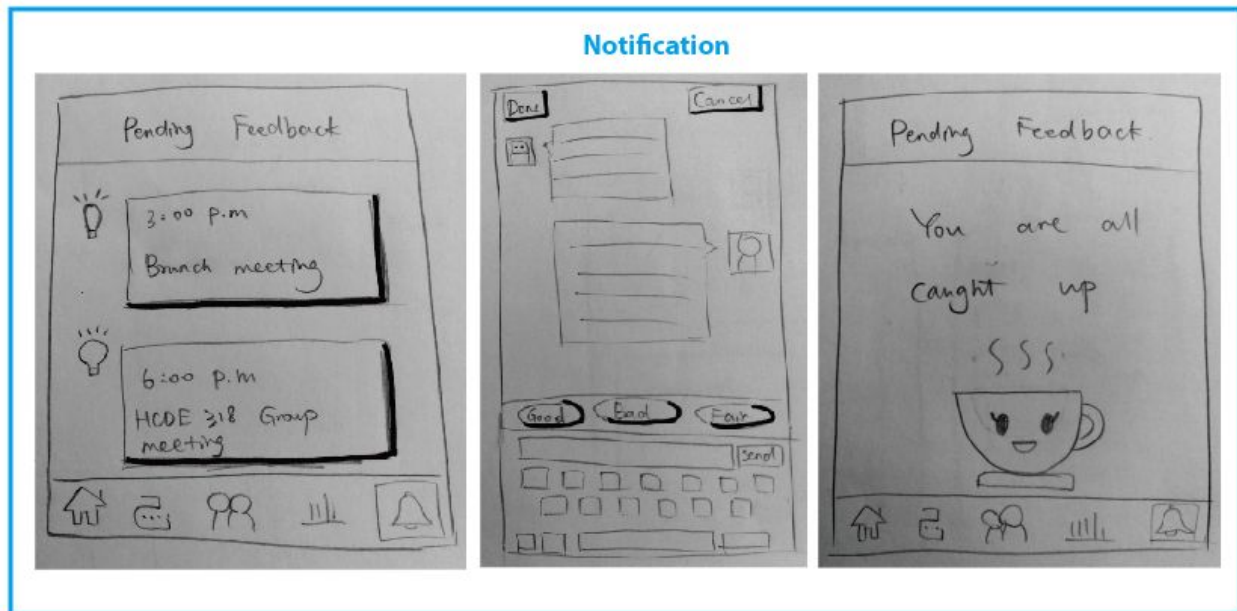
Pend feedbacks are notified through the notification page. Users can click on the pending feedback to add feedback to the activity. Users can choose from the sample answers if they want when providing feedback through chatting with the chatbot. Users can also type themselves to provide more detailed feedback. After users finish adding feedback, they click "Done" to quit the page. If they have not finished adding feedback but don't want to continue, they can click "Cancel" to quit the page.
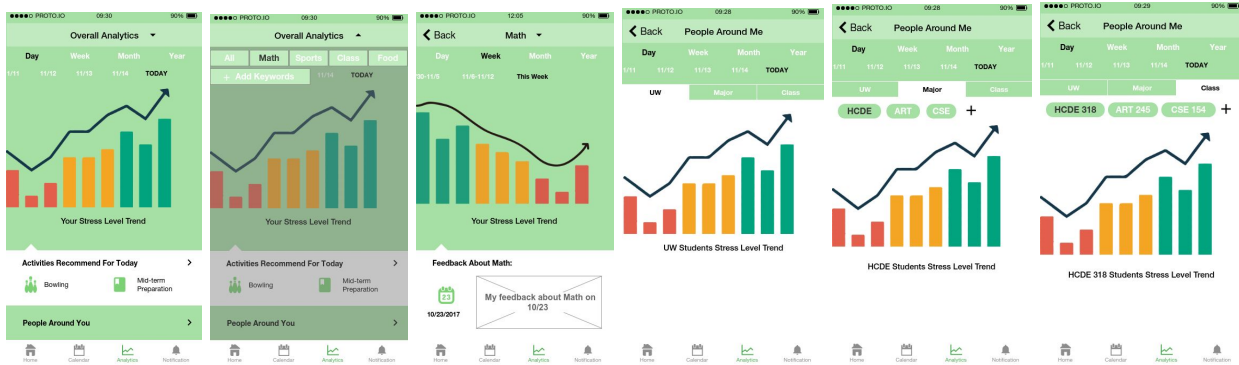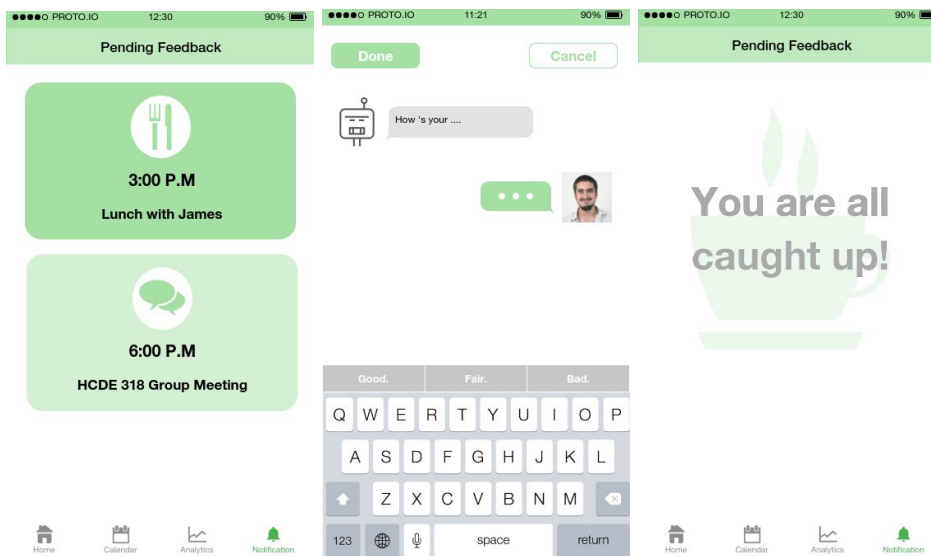
Digital Mockup

Initial Digital Mockup Overview

Home Page and Calendar for Tracking Feedback

Q Search

Record

" You've been using RAPID for **56** days.

74 feedbacks are provided. "

TO-DO

You have

2 Pending Feedback

Tips of the Day

Recreation:
Bowling

Academics:
Mid-term preparation

Food and Drink:
Kongfu Tea

Home   Calendar   Analytics   Notification

NOV.2017 ▾   TODAY

Sun	Mon	Tue	Wed	Thur	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

3:00 P.M   Lunch with Jamie   ›
6:00 P.M   HCDE 318 Group Meeting   ›

Home   Calendar   Analytics   Notification

NOV.2017 ▾   TODAY

Sun	Mon	Tue	Wed	Thur	Fri	Sat
13	14	15	16	17	18	19

2:00 P.M
3:00 P.M   Lunch with Jamie
4:00 P.M
5:00 P.M
6:00 P.M   HCDE 318 Group Meeting

Add more events

Home   Calendar   Analytics   Notification

‹ Back

📅 11/15/2017   ✏
🕐 3:00 P.M   ✏
📍 Cafe Vista   ✏
📅 Lunch with Jamie   ✏
📋 Feedback   ✏

Home   Calendar   Analytics   Notification

Analytics for Analyzing Feedback and Other Statistics

Overall Analytics ▾
Day   Week   Month   Year
1/11   11/12   11/13   11/14   TODAY

