
Amy Malia Takayesu

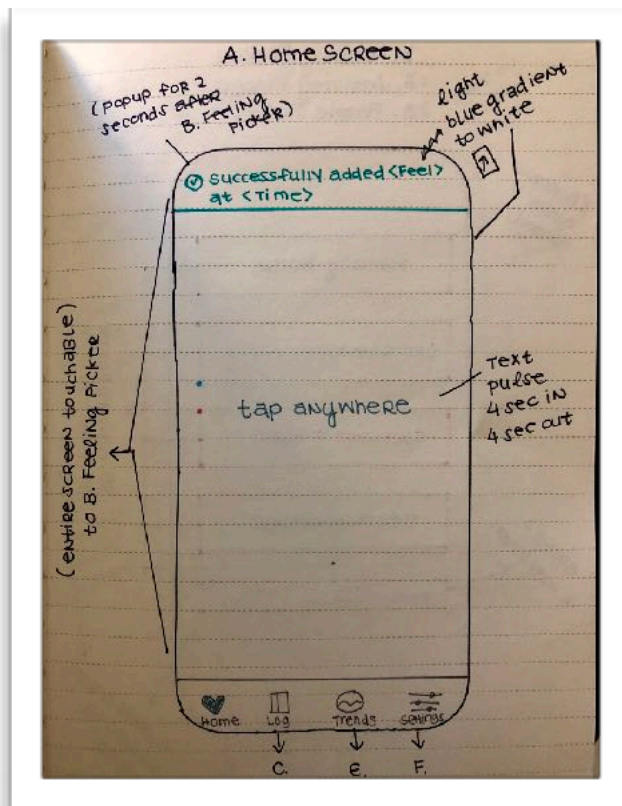
UX Research Portfolio | June 2019

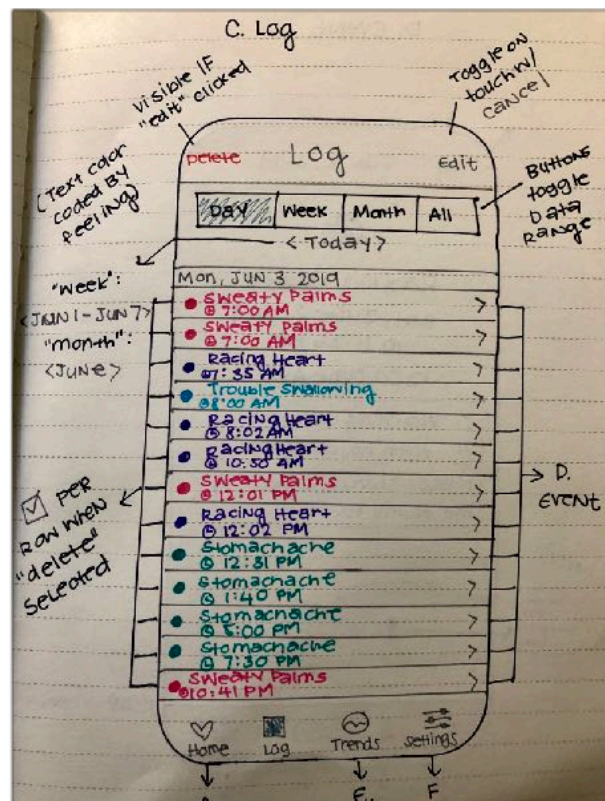
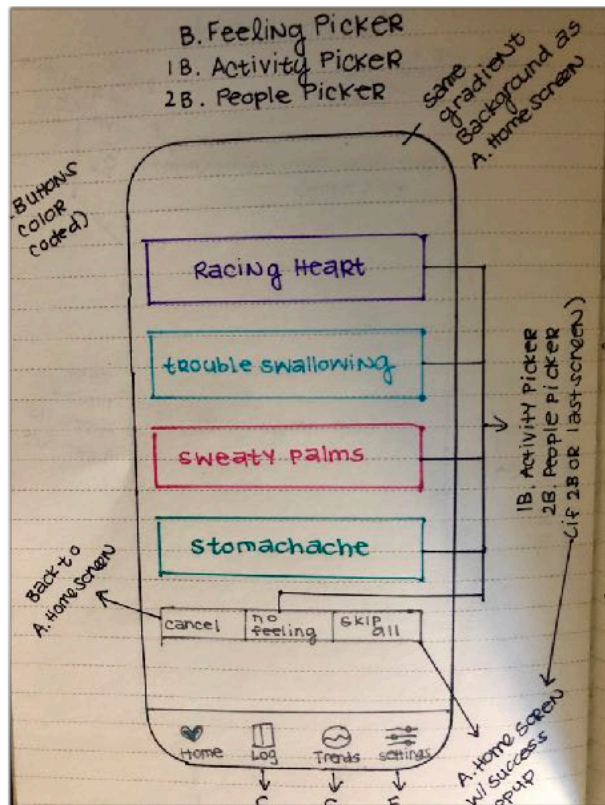
Anxiety Tracker

