# Project 2 Pre-Design Activities

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## Part 1: Theme

For our project, we chose to do theme 1: motivational and organizational tool for students. After discussing the three options, we chose this theme because we felt that it would be the most useful to us as canvas users. We found this theme interesting because of the motivational aspect. We do not feel like canvas currently does a good job of motivation and we are excited to see how we could incorporate this aspect.

**Envisioned Design Requirements for Theme 1**

1. Features developed oriented towards ultimate user: students
2. Options that are intuitive enough to achieve the purpose of providing motivation and organizational support for students
3. Streamlined options for individual use and organization
    a. Site layouts and user functionality/feedback
4. Visual encouragement and accountability for completing assignments.
    a. Assignment progress tracker.

## Part 2: User Research

### User Research Goals

1. **Understand student's perspective**
    a. Struggles, pain points
    b. Areas to improve
    c. Things that work well
2. **Orient design towards a holistic purpose**
    a. Utilize research to understand what core needs/purpose of using the tool
    b. Help eliminate/repurpose low level features or not so needed features
3. **Advocate for a diverse set of users (amongst students)**
    a. Accessibility Needs
    b. Different types of students
        i. Nontraditional students (coming back to school later in life, first gen college students, etc.)
        ii. Students that need additional resources (disabilities, mental health support, etc.)

### Research Questions

1. **Students Perspective**
    a. How are students motivated to complete their work?
    b. To what extent does an average student use canvas for?
    c. How are students using canvas to organize themselves for a semester (and each class)?
2. **Holistic Use of Tool**

    a. What features are needed for canvas to be useful?
    b. What current tools on canvas do students not use?
3. **Diverse Set of Users**
    a. What kind of users tend to struggle due to lack of support with Canvas?
        i. What type of students does canvas currently not advocate for?
    b. What kinds of extra support are students looking for that Canvas could help with?

## Interviews

1. When your professor assigns you an assignment, what types of planning and organization do you typically do?
2. What things would you want canvas to do that it currently doesn't do?
3. If you had to pick, what are the top 5 things on this page that you use? *Show picture of canvas* What's something you would remove from this page?
4. How do you study during midterm and final exam season?
5. Follow up to Question 4, What keeps you motivated during those stressful times?
6. What are some things you used outside of a digital tool like canvas to keep you organized? Why do you use that instead?

Research Goal 3 will be addressed via Googling and learning about UC resources for accessibility

## Project 1 Interviewing Reflection:

Cara

- Talk to people who are genuinely invested in what you are asking about. Otherwise, answers tend to be noncommittal or lack detail.
- Questions that aren't yes or no can still be too simple; ask follow up questions when interviewees give short answers.
- Some of my questions were meant to get specific answers or types of answers and weren't open ended enough.
- On the other hand, questions that are too open ended tend to result in silence because the interviewee may not even know where to start with their answer

Anna

- It is important to have alternative ways to ask the same questions in case they don't understand the first way that you asked it.
- I realized that people already had some ideas in their head that I hadn't thought of. For this reason, it was good to include some more open-ended questions that weren't directly tied to an idea I already had.

Keerthi

- When the interviewee had short responses, it was hard to extract information from them to gain more insight
- Having the interviewee walk through certain tasks helped gain more knowledge on how things are typically done and what could be changed

Tom

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## Results

[Anna]

Interview 1 (nursing student):

1. Write down in planner and check canvas calendar and modules
2. Add things into the canvas calendar so that I don't need to put it in my personal calendar
3. Top 5: Dashboard, calendar, modules, grades, assignments
    a. Remove: People, Groups
4. Night before. Write down all my notes. Look at the power points posted on canvas. Color
5. Grades. The fact is that it is happening, so I must study. I need to pass to get my degree
6. Notebook to write down notes. Canvas doesn't really have a note taking thing. Helps me remember. Prefer planner/google calendar because I can see everything at once

Interview 2 (business student):