Your Stress Level Trend

Activities Recommend For Today   ›
Bowling   Mid-term Preparation

People Around You   ›

Home   Calendar   Analytics   Notification

Overall Analytics ▾
All   Math   Sports   Class   Food
+ Add Keywords   11/15   TODAY

Your Stress Level Trend

Activities Recommend For Today   ›
Bowling   Mid-term Preparation

People Around You   ›

Home   Calendar   Analytics   Notification

‹ Back   Math ▾
10-11/5   Day   Week   Month   Year
11/6-11/12   This Week

Your Stress Level Trend

Feedback About Math:
📅 10/23/2017   My feedback about Math on 10/23

Home   Calendar   Analytics   Notification

‹ Back   People Around Me
Day   Week   Month   Year
1/11   11/12   11/13   11/14   TODAY
UW   Major   Class

UW Students Stress Level Trend

Home   Calendar   Analytics   Notification

‹ Back   People Around Me
Day   Week   Month   Year
1/11   11/12   11/13   11/14   TODAY
UW   Major   Class
HCDE   ART   CSE   +

HCDE Students Stress Level Trend

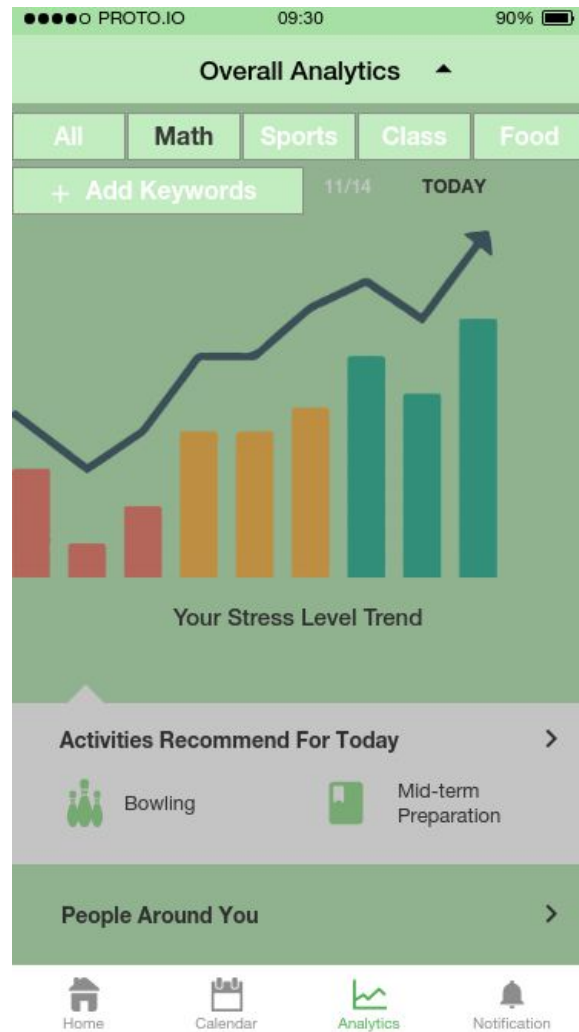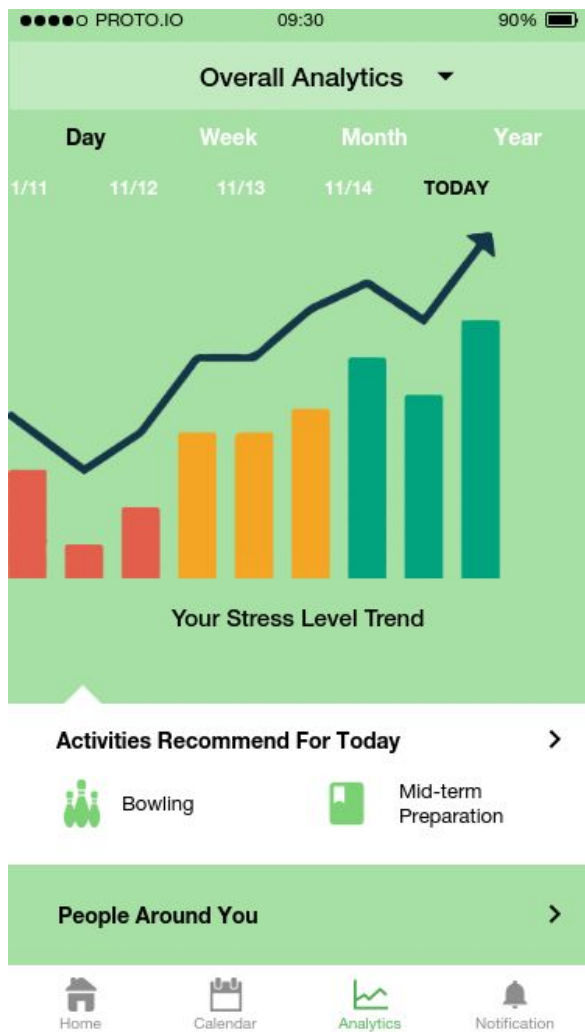Home   Calendar   Analytics   Notification

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‹ Back   People Around Me
Day   Week   Month   Year
1/11   11/12   11/13   11/14   TODAY
UW   Major   Class
HCDE 318   ART 245   CSE 154   +

HCDE 318 Students Stress Level Trend

Home   Calendar   Analytics   Notification

Notification for Pending Feedback

Pending Feedback

🍴
3:00 P.M
Lunch with James

💬
6:00 P.M
HCDE 318 Group Meeting

Home   Calendar   Analytics   Notification

Done   Cancel

How 's your ....

• • •

Good.   Fair.   Bad.

Q W E R T Y U I O P
A S D F G H J K L
⇧ Z X C V B N M ⌫
123 🌐 🎤 space   return

Pending Feedback

You are all caught up!

Home   Calendar   Analytics   Notification

We figured out that we should not include the summary of stress level trends of other students in the community feature since it is actually part of the Analytics. "Community" is more like a feature that enables users to interact with each other and we do not want to go over our two main tasks. So we deleted "community" from our navigation bar.

We decided to use green as our theme color since green is considered as the color which helps people relieve stress. We added many small icons to make our design not "text heavy". This is definitely not the end of our design, a good design needs time and effort. We will further improve it based on critique feedback. We used Proto.io to build this digital mockup, but we want to use Adobe XD in future since Adobe XD is more professional.