What is it?

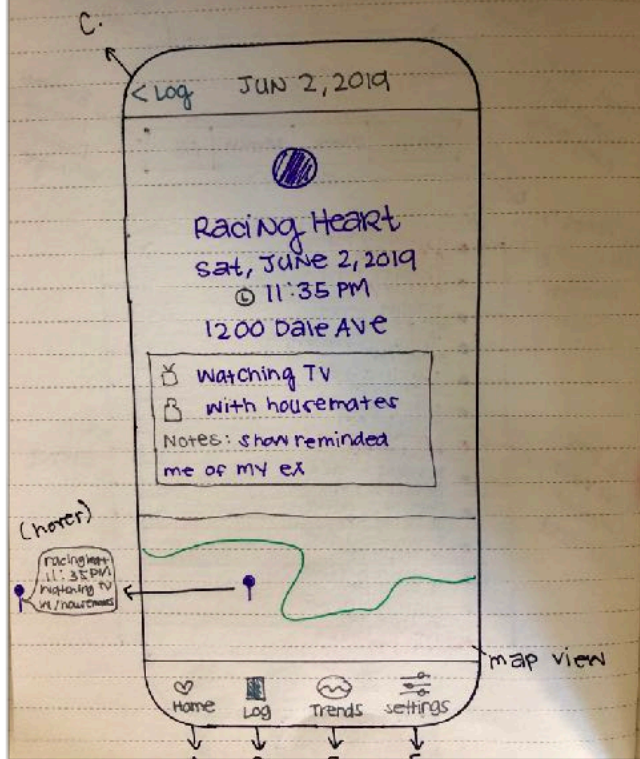
Anxiety Tracker is a mobile application that allows users to quickly and easily log and find patterns with anxious events throughout the day.