1. Refer to canvas calendar as well as the course calendar if it is posted as part of the syllabus
2. Notify me when I have an upcoming assignment that I haven't submitted
3. Top 5: Announcements, assignments, grades, modules, syllabus
    a. Remove: Everything below modules
4. Review presentations and modules and complete practice content.
5. Grades. Wanting to perform
6. Notebook to write down things in addition to assignments like things I need to remember about assignments. I use OneNote to take notes for class

[Cara]

Interview 1 (masters in education – graduated summer 2022):

1. Mentally keeps track of assignments, checks in with canvas daily or weekly depending.
2. Would like notifications of some kind to let him know if a professor has commented on an assignment (could come with the "graded" notification). Discussion portions of modules kick you out of the module itself so that you have to circle back around to get to modules again – lots of back and forth or needing to keep multiple tabs open at once.
3. Assignments, Grades, Modules, Announcements, Home page. A lot of the resource tabs are circular and take you to random pages that you don't need or won't use.
4. Less Exams more papers. For papers, he must keep a lot of things open at once for cross referencing.
5. Motivation usually comes from outside sources that classes will use (Pearson or mathxl for math/science classes). Those places will have progress bars. Modules within canvas do have a page count. Progress bars would mostly be useful for assignments done directly in canvas. Friends within classes also help with motivation.

6. “Google drive is where my life lives” - has bled over into current work as a high school teacher; Positives to google drive: folders, easy shareability, their own apps (docs, sheets, jamboard, etc). Said: ‘If we’re so gung ho about canvas for everything, is there a way to just throw the teams-like functionality into canvas itself?’

Interview 2 (former student. Current teacher, academic advisor, PHD candidate)

** Some parts of this interview were answered from the teacher or TA perspective. That will be noted.

1. Planning and Organization for assigning work to students: Canvas is very clunky to work with. She goes in and cleans up her page before posting (takes out unnecessary sidebar content). Says image for the page helps students find what they’re looking for (differentiate classes from each other) Having a banner of sorts at the top of the page is very welcoming. Canvas uploads can be set to a timer which helps with time management, assignments that haven’t been submitted are very obvious (students are highlighted in red) Likes that student page for assignments groups undated, upcoming, and past assignments in different blocks. Some students sync canvas to their phone calendar (I didn’t know this was an option, why is it not easier to find?)
2. Canvas shows grades in the order they’re uploaded instead of the order assigned, this isn’t helpful to the instructor or the student.
3. Home, Syllabus, Modules, Grades, Assignments(no separate tab for quizzes needed because of this) – People as well to some extent. After being shown a page on my canvas: almost everything in the lower have of the sidebar doesn’t get used for anything. Preferred online platform: WebEx (says she’s probably in the minority) because even though it’s not aesthetically pleasing, it’s functional. Would choose teams if they had breakout rooms working.
4. Flashcards, pen and paper notes. It would be helpful if Canvas had study help like flashcards built in.
5. Struggles with long term deadlines – needs to break those up into smaller chunks. Having dedicated days/times for work and breaks between work periods help with burnout. Practice with things like presentations helps with stress levels. Accountability helps with motivation as does general expectation. Turns things in because she doesn’t like letting professors or group members down.
6. For work: Outlook calendar. For personal life: physical planner. Having a to do list that you can physically cross off and having reminders about everything that is happening in you life all written down is very satisfying.

[Keerthi]

Interviewed 2 EECE Students:

7. (1) Utilizes assignments on canvas and the agenda in the calendar to track what needs to be done – reads the homework assignment and then plans based on that for when they will complete their work before the deadline (if its longer in effort, starts right away doing little at a time if its small, dedicates 1 day to finish everything)
8. (2) Have the calendar be available to display while looking at other pages and not just locked to a tab

9. (3) Top 5: assignments, Modules, Grades, Announcements, and People
    a. Remove/Reformat: To Do list on the right side of the page (its visual noise)