Tasks

Home Page
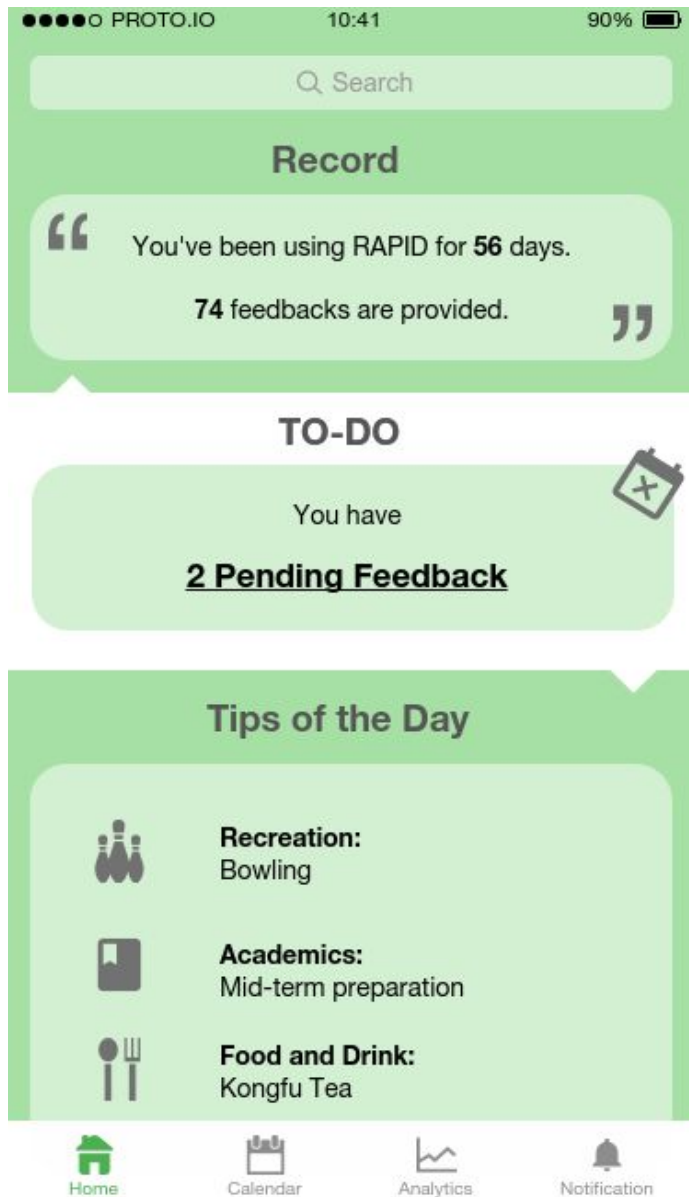
The homepage contains three parts: app usage record, pending feedback quick link, and customized tips. App usage record is for users to see their statistics and history of using RAPID. Click on pending feedback quick link will direct users to the Notification Page. Customized tips are provided based on users' feedback about their activities. More detailed feedback provided, more specific tips the application will give. This function can also be found under the Analytics Page with more details.

Calendar: Tracking Feedback [Main]

After clicking the calendar icon in the menu at the bottom of the page, the users can choose any date to see details of their schedules and feedback. By clicking the month/year on the top of the calendar, the user can choose different months and years. And if the users click on "today" button, he/she can go back to today.

< Back

📅	11/15/2017	✏️
🕐	3:00 P.M	✏️
📍	Cafe Vista	✏️
📅	Lunch with Jamie	✏️
📋	Feedback	✏️

🏠 Home   📅 Calendar   📈 Analytics   🔔 Notification

Users can click on events in their schedules to edit the events and their feedback by clicking the "pen" button. Users can also click on the "add" button at the bottom part of the calendar page to add new events to their schedule.

Analytics: Analysis of Feedback [Main]

"Analytic" allows users to see their feedback summary and analytics. Users can choose from "Day", "Week", "Month", "Year" to see their stress level trend over a chosen period. By clicking on the small triangle near the "Overall Analytics" at the top of the page, users can also choose keywords from list or add keywords themselves to see their stress level trend related to the chosen keyword over a chosen period.

Their feedback related to the keyword will also be posted under the stress level trend chart.

The block of "Activities recommend for you" will allow users to see tips and recommendations of activities for them. These data are based on users' past feedback, so more detailed past feedback the users provide, the more accurate and useful tips and recommendations the application will give them. Activities may include sports, food, classes, and etc. Users can search for keywords to see recommendations after they choose to learn more by clicking the block.

Clicking on "People Around You" enables users to see the summary of stress level trends of other students around them. By clicking on "UW", users can see what's the average stress level of other UW students over the quarter. "Major" allows users to see the average stress level of students from a specific major. The default major will be the user's own majors and the user can also click on other majors or add another major which is not in the selecting list to see the average stress level of students from those majors.

Same about the "Class". The default classes will be classes the user takes for the current quarter.

Notification: Pending Feedback
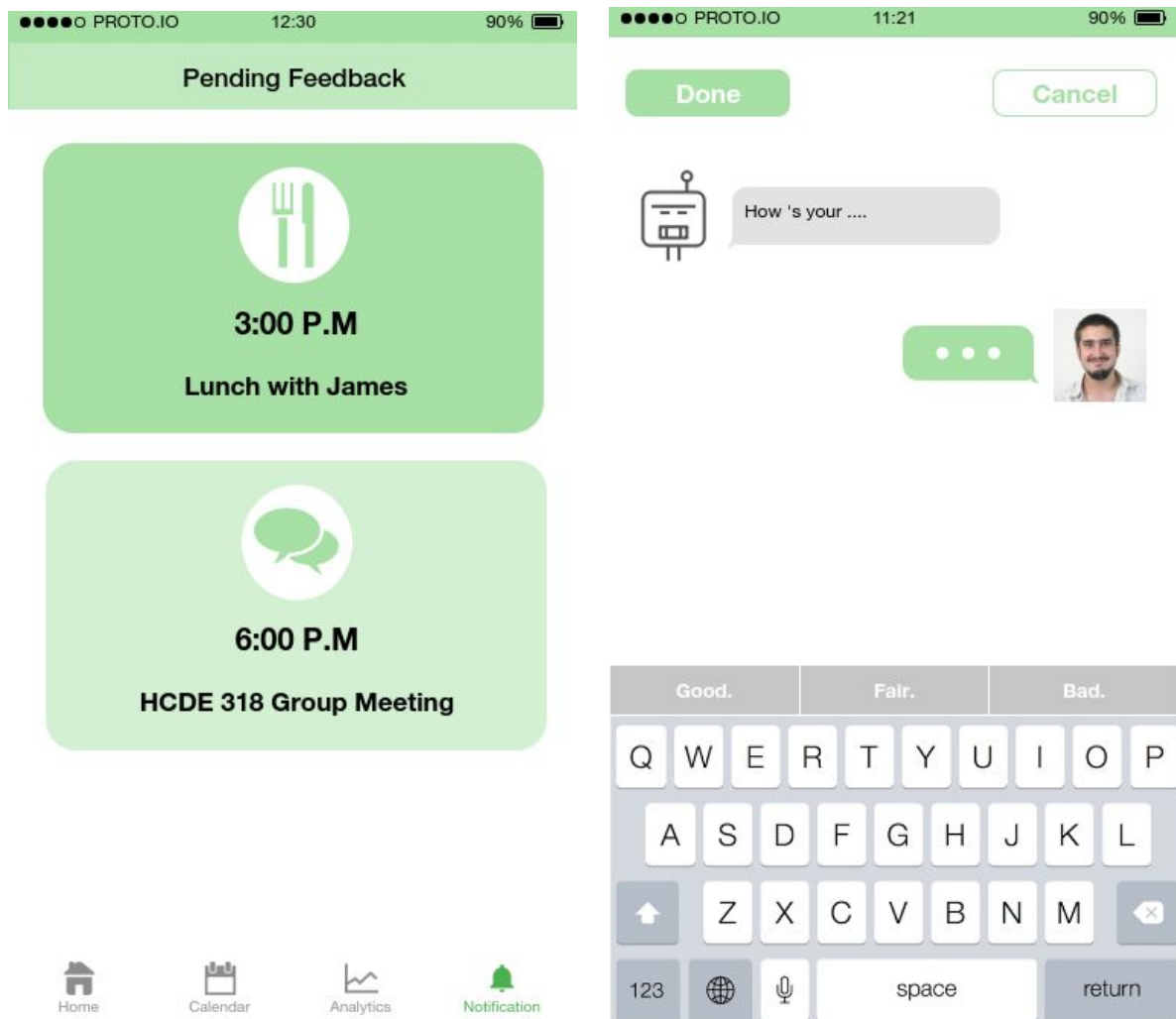
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Pending Feedback

You are all
caught up!