Wireframing

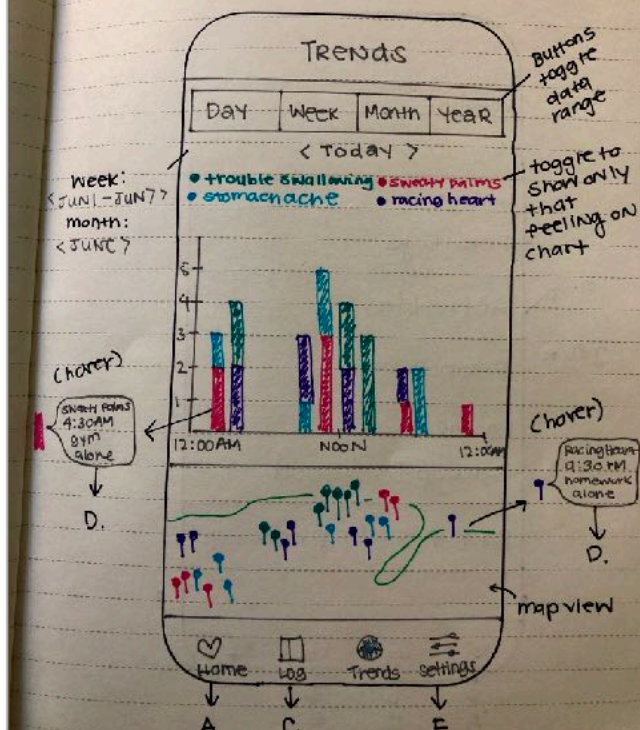




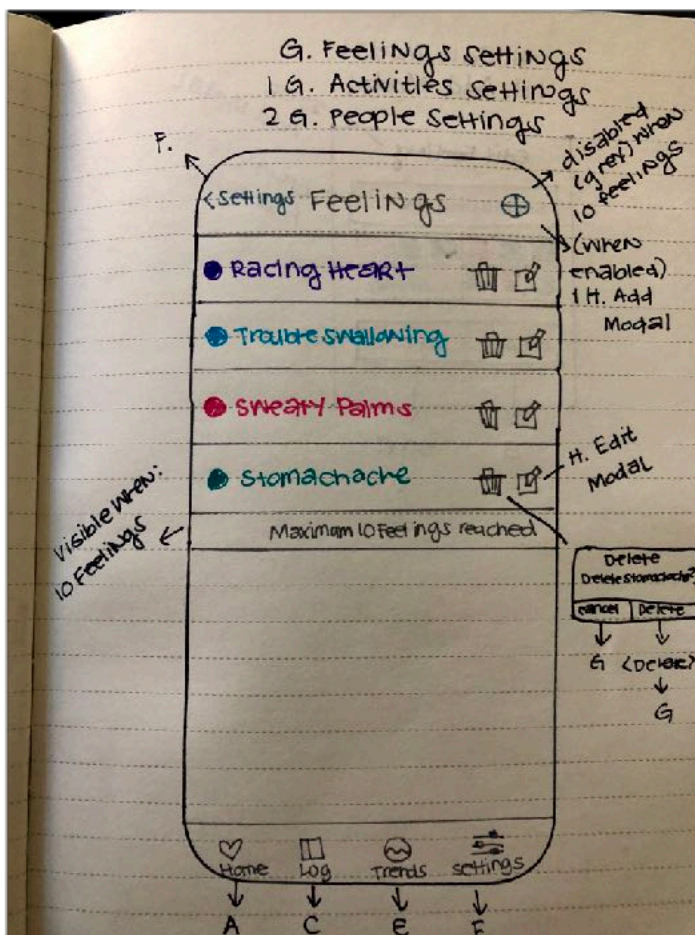
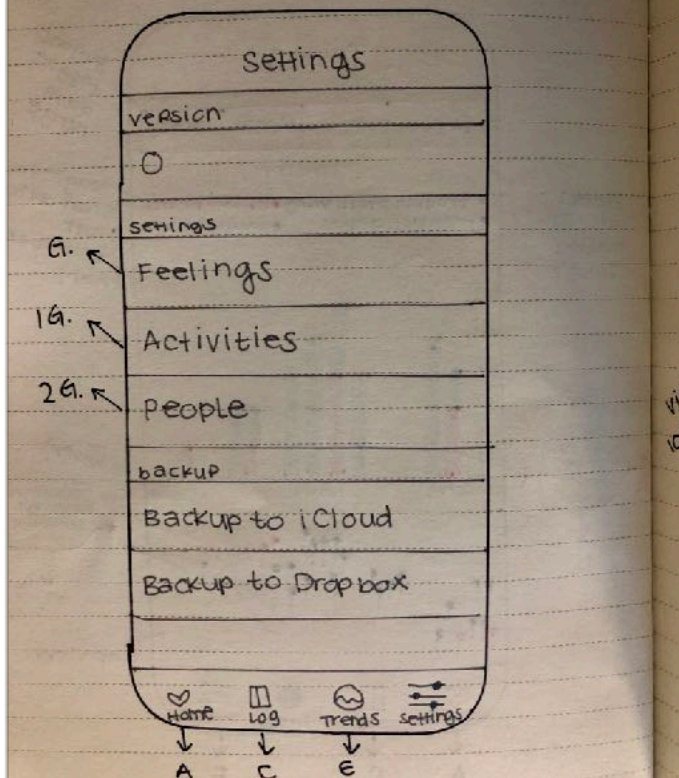
D. EVENT