10. (4) Depends on class structure – puts together a plan before exam. Usually complete all practice problems or exams and then review lectures and notes of material being covered on exam. When reviewing notes, if there are problems to solve, will go back and do them. Also will go back to old homeworks and review the problems that were marked incorrect and review the correct solution -> how indepth this process is done is dependent on the time available until exam
11. (5) "During stressful times, I'm mostly motivated by the idea of getting takeout after I'm done with an exam, or finally having time to do stuff like take a night off and just play video games or watch a movie. I've also been motivated by my cat when he was staying with me; once I got through the stressful times, I could hang out with him and just relax without worries temporarily. Commiserating with friends in the same stressful boat can be very motivating as well."
12. (6) Typically uses: physical planner but if class has few assignments the use of the physical planner drops, expo marker calendar to mark the upcoming month of assignments with appts, volunteer activities, and time planned for family and social events
    a. Carries physical planner to class since professors will verbally say intermediate deadlines and not post on canvas so uses physical planner to track that
    b. Expo Marker calendar is highly needed since it student needs visual representation of time passing with the amount of work needed – this conceptualization helps reduce stress. (or increases if student doesn't do this)
    c. Main Worry/stress factor: when to start assignments to ensure they will have time to complete them

[Tom]

## Contextual Inquiry

Group Discussion Notes:

- How to do it
    - Watch someone use canvas
    - Have someone record themselves using canvas
    - Use a program that collects data as the user uses it
        - Where do their eyes go?
        - What types of clicks do they use?
- User can be aware that someone is watching and affect results
- Ask directly what purpose is to determine – if user gets distracted or is genuinely confused or struggling with the tool

Keerthi watched her brother who is a sophomore in MET at UC use canvas to figure out what homework he has and how he typically plans with canvas: (recording - [https://mailuc-my.sharepoint.com/:v:/g/personal/sekarsu_mail_uc_edu/EW9mPNdfl-ZGnQsvY0WAeSABFImHpGH7x-1myBWqPdhthg](https://mailuc-my.sharepoint.com/:v:/g/personal/sekarsu_mail_uc_edu/EW9mPNdfl-ZGnQsvY0WAeSABFImHpGH7x-1myBWqPdhthg))

Notes:

- Views assignments in monthly calendar form
- Adds his own events when he wants to input his assignment deadlines
- Uses home view for assignments (completed is grey, to do is visible)
- Each professor sets up canvas differently so he mainly grabs what his deadlines are and puts in calendar to rely on 1 format
- Professor doesn't link hw pdf to assignment so he has to find it in files
- Only uses 3 buttons mainly: home, announcements. Files (sometimes modules) everything else is ignored

Contextual Inquiry 2 (Senior Marketing Student)

Notes:

- Goes to modules upon going to class
- Lots of things in the modules took time to find the right thing.
- Two modules with all of the weeks as sub sections of the modules and then other modules that are just for the week.
    - Needs to go to three different places within modules to get all the information needed for the week.
- Long announcements with lots of links
    - Couldn't get this information from modules
- Click on assignments from Calander to go to assignment descriptions.

## Survey

Utilized Likert Scale in the form of 1-5

1. Rank from most used to least used the following features:
    a. Groups
    b. Calendar
    c. Inbox
    d. History
    e. Help
2. When interfacing with a specific course, rank the following from most used to least used:
    a. Announcements
    b. Assignments
    c. Discussions
    d. Pages
    e. People
    f. Modules
3. When a course is structured as a hybrid/online – what is your preferred online platform?
    a. Zoom
    b. Webex
    c. Google Meets
    d. Teams