🏠
Home

📅
Calendar

📈
Analytics

🔔
Notification

No notifications.

Refined Digital Mockup Overview

Home Page and Calendar for Tracking Feedback

RAPID

Record 😊

You've been using RAPID for **20** days!

You've recorded **50** feedbacks!

To-do ✏️

Submit feedback to today's events

Home   Calendar   Analytics   Notifications

Calendar

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	**17**	18
19	20	21	22	23	24	25
26	27	28	29	30		

12:00 AM / 1:00 AM — Do homework — Now

2:00 AM / 3:00 AM — Meet Mike at Cafe — in 1 hr, 23 min

8:00 AM / 9:00 AM — Go to Math quiz — in 7 hr

Home   Calendar   Analytics   Notifications

← **Event Info** 🔍

Meet Mike at Cafe

Fri, Nov 17, 2017
from 12 pm to 1:30 pm

Feedback

Stress Level

0 ——— 6 ——— 10

Thoughts

I really enjoyed the brunch with James because James is a nice guy. We had good conversation about our careers and recalled our great time in college as roommates. James is a good listener and he is one of my best friends in town.

Home   Calendar   Analytics   Notifications

Analytics for Analyzing Feedback and Other Statistics

Notification for Pending Feedback

Tasks

Home Page
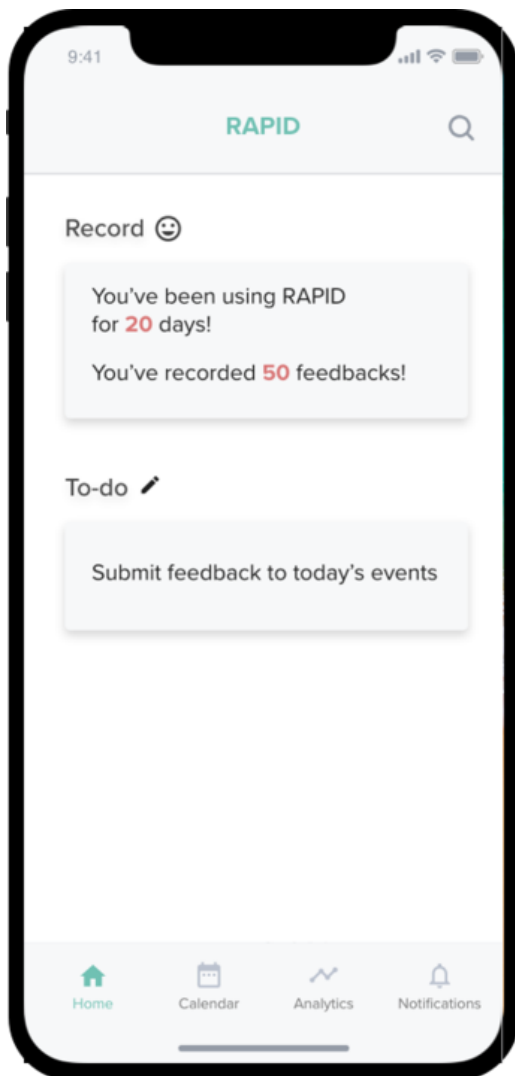
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Calendar: Tracking Feedback [Main]
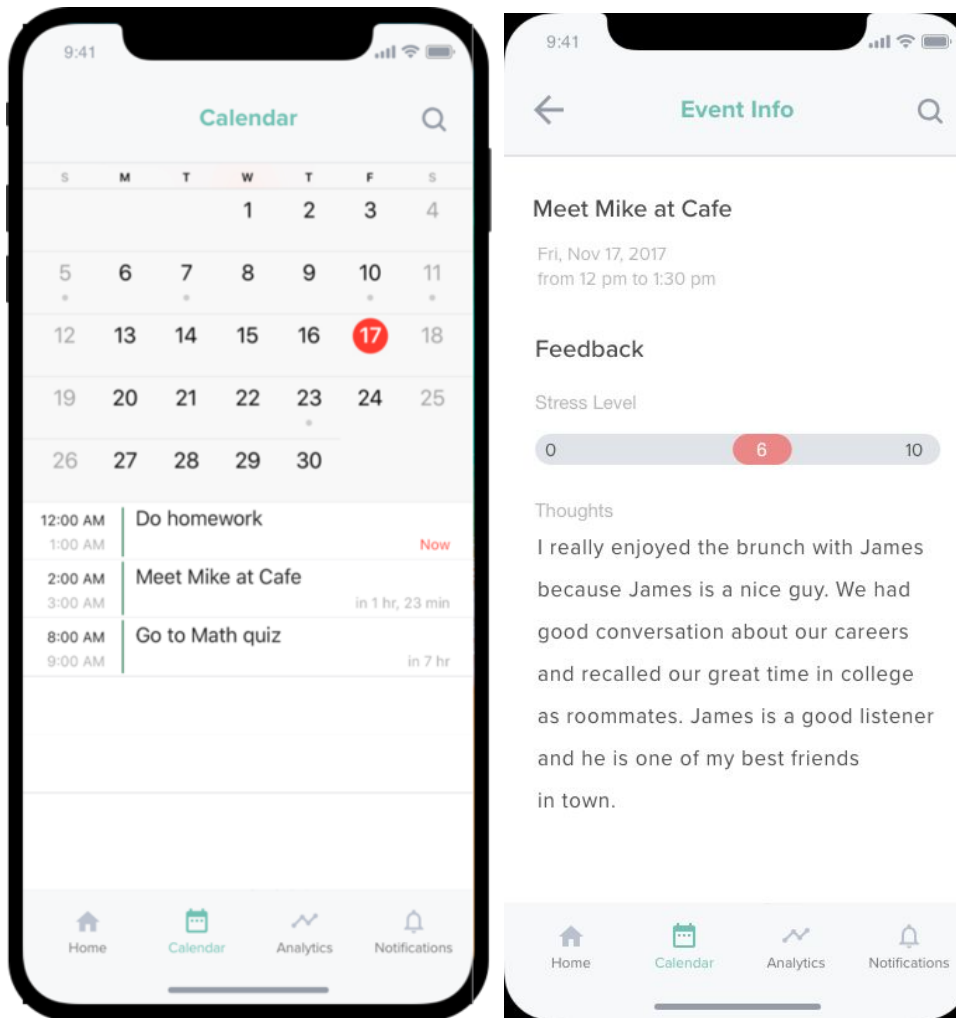
After clicking the calendar icon in the menu at the bottom of the page, the users can choose any date to see details of their schedules and feedback. By clicking the "search" button, the users can search for a specific event or a specific date or their feedback by entering keywords. Users can click on events in their schedules to edit the events and their feedback by clicking the parts they want to edit.

Analytics: Analysis of Feedback [Main]

"Analytic" allows users to see their feedback summary and analytics. Users can choose from "Day", "Week", "Month", "Year" to see their stress level trend over a chosen period. By clicking on keywords from list or add keywords themselves, users can see their stress level trend related to the chosen keyword over a chosen period. Their feedback related to the keyword will also be posted under the stress level trend chart. And the block of "Activities recommend for you" will allow users to see tips and recommendations of activities for them. These data are based on users' past feedback, so more detailed past feedback the users provide, the more accurate and useful tips and recommendations the application will give them. Activities may include sports, food, classes, and etc. Users can search for keywords to see recommendations after they choose to learn more by clicking the block. Clicking on "People Around You" enables users to see the summary of stress level trends of other students around them. By clicking on "UW", "Major" or "Class" users can see what's the average stress level of other students in chosen categories.

