

## Written Assignment II |

POV & Experience Prototypes

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## INTRODUCTION

### OUR TEAM



Aditi



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Radha



Anna

We are a team of Stanford CS and Symbolic Systems students in the Human 2.0 (AI) studio.

### PROBLEM DOMAIN

We interpreted the theme of Human 2.0 in relation to our local environment at Stanford. On campus, students often feel pressure to be the best versions of themselves – *student 2.0*.

However, Stanford students face various pain point when tasked with determining who they want to be, and what they want to achieve. We were excited to learn more about the ways in which students organized and planned fulfilling lives.

## PRELIMINARY POV

We began this week with the following POV:

- **We met....**  
a regretful senior who was struggling to complete her major.
- **We were amazed to learn that...**  
no one told her to create a four year plan.
- **It would be game changing if...**  
students learned early on that academic organization was as important as academic exploration.

## ADDITIONAL NEEDFINDING RESULTS

Based on feedback, we reimagined our focus (academic planning). We flared out to include broader themes:

- i) maximizing academic potential
- ii) physical and mental well-being on campus and
- iii) productivity.

We conducted **six** interviews. Given the scope of sensitive information collected, we will keep the students' identities confidential. Summaries are listed below, with quotes found in **<Appendix 1>**.

### i) Maximizing academic potential

Interviewee #1:

*A Stanford freshman who initially joined Stanford class of 2018 but took a three year leave of absence to work for Cirque du Soleil.*

Interviewee #2:

*A Stanford sophomore studying film studies who wants to pursue her creative passion and build skills desirable in the workforce.*

**ii) Physical and mental well-being on campus**

Interviewee #3:

*A high-achieving Stanford senior who went on reduced course load after a stressful quarter.*

Interviewee #4:

*A Stanford athlete who felt obliged to hide physical illness due to pressure to achieve.*

**iii) Productivity**

Interviewee #5:

*A low-income student who used productivity tools to prioritize and manage limited time on campus.*

Interviewee #6:

*An international student who placed high importance on mindfulness practice.*

## REVISED POVs and HMW STATEMENTS

After assessing our new data, we created a short list of POVs and used the heat-map starring method to select the top three choices. We spent 3 minutes brainstorming ~10-15 HMWs per POV.

The favorite HMW for each POV is in **bold** within the list.

### → POV 1

- **We met ...**  
A student who went on reduced course load for mental health reasons.
- **We were amazed to learn that ...**  
She felt social pressure to keep up with her peers.
- **It would be game changing if ...**  
Students valued personal well-being as much as perceived achievement.

How Might We..

1. HMW encourage students to unschedule a part of their days?
2. HMW help people who work long hours place more social value on wellness?
3. HMW transform students' notions of personal well-being into a social activity?
4. HMW help busy people schedule time for wellness?
- 5. HMW help busy, high-achieving people realize when their daily habits are leading to un-wellness?**
6. HMW help students realize the importance of wellness?
7. HMW help students equally prioritize wellness and achievement?
8. HMW help over-committed students realize they are over-stretching themselves?
9. HMW help busy students learn which wellness practices will work for them?
10. HMW guide busy college students through the phase of testing new wellness practices?

## → POV 2

- **We met ...**  
A student athlete that is perpetually ill.
- **We were amazed to learn that ...**  
She shops classes to gauge whether the professor is 'understanding.'
- **It would be game changing if...**  
Students could get a 'feel' for a class without shopping it.

## How Might We..

1. HMW encourage professors to share information early to account for special accommodations?
2. HMW remove the time burden of shopping classes to decrease student stress during first few weeks of school?
3. HMW help students determine what courses best fit their personality?
4. HMW help students sense a professor's personality before taking a course?
5. HMW help underclassmen tap into verbal knowledge that is infrequently documented on campus?
6. HMW create the norm of publishing all course information?
- 7. HMW make students feel like they have a crystal ball to assess the resources and logistics associated with a class?**
8. HMW make every student feel like they have an older sibling on campus for advice?
9. HMW help students find subjective facts about a class?
10. HMW help students feel excited about a class without attending it?

## → POV 3

- **We met ...**  
a sophomore film major taking statistics classes.

- **We were amazed to learn that ...**  
she chooses classes that will teach her useful and employable skills.
- **It would be game changing if...**  
students could align their desired lifestyle with actionable choices on campus.

How Might We..

1. HMW help students choose a track based on which skills they hope to learn?
2. HMW help students make informed decisions about skills needed in industry?
3. HMW help students see which elective classes students in their major enjoy?
- 4. HMW help students easily convert long-term goals into manageable tasks?**
5. HMW help students understand perspectives of future employers looking for certain traits?
6. HMW make academic planning feel like a matching game?
7. HMW destigmatize lifestyle choices so students feel comfortable exploring alternate paths?
8. HMW help students easily find accessible courses for a skill?
9. HMW reimagine mentorship on campus?
10. HMW encourage students to think about their desired lifestyle early in their college careers?