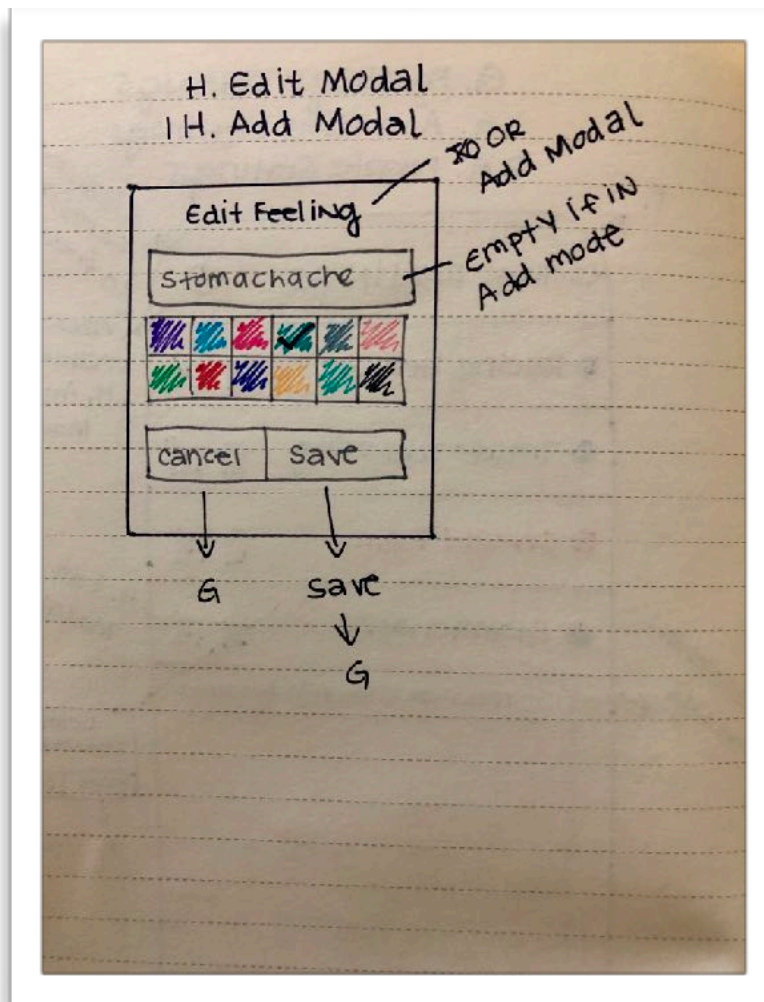


E. TRENDS



F. settings





Usability Testing

I am in the process of conducting usability testing on the beta version of the app. I have reached out to the target audience of users who deal with anxiety on a daily basis. I use two different versions of the app, one on an iPhone, and one on an Android phone. One of the versions has a newly installed version of the app, while the other has existing data. The process is as follows:

1. Present the user with the newly installed version of the app and observe how they interact with it without any instruction.
2. Present the user with the app with existing data and observe how they interact, interpret and respond to the data visualizations.
3. Present the user with several realistic scenarios and observe how they figure out the task. (I.e. How would you go about adding a new feeling? How about editing that feeling you just added? How would you figure out which day of the month you had the most headaches?)

RadGrad

What is it?

RadGrad is a web application that combines degree planning, social networking, and gamification to enhance the academic, professional, and social college experience for undergraduate STEM university students. It aims to solve issues such as:

1. Students from the University of Hawaii often have a hard time getting jobs on the mainland even if they were high performers in school.
2. Many information and computer science (ICS) alumni say they realized too late that they lacked the experience that employers were looking for (i.e. internships, independent projects, hackathons, specialized knowledge).
3. Computer science changes too quickly for college course curriculum to keep up with.
4. Low female ICS program enrollment

Preliminary User Research

I set out to find the problems that current and past students were having. Our first iteration focuses on a relatively small and specific group of users: current undergraduate computer science students at the University of Hawaii at Manoa.