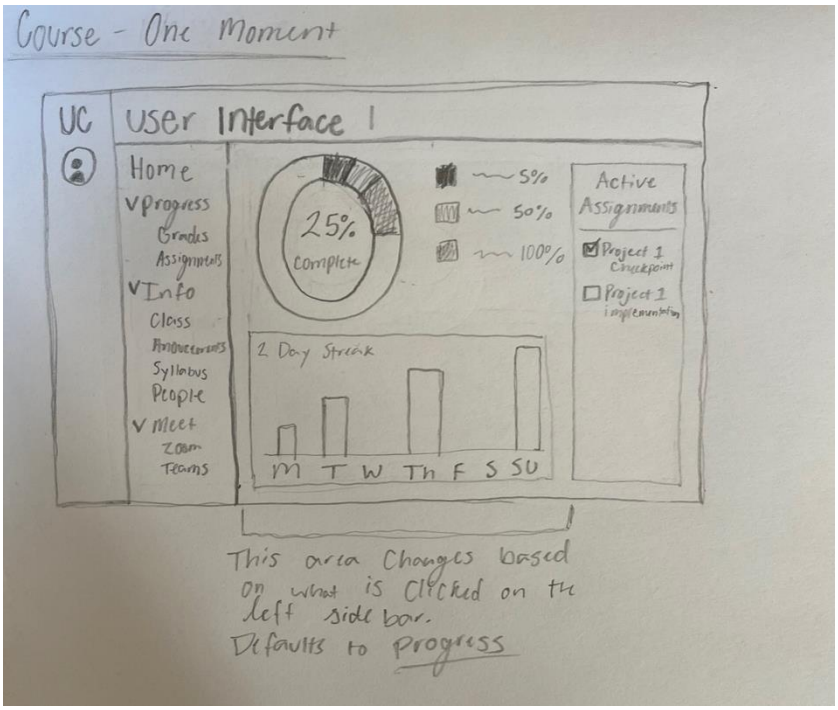
4. When viewing old lectures what tools do you use the most?
    a. Echo360
    b. My Media
    c. Office 365
    d. Media Gallery
5. From a scale of 1-5 (1 = least, 5 = most), how useful would the following feature be?
    a. Feature: Assignment Progress Tracker
6. From a scale of 1-5 (1 = least, 5 = most), how useful would the following feature be?
    a. Using feature from question 5, a recommended time management plan
7. From a scale of 1-5 (0 = does not apply, 1 = least, 5 = most), how useful would the following feature be?
    a. Transcriptions of live lectures
    b. Tooltips to help people not as “tech-savvy”
    c. Page reader (button pressed, audio of the page starts)
    d. Responsive Font Size changer

## Sketching & Storyboarding Prototypes

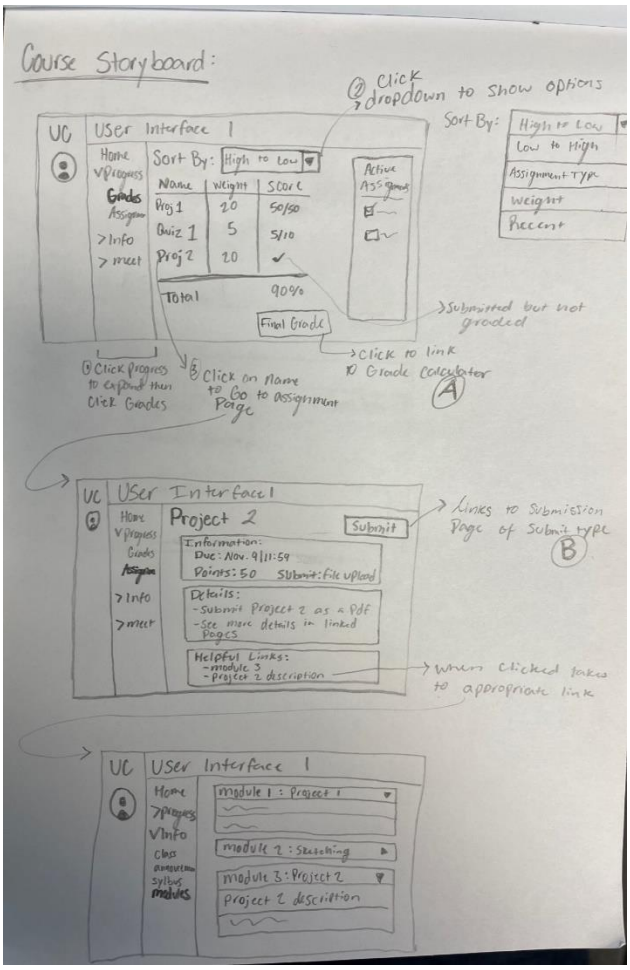
Group Sketching Activity:
https://discord.com/channels/1011045261985984562/1036704084092272660