## **SOLUTIONS**

We repeated a similar brainstorming process for each HMW, and chose the following favorite solutions:

1. 'I'm sick' Button (app)  
*De-stigmatizes being sick by automating messaging needed to excuse the person from calendar appointments.*
2. Voice assistant  
*Answers academic and professional development questions.*
3. Career to Class Website  
*Converts a student's career goal into a four year plan.*

## EXPERIENCE PROTOTYPES

### PROTOTYPE 1: The "I'm Sick" Form

#### ASSUMPTION:

We wanted to test whether time needed for the process of communicating about your illness increases the guilt a person associates with missing commitments.

#### PROTOTYPE:

We created a short, digital form that would send an email to all of your contacts with whom you had an appointment.

Sick form

If you are not currently sick, imagine you feel strong symptoms of a viral infection when you wake up one morning: headache, body aches, congestion.

Today, you have many commitments. Look at the commitments below, and complete the following tasks. Please talk through your thought process as you complete the exercise.

How do you feel today?  
Describe your illness to your appointment contacts.

Your answer \_\_\_\_\_

Here is the list of your commitments. Select all commitments you would try to be excused from:

- ☐ 9am: Math class. You need to turn in a PSET that is due. Contact name: J. Johnson
- ☐ 10:30am: Writing class. This class is graded based on attendance. Contact name: R Smith
- ☐ 12:00pm: Lunch with your faculty advisor (an extremely busy professor). Contact name: S Pierce
- ☐ 3:00pm: Computer science class. This class is video recorded. Contact name: E Roberts
- ☐ 5:00pm: Club meeting where you are supposed to present to all the members. Contact name: L Rivers
- ☐ 8:00pm: Best friend's birthday party. Contact name: V Walters

Email draft (to be sent to respective contact person for each commitment)

Dear [name],

Unfortunately, I woke up this morning feeling (...), and do not think I can make it to \_\_\_\_\_ today. Please excuse me and I will catch up on any work I have missed.

Sincerely,  
[Your Name]

SUBMIT

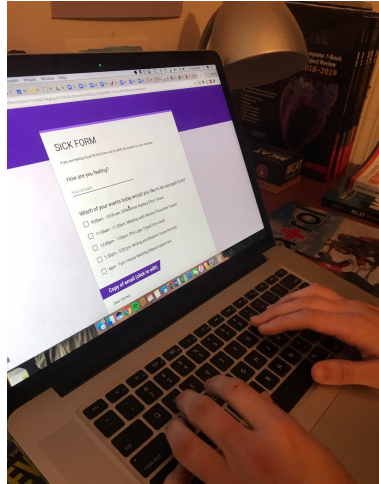
#### TESTING:

- Dartmouth  
To expand our user reach, Matthew tested this prototype with one student during a trip to Dartmouth.
- Stanford  
Radha also found 4 Stanford students who currently felt sick to see how they would respond in a realistic manner.
- Our methodology included having participants complete the task of sending emails to cancel appointments using the form, and verbally walking through thought processes.

## RESULTS/LEARNINGS:

### *Things that worked*

- 3 participants thought time-saver because it headache of



it was effective  
eliminated the  
coordinating emails.

### *Things that didn't work*

- 2 people thought the form was too limited in scope, and wanted more sophisticated means of editing the email draft.

Interestingly enough, the Dartmouth student (pictured above) did not see the need for this type of service, as her past professors were generally accommodating. She described that in the semester system, it is easy to make up work if you miss a week of class. This contrasted with Stanford students, who would only try to get out of classes that required little participation. Generally, they felt guiltier when they had a deliverable due

### **Validity of Assumption:**

Refuted. The time needed to communicate illness and degree of guilt was not strongly correlated.

## **PROTOTYPE 2: The Crystal Ball**

### **ASSUMPTION:**

Students would feel comfortable receiving recommendations from technology.

### **PROTOTYPE**

Crystal ball was a wizard of oz prototype where a round piece of cardboard was taped onto her phone, effectively hiding it.



## TESTING

- We approached students in OU & the main quad.
- After receiving confirmation, Aditi would brief participant and ask them to ask the crystal ball any question relating to academic or professional development.
- Anna played the role of the virtual assistant and responded (via speaker phone) with the answer.
- Aditi would gauge participant's response and follow up with short list of questions.



## RESULTS/LEARNINGS

*Things that worked:*

- People were shocked when the prototype actually answered questions,

and only later on realized there was a phone behind the scenes.

*Things that didn't work:*

- Questions asked weren't easily looked up.
- Perhaps it was too fantastical -- people didn't seem to take responses too seriously.

Surprisingly, participants found delight and surprise in the exercise. The first topics they asked about were questions that worried them - "Am I going to graduate?" "Can you debug this code for me?"