Notification: Pending Feedback

Pend feedbacks are notified through the notification page. Users can click on the pending feedback to add feedback to the activity. Users can choose from the sample answers if they want when providing feedback through chatting with the chatbot. Users can also type themselves to provide more detailed feedback.

Changes in response to critique

It was critical to know that user was confused about what each button and category meant on the Analytic page. The participant was unsure of what he would see after clicking on each button. Also, many of them mentioned that they thought they don't need the function at all. They already knew what they like or dislike, so why they want the application to tell them? So we decided it is better to redesign the Analytics page to convey more meaningful data for users such as the straightforward line graphs that illustrates the trend of their stress level and tips suggested for them based on past feedback. The redesign of the page makes the Analytic function more useful for users since now it can actually helps the users instead of providing information that users already known or even do not want to know.

Moreover, finding out usability constraints of our landing page (basically just showing the calendar) was essential for us. If users start to be confused about the starting screen, they will no longer want to use the whole application. We found the participant had no idea how to initiate the task as all he sees was just a calendar. It triggered us to clean out the landing page and

redesign it more intuitively with data that users look for first when they open the app. So the landing page turned out to be an overview page including three parts: app usage records, pending feedback quick link, and customized tips.

Lastly, we figured out that "+" button on calendar page made the participant hesitate to proceed to the next step and use it in an opposite way of our intention: adding a feedback. It was because that he supposed the "+" button means adding a new event. That was also a serious usability issue and we need to eliminate the confusion. Therefore, we changed the function of the "+" button from adding a new feedback to adding a new event that more closely matches user's' mental image.

Changes from paper to digital

As we moved from paper to digital, we had to make decisions on the what tool do we want to use to make the mockups. We first tried to use Proto.io but since visual design is quite an important part for an application, that is the appearance of the interface (color, typography, etc), and Proto.io has too limited designs of UIs and choices for color and font, we used Adobe XD for refined design. We changed the theme color to cyan since we found that green sometimes is hard to see. Blue and green are all colors that make people feel relaxed, cyan may be a better choice for our theme color. The digital mockup is far clearer than any of the paper ones because of its consistency and styling and much more appealing because of its simplicity and professionalism.

Discussion

We learned that iterative design does not mean design is a never ending process. Instead, iterative design means that the team keeps making incremental changes based on feedback from various stakeholders and makes as many sketches and prototype as possible in an allowed time period. Successful iterative design requires a lot of ideas, no matter they are good or bad. We also learned to be flexible about the plan. As we learned more about our users and tasks, we had a big change in the direction of the project. The flexibility nature of iterative design is very important because it guarantees we design products that people want to use with current technologies. It's a more agile way of product development contrast to waterfall which is way too focused on planning and executing the plan. If we follow the original plan which was designing a CBT app that helps people relief stress, we will not be able to get to this point.

At the beginning, we were lost because our tasks are too vague and high level. With the help of TAs and professor, we were also to narrow down our focus and dive deeper into understanding why certain college students are stressed. The in-depth research data helped us to define new tasks and we were a little surprised by how much information we received from one single participant. For the team, that was a big relief because we finally found a direction that we see as promising. At the same time, we were a little scared because the new research results meant
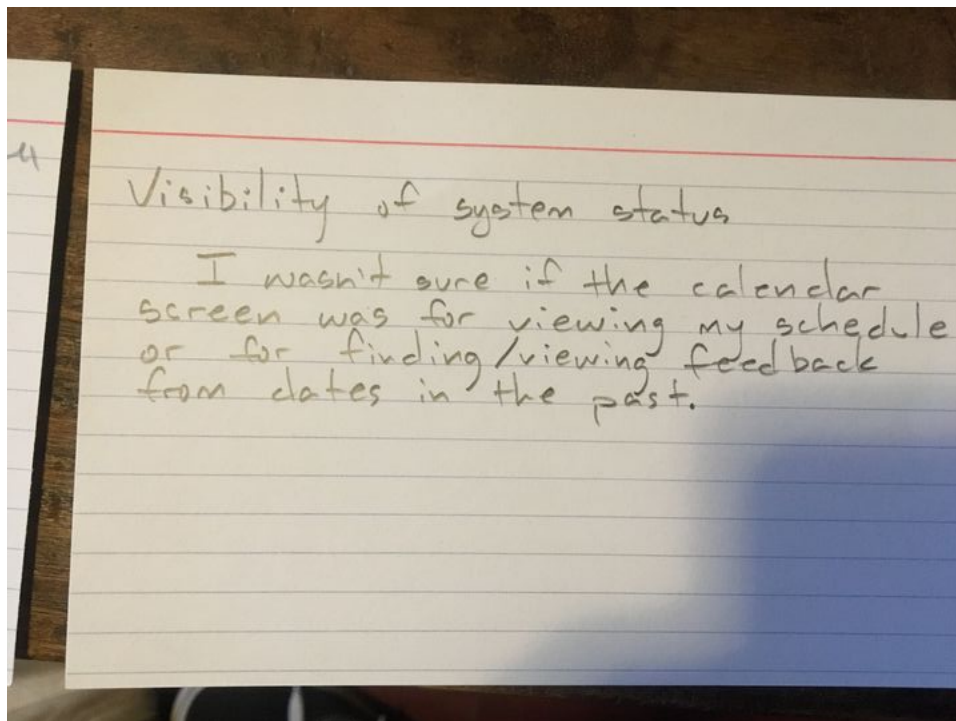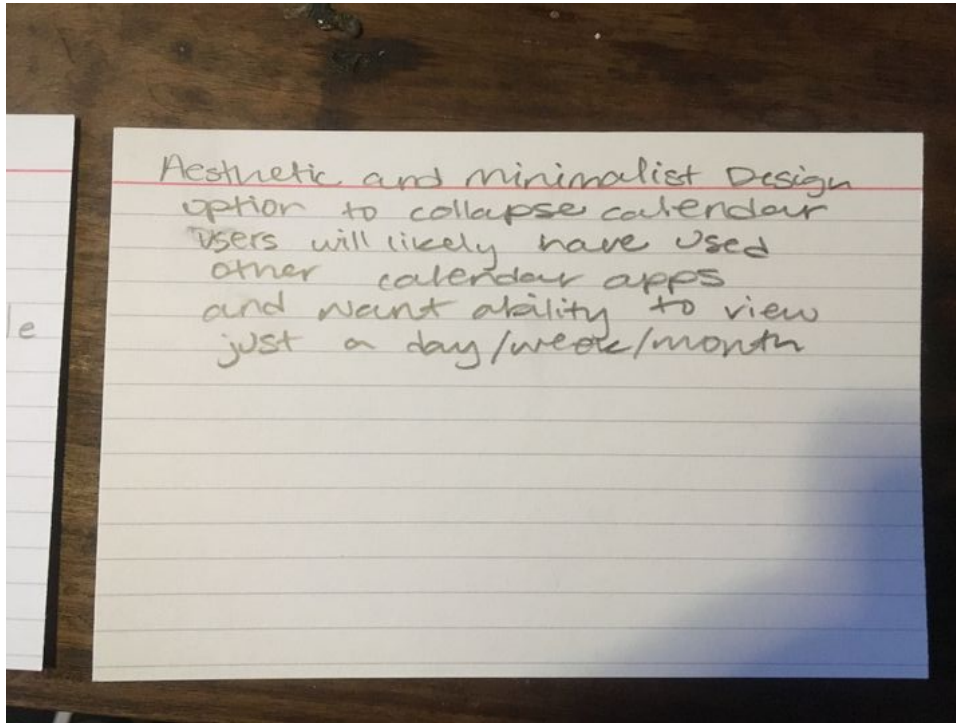
that we were going to deviate from the original plan. But, after conversations within the team and with TAs, we decided to move on with the new plan because iterative design process allows flexibility.
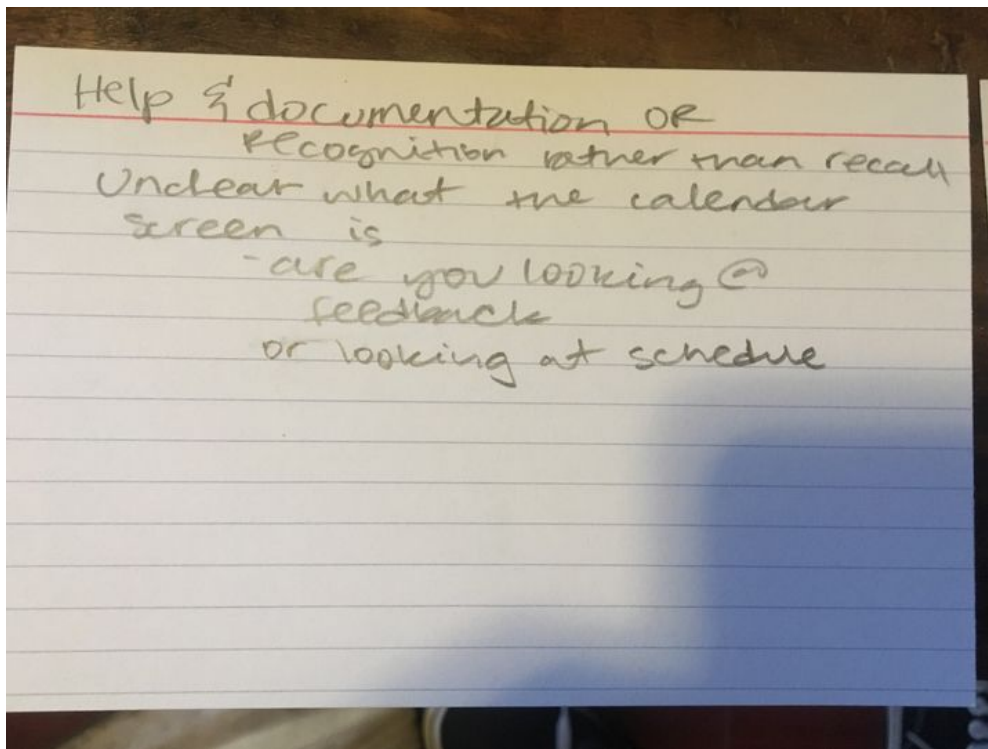
For the usability testing, one thing we could improve is to make it more structured. We have a guideline but we did not have a script that we read from. So different moderators may cause different results. Also, asking participants questions at the end of the testing is not a good practice because participants have to recall what happened few minutes ago. Human memories are not very reliable so that in the future we should ask post task follow-up questions.