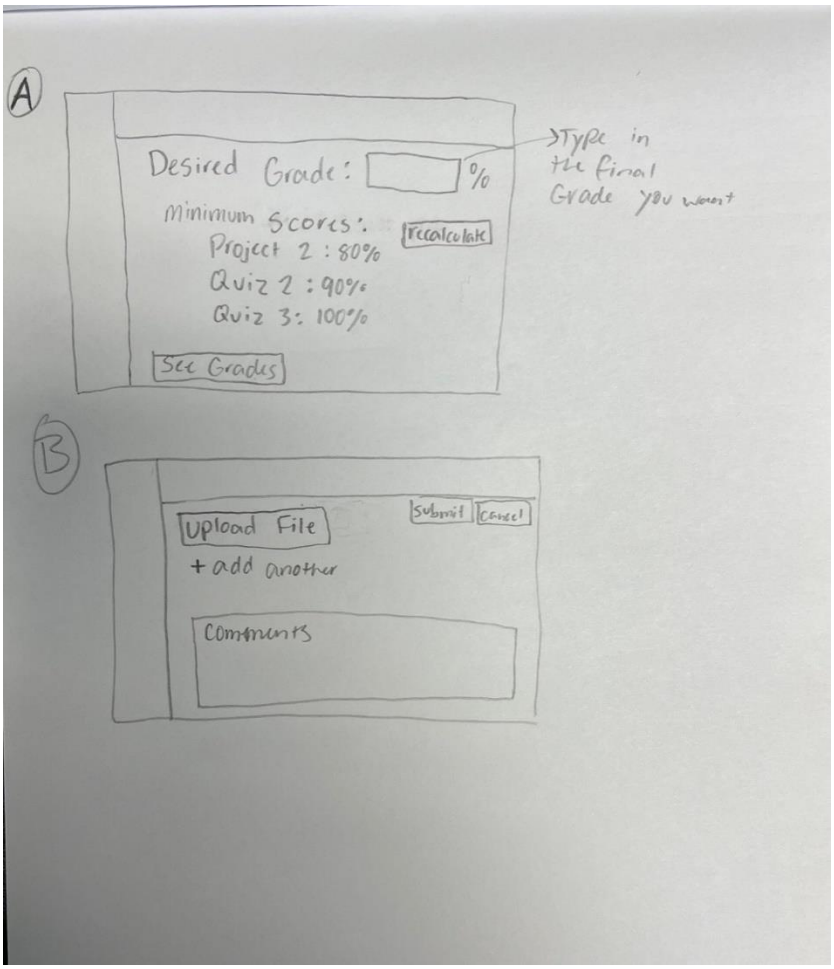
Anna:

- Course Interface Sketch:

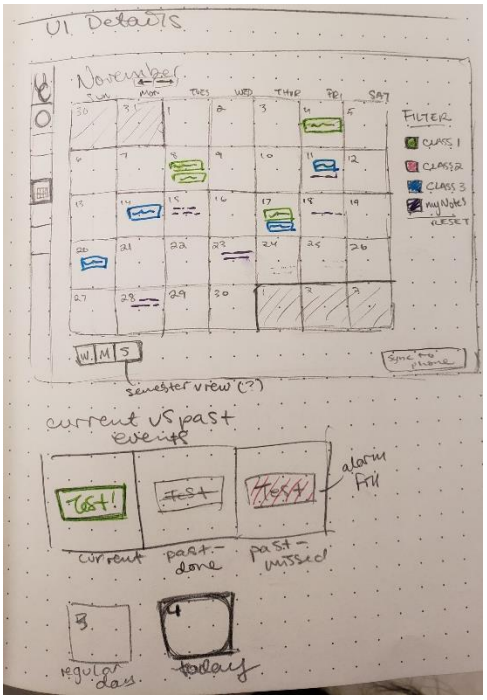


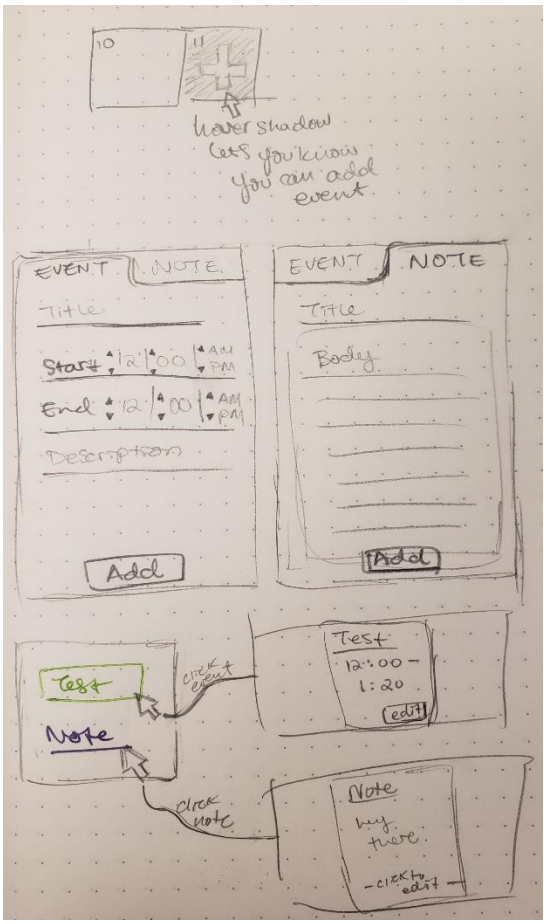

- Course Storyboard:


Course Storyboard:
UC
User Interface 1
Home
Progress
Grades
Assignments
>Info
>meet
Sort By: High to Low
Name | Weight | Score
Proj 1 | 20 | 50/50
Quiz 1 | 5 | 5/10
Proj 2 | 20 | ✓
Total | 90%
Final Grade
Active Assignments
2 Click dropdown to show options
Sort By:
High to Low
Low to High
Assignment Type
Weight
Percent
Submitted but not graded
Click to link to Grade Calculator
A
1 Click Progress to expand then Click Grades
3 Click on Name to Go to assignment Page
UC
User Interface 1
Home
Progress
Grades
Assignments
>Info
>meet
Project 2
Submit
Information:
Due: Nov. 9 11:59
Points: 50
Submit: File upload
Details:
- Submit Project 2 as a Pdf
- See more details in linked Pages
Helpful Links:
- module 3
- Project 2 description
Links to Submission Page of Submit type
B
When clicked takes to appropriate link
UC
User Interface 1
Home
Progress
Info
Class announcements
syllabus
modules
module 1 : Project 1
module 2 : Sketching
module 3 : Project 2
Project 2 description

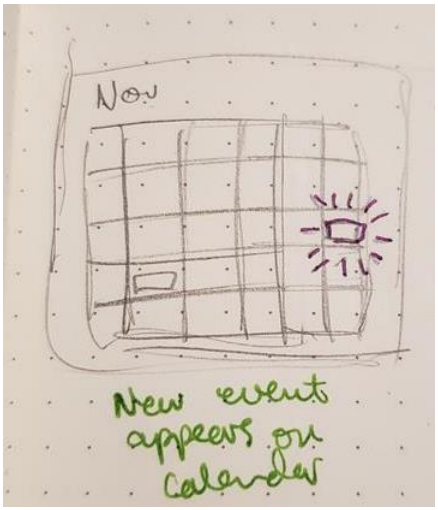

A
Desired Grade:
%
Type in the final Grade you want
Minimum Scores:
Recalculate
Project 2 : 80%
Quiz 2 : 90%
Quiz 3: 100%
See Grades
B
Upload File
Submit
Cancel
+ add another
Comments

Cara:

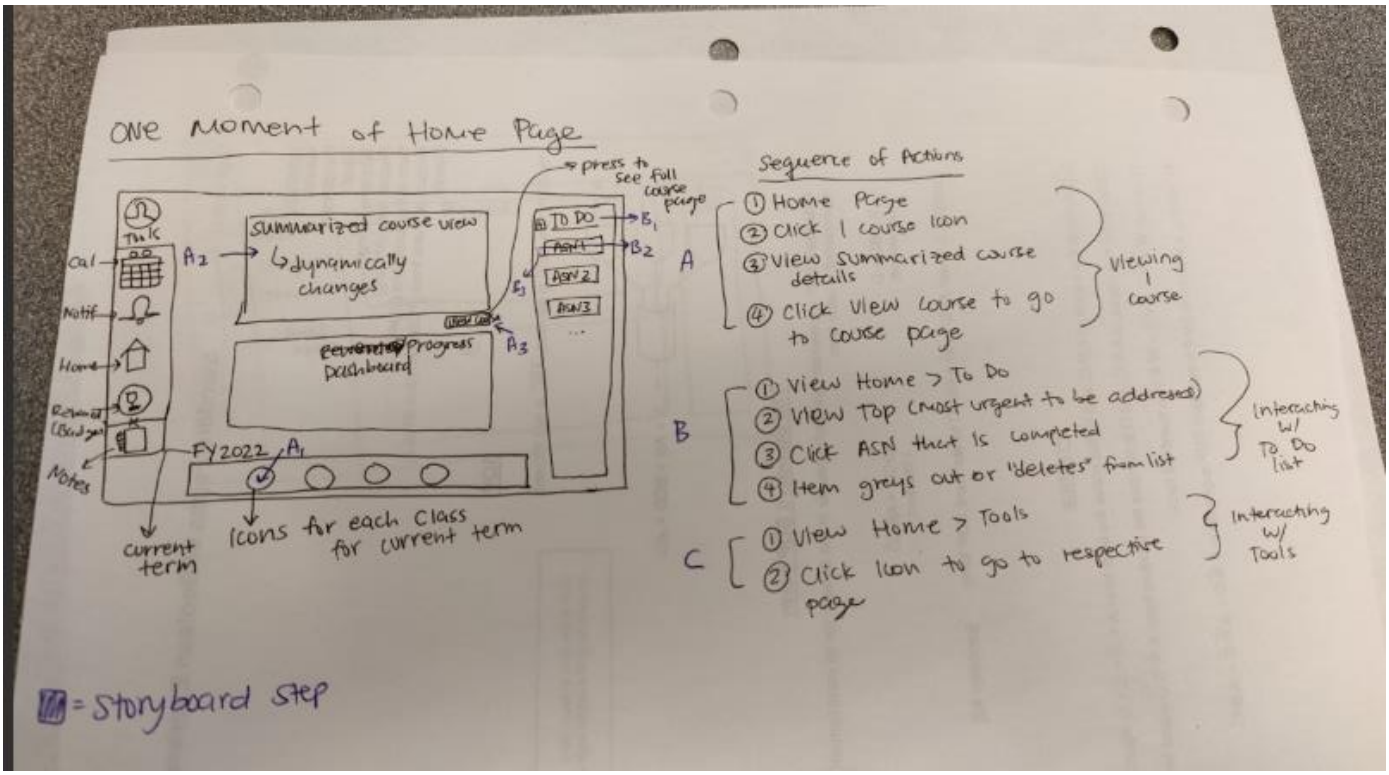

UI Details
November
FILTER
CLASS 1
CLASS 2
CLASS 3
myNotes
RESET
W M S
Sync to phone
semester view (?)
current vs past events
Test!
Test
Test
alarm fill
current
past - done
past - missed
3
4
regular day
today