I gathered responses from 199 ICS students from 2008 to 2016 answering a question, “[What are] Three bad things about being an ICS student[?]” on a forum on a Hawaii technology community site, *TechHui*. I compiled a list of the ten most common complaints.

The ICS department needs to offer classes more frequently.

The ICS department needs to offer a wider variety of classes.

The ICS department needs a better sense of community.

Some of the professors in the ICS department need to improve their teaching.

The ICS department should offer more focused areas of study.

ICS classes are too time consuming and take up more time than anticipated.

The ICS department should offer more classes that meet focus requirements.

ICS books are too expensive.

ICS courses should involve more group work

ICS should encourage more interaction among students.

To get an idea of the types of game mechanics that attract current ICS students, I conducted a brief informal survey of current ICS students’ favorite games and genres. I got 16 responses and aimed for equal gender representation.

| Gender | Game Title | Genre |
|--------|---------------|-------|
| Male | Seven Knights | RPG |

| | | |
|--------|---------------------------|-------------------------|
| Male | Kerbal Space Program | Space Flight Simulation |
| Male | League of Legends | MOBA |
| Female | League of Legends | MOBA |
| Male | Monster Hunter | RPG |
| Male | NBA2k7 | Sports |
| Male | Hearthstone | Collectable Card |
| Male | RimWorld | Construction Management |
| Male | Geometry Dash | Aracde |
| Male | Overwatch | FPS |
| Female | Pokemon Go | Augmented Reality |
| Female | Pokemon Go | Augmented Reality |
| Female | Minecraft Sky Factory 2.5 | Sandbox |
| Female | Call of Duty | FPS |
| Female | Assassin's Creed | Action/Adventure |
| Female | Summoner's War | RPG |

For more details on how the data I gathered impacted the design and implementation of RadGrad, see my complete report here: <https://github.com/amymalia/radgrad-thesis/blob/master/thesis.pdf>

Baseline User Surveys

In order to measure if RadGrad has any academic, professional, or social impact, I designed a baseline survey with specific and measurable questions about students' experiences. This survey will be conducted again by another researcher in the future as a post-survey for comparison. I conducted this survey in person with 100 undergraduate ICS students. It was deployed electronically via Google Forms and students completed the survey on an iPad either immediately before or immediately after an advising session with an ICS advisor. These students are taking advantage of the current department resources available to them, which suggests they may be the same types of students who would actively participate in RadGrad. There are three modified versions of the survey: for prospective ICS students, current ICS students, and graduating ICS students.

ICS Student Experience Questionnaire

Current ICS Students

We are gathering information about the experiences of current students in order to ensure that the ICS department provides what students need to succeed. Please answer the following questions as honestly as possible. Prospective ICS students may skip this section.

Which of the following extracurricular activities pertain to you?

We are trying to ensure that our students are getting the best and most well-rounded preparation for their future. For each of the following activities, please check the box if you are currently doing the activity OR have done it in the past. Check any that apply.

- ☐ An ICS related internship
- ☐ An ICS-related job
- ☐ A hackathon or any other type of public computer science challenge (i.e. cyber security competitions, programming related contest)
- ☐ An open source project
- ☐ An ICS-related project outside of class (i.e. personal project, extension of class assignment, working under a professor or graduate student)

Do you feel that you get enough support from others in the ICS department?

Check any that apply.

- ☐ I would like more support from professors in the ICS department.
- ☐ I would like more support from TAs in the ICS department.
- ☐ I would like more support from my peers in the ICS department
- ☐ I would like more support from the counselors in the ICS department
- ☐ I feel adequately supported by others while pursuing my degree in the ICS department.
- ☐ I often feel completely alone in the ICS department and thus only depend on myself

As a student, do you feel like you have a voice to make changes within the department?