We wish we could have more time and iterations on the current designs. As a team, we really like the direction we are going and can see it as a promising product. However, time and resource (we are all running at 100% capacity) do not allow us to do so. We think that more initial sketches will help the most since we can come up with more ideas and paths.
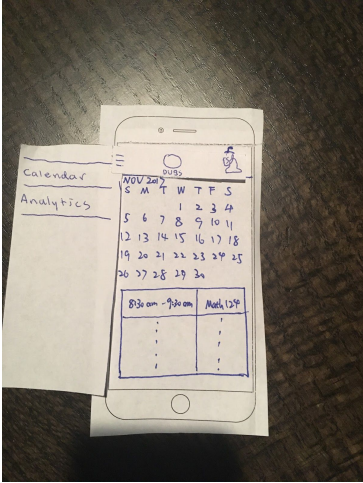
Appendix

Heuristic Evaluations Feedback:

Aesthetic and minimalist Design
option to collapse calendar
Users will likely have used
other calendar apps
and want ability to view
just a day/week/month

Visibility of system status

I wasn't sure if the calendar
screen was for viewing my schedule
or for finding/viewing feedback
from dates in the past.

Help & documentation OR
Recognition rather than recall
Unclear what the calendar
screen is
  - are you looking @
    feedback
  or looking at schedule

Heuristic Review

Initial Image	Incident	Severity	Fix	Fixed Image
	Visibility of system status I wasn't sure if the calendar screen was for viewing my schedule or for finding/viewing feedback from dates in the past.	1		
	Record feedback via chatbot is			

	time-consuming. The user was not willing to type and chat with a bot. She thought chatting with a chatbot should be a way which helps her relieve stress but not a way to record feedback. She prefers to use scale sliders and select from reasons like "instructor is great", "material is fun" through selectors and add additional notes if her reasons are not included.			

Critical Incidents and Results from 1st round Testing

Initial Image	Incident	Severity	Fix	Fixed Image
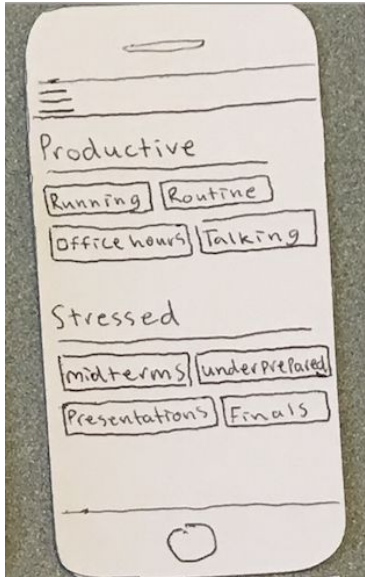
	1.Uncertainty of what the rectangles are for Are they tags (like the ones at the end of blog posts?)" Meaning if the participant clicks on "Running", she will see all the events related to running 2. It's hard to tell if the rectangle elements are clickable 3. She wants a way to search for categories or events in analytics	2	1. Added search icon on the top of page, so users can search by their keywords 2. Expanded size of the keyword boxes, which induces users to click by increasing affordance	
	Confusion about what "+" button represents When the calendar is the first thing participant sees, he feels confused about what to do next. There is no visual cues as what the participant can do. He also asks what will happen after clicking on the "+". Will the app add a new event? Or a new feedback to the past event?	3	Categorized one (+) add button into two different ones relative to user's input - new feedback / create an event	
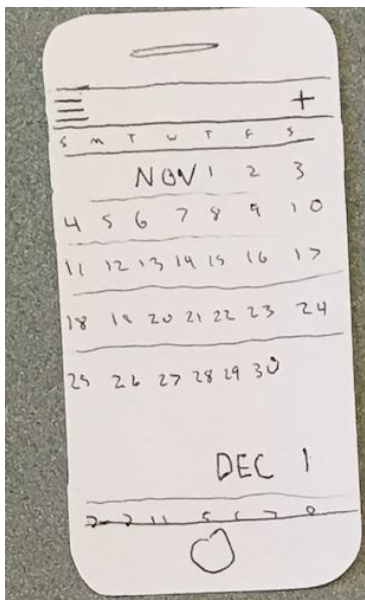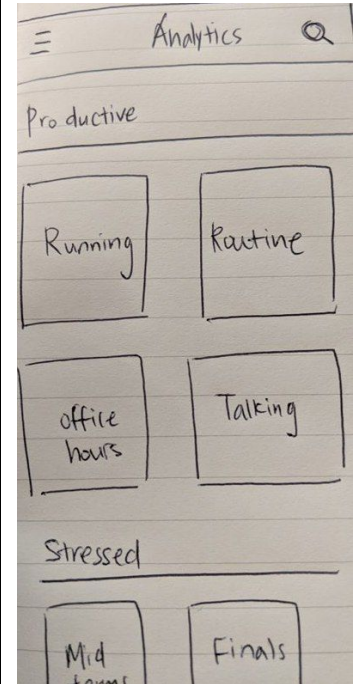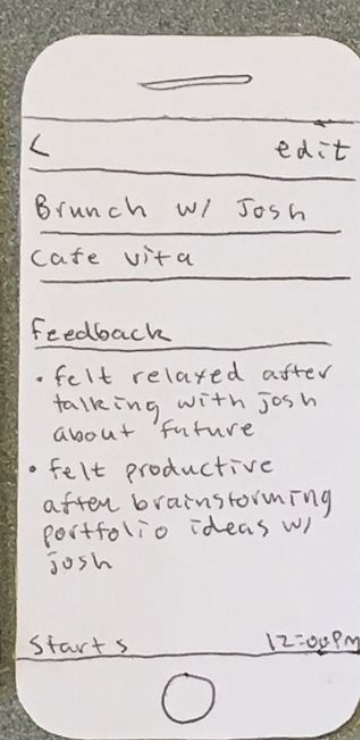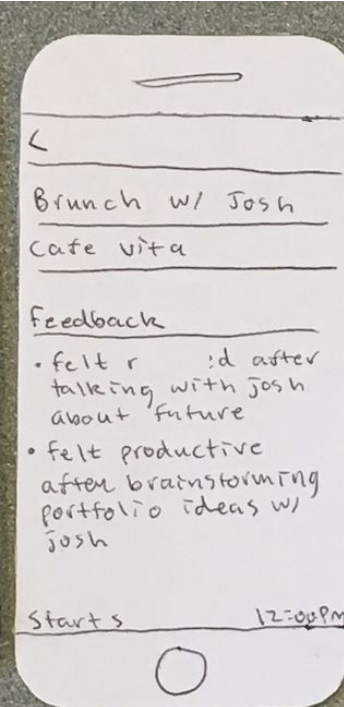
Image	Description (+/-)	Severity	Revision	
	Accessibility for Editing function The "Edit" button is unnecessary. The user should be able to edit after *tapping* on the feedback box	1	Removed "edit" button to enable user to tap and edit the feedback input box	