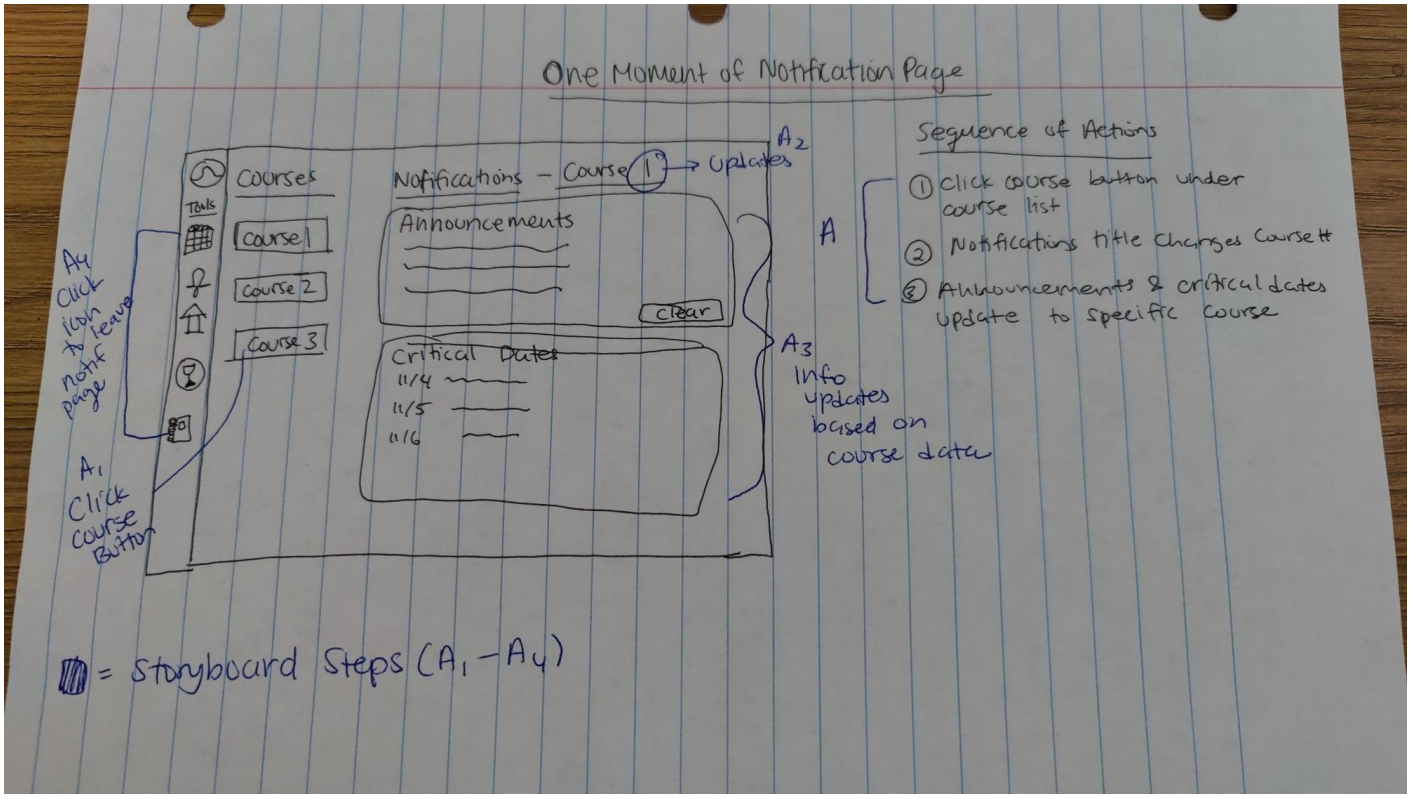

10
11
hover shadow lets you know you can add event
EVENT
NOTE
Title
Start 12 00 AM PM
End 12 00 AM PM
Description
Add
EVENT
NOTE
Title
Body
Add
Test
Note
click event
Test
12:00 - 1:20
edit
click note
Note
hey there
- click to edit -

CALENDAR
Switch from week to month view, look ahead @ assign, add new event
Click Month view
Click event
View popup, close
add event Sat.
New Event
Name: STUDY!
Saturday Nov
Enter title
Enter start
Enter end time
New Event
Save
Click Save


NOV
New event appears on calender

Keerthi:




Storyboard is overlaid in blue pen on sketch so I wouldn't have to redraw it with the sketching step

Tom:

## Implementation Plan

1. Home Page: organization & motivation for all 3 courses (Keerthi)
2. Course Specific: (Anna)
    a. Organize/set-up data in react
    b. React make a data type to make a course structure to build off of for each course required
3. Calendar Page (Cara)
4. Notification Page (Tom)