- ☐ Yes
- ☐ Somewhat
- ☐ No

ICS Student Experience Questionnaire

This questionnaire will ask you about your ICS degree program experience so far, in order to improve the program for future students.

* Required

What is your gender? *

- ☐ Male
- ☐ Female
- ☐ Other :

What is your current status in the ICS degree program? *

- ☐ Completed 0 ICS courses
- ☐ Completed 1-2 ICS courses
- ☐ Completed 3-4 ICS courses
- ☐ Completed 5 or more courses and expecting to graduate within 3 or more semesters
- ☐ Completed 5 or more courses and expecting to graduate within 2 or less semesters

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ICS Student Experience Questionnaire

Graduating ICS Students

We would like to know how you feel about your overall experience in the ICS degree program in order to make improvements for future graduates. If you are graduating this semester, please answer the following questions as honestly as possible. All other ICS students may skip this section.

Now that you are nearing the end of your ICS degree program experience, how well prepared do you feel to find a job after graduation?

- ☐ Well prepared
- ☐ Adequately prepared
- ☐ Unprepared

If you answered above that you feel unprepared to find a job after graduation, please explain why.

Your answer

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SUBMIT

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ICS Student Experience Questionnaire

Current ICS Students: Influences

We are interested to know more about who has influenced you in your ICS degree experience, and who you might have influenced. Prospective ICS students may skip this section.

To what extent have ICS alumni influenced your development in the ICS program?

Check all that apply. Influences include giving advice, answering questions, job recommendations, course recommendations, etc.

- ☐ I have not been influenced by any ICS alumni.
- ☐ An ICS alumni influenced me to pursue a major in ICS.
- ☐ An ICS alumni influenced me to improve my professional development.

To what extent have ICS peers influenced your development in the ICS program?

Check all that apply. Influences include giving advice, answering questions, job recommendations, course recommendations, etc.

- ☐ I have not been influenced by any ICS peers
- ☐ An ICS peer influenced me to pursue a major in ICS.
- ☐ An ICS peer influenced me to improve my professional development

To what extent have you influenced your ICS peers' development in the ICS program?

Check all that apply. Influences include giving advice, answering questions, job recommendations, course recommendations, etc.

- ☐ I have not influenced any ICS peers.
- ☐ I have influenced a peer to pursue a major in ICS.
- ☐ I have influenced a peer to improve their professional development.

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ICS Student Experience Questionnaire

Prospective ICS Students

We are gathering information about the initial feelings of prospective ICS students. Please answer the following questions as honestly as possible. Current ICS students may skip to the next section.

How EXCITED are you about entering the ICS program? Rank from 1-5.

| | | | | | | |
|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Not at all excited | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very excited |

How INTIMIDATED do you feel about entering the ICS program? Rank from 1-5.

| | | | | | | |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Not at all intimidated | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very intimidated |

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What makes you proud to be a part of the ICS department?

Check any that apply.

- ☐ The prospect of getting a high paying job
- ☐ Surviving the rigoroussness of the curriculum
- ☐ Associating with people in the ICS community
- ☐ Working on ICS related projects.
- ☐ Receiving ICS related awards.
- ☐ Other: _____

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For more details on the survey results and analysis, see my complete report here: <https://github.com/amymalia/radgrad-thesis/blob/master/thesis.pdf>

Usability Testing

Our goals of the Beta RadGrad usability testing were to identify problems faced by students and advisors while using the system, collect data useful for improving the system, and determine overall satisfaction with the current system design.

We conducted the test with five students and one advisor. The students were specifically chosen for their varying levels in the program. Students were offered \$20 compensation for attending one of these 30 minute sessions. We created a specific account for them prior to their session, to make the experience as realistic and specialized as possible.

Three people participated in each session: the student, an evaluator, and an observer. Each session was recorded for further evaluation.

For more details on the test results and design, see the documentation here: <https://www.radgrad.org/docs/archive-beta-test.html>