Critical Incidents and Results from 2nd round Testing

Image	Description (+/-)	Severity	Revision
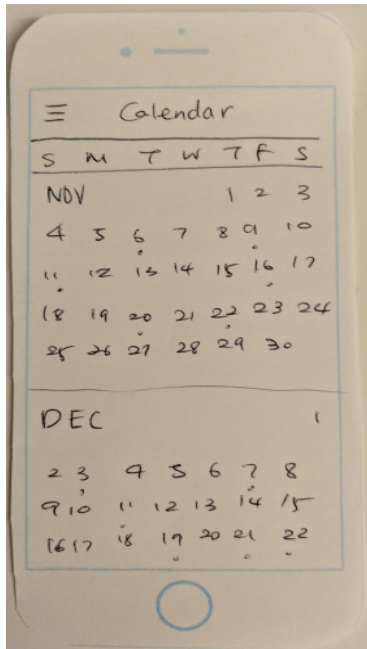
	- : Users were confused at this starting screen. They did not know what to do after we tell them the first task is to provide the feedback to a specific event.	1
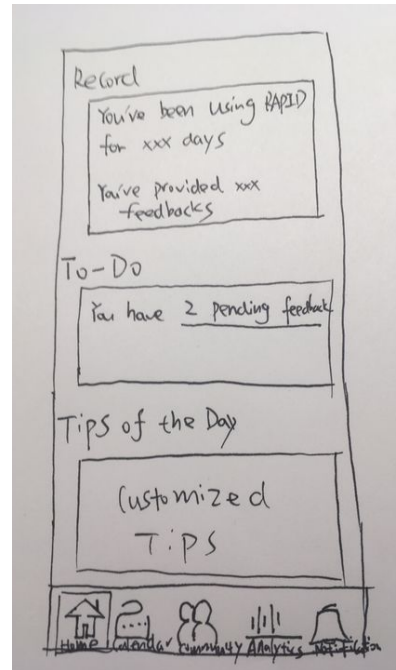
We completely redesign the homepage that contains three parts: app usage records, pending feedback quick link, and customized tips. |
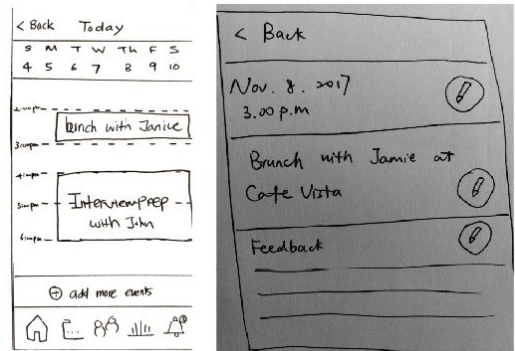| | - : Disliked the "hamburger" menu. | 2 |
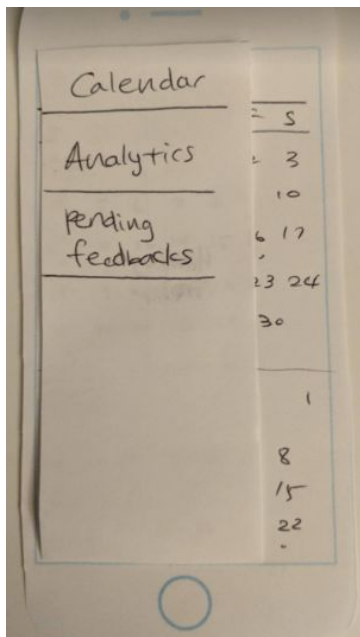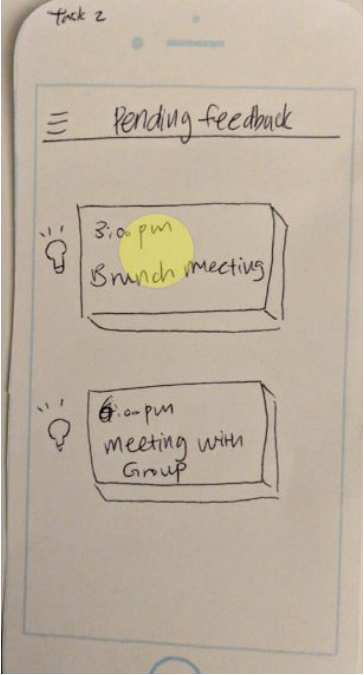
We removed the "hamburger" button and |

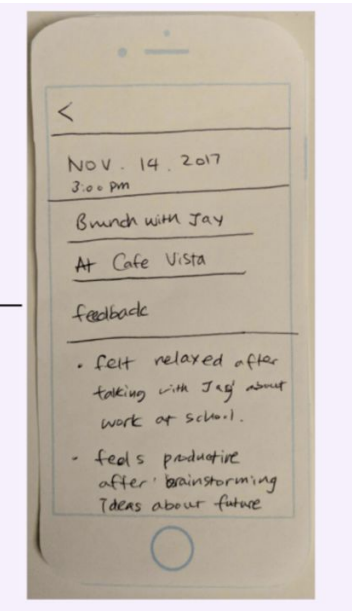|			implemented the extended list at the bottom of the page.
	+ : Liked the pending feedback page, pretty straightforward.		
Participant's suggestion	- : Wanted to see what's the stress level of other UW students.	2	 We added a community feature that gives overview of stress level of UW students / students sorted by majors / students sorted by classes..
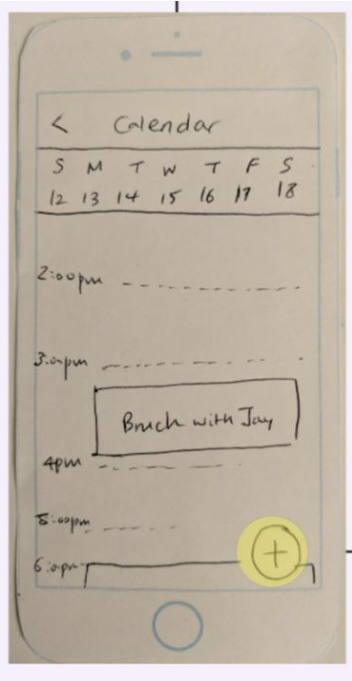
|	- : User did not click on "+" to add the feedback for one specific event. Instead, the user clicked on the event itself.	1	 We allowed users to click the event to edit both the event and feedback. We changed the function of the "+" button from adding a new feedback to adding a new event that more closely matches user's mental image.
	- : User failed to get out the first few tries. User tried different actions such as swiping, clicking etc. He eventually figured out that the "<" button is for exiting	3	 We added text of "Back" behind "<" button to clarify it.
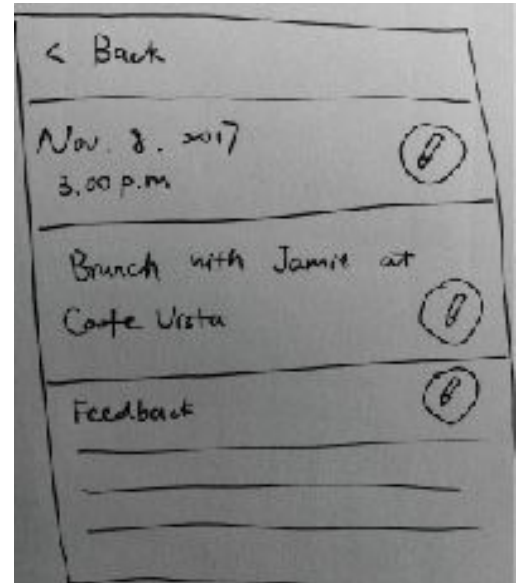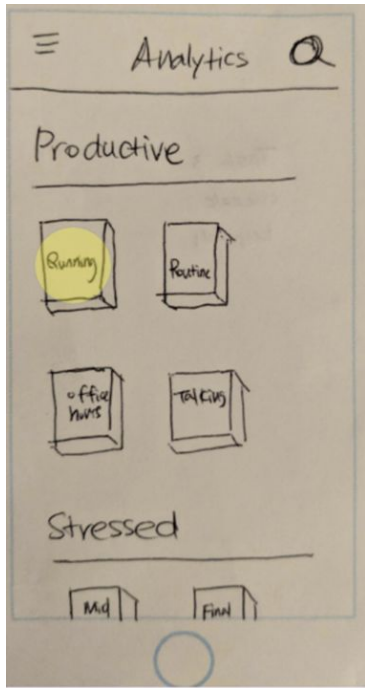
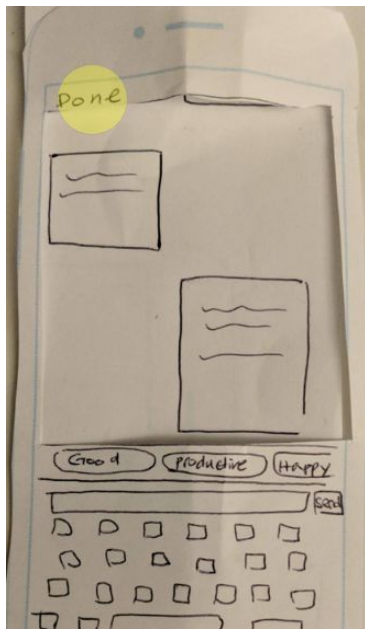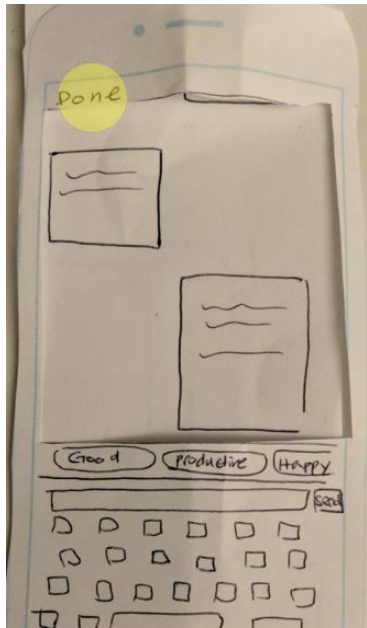|			
	- : Users were confused about what the analytics do and what are those categories and buttons. They did not know what to do at this page and they did not think they need this function.	1
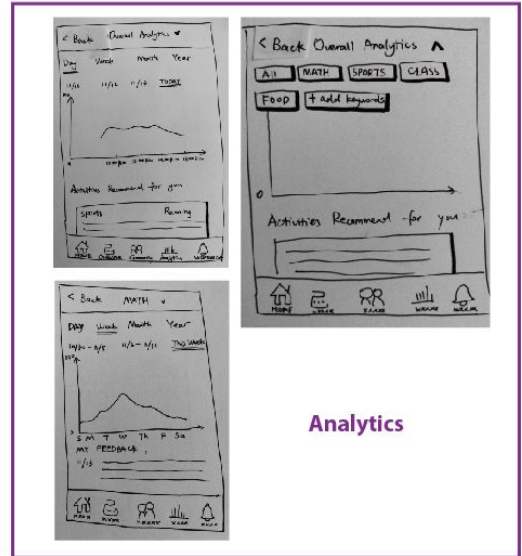
We completely redesigned the Analytics page to include charts that illustrates users' trend of their stress level. We also added a recommended events and classes section based on feedback we gather from users in order to make this function actually helps the users. |
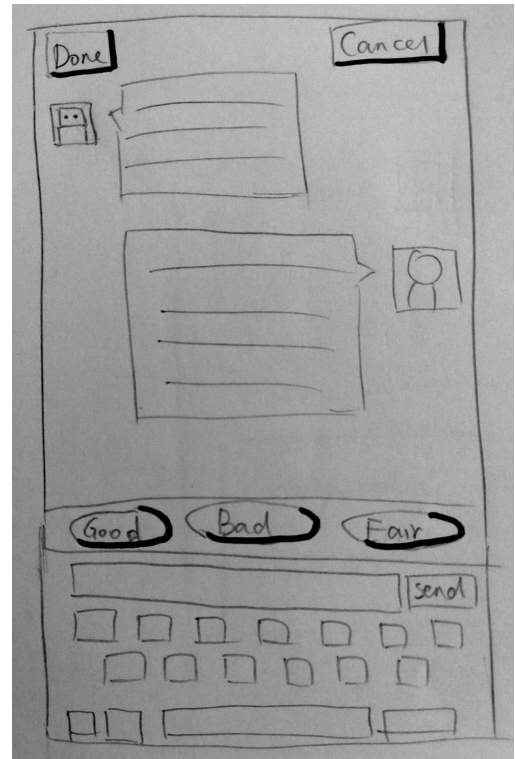| | + : Users liked the "sample" answers to choose from when providing feedback through chatting with chatbot. Really convenient. | | |

| | - : Users not sure how to quit the chatbot if they have not finished providing feedback but don't want to continue. | 2 |

We added a "cancel" button. |