### **VALIDITY**

The assumption tested was proved not valid. The underclassman stated he would prefer to receive recommendations from people he knew. The experienced upperclassman stated that this tool was not useful.

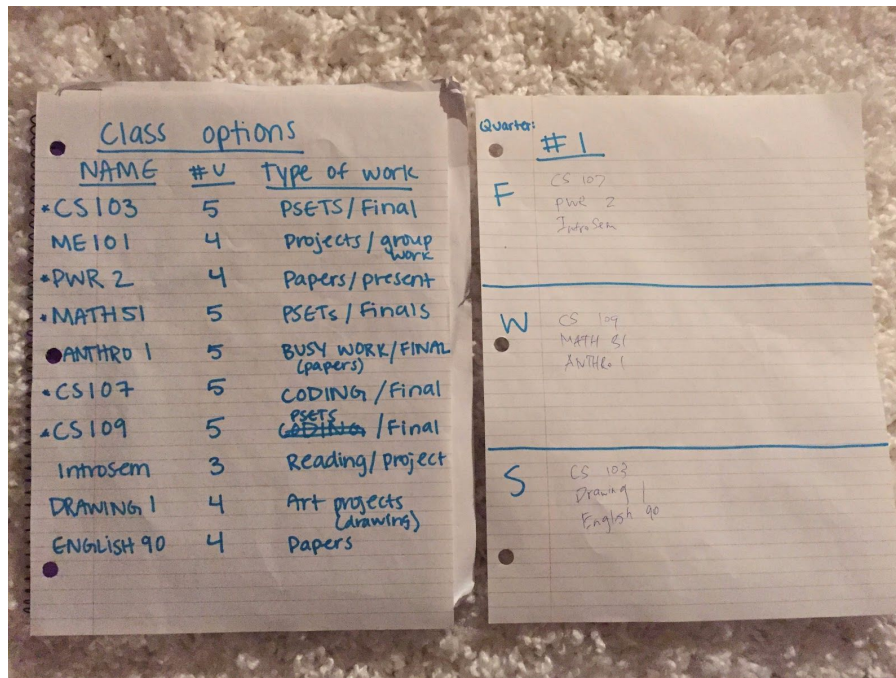
## **PROTOTYPE 3: The Course Scrambler**

### **ASSUMPTION:**

When planning ahead, students place importance on balancing their classes by type and quantity of work.

### **PROTOTYPE:**

We created a of "required" classes & set of "passion" classes, blank buckets for Fall, Winter, Spring for the testees to fill. There was a physical prototype made from pen and paper, and a version using trello.com (*see appendix*).



## TESTING:

We asked students to make a 1-year plan in which they took all of the required classes and also met 12 units per quarter. We did this on a paper list as a first iteration, then on a software application.





## **RESULTS:**

### *Things that worked*

- People clearly understood the task with minimal explanation.

### *Things that didn't work*

- We randomly approached people seeking out a freshman but did not succeed. Instead, we tested with upperclassmen who were familiar with the courses, eliminating the uncertainty we hoped for.

We were surprised that the task brought back bad memories for both participants. Furthermore, the participants both seemed dependent on social influences -- what their friends might be taking, or advice from someone with experience.

Both participants scheduled their required classes first and then fit in passion classes around that. Both participants placed high importance on balancing their course load across quarters in terms of time commitment and main type of work (PSETS, coding, writing, reading, drawing/making), aiming to



have “well rounded quarters” with a “good mix” of classes.

### **Validity of Assumption:**

Our assumption was validated based on justification above.

### **New assumptions:**

- Students actually plan ahead.
- Students plan starting with an idea of what they have to do.
- Students have a way to know which classes are required for them.
- Students can find plenty of “passion” classes.

## **KEY TAKEAWAYS / NEXT STEPS**

Ultimately, we learned the value of broadening our initial idea. Testing new concepts less directly related to academic planning broadened our scope and understanding of student needs.

Based on validity of assumptions, we believe the course puzzler prototype was most successful. We plan to continue working on iterations geared towards helping students convert long-term goals into actionable chunks.

**Word count: 1746**

## **APPENDIX**

### **<Appendix 1> Interviewees & Interesting Quotes**

#### Interviewee #1:

Interesting quotes:

- “When I first began as a freshman 3 years ago, I made my four-year plan the summer before.”
- “I enjoy creating my four year plan -- it’s like a puzzle fitting together the moving pieces”
- “Now that I’m back, I want to make the most of Stanford’s resources. My calendar is packed with classes and activities for my professional development”

#### Interviewee #2:

Interesting quotes:

- “I try to take classes that teach me skills that make me look more marketable”

- “Throughout freshman year, I was consistently told not to think about academics and it would all figure itself out”

## ii) Physical and mental well-being on campus

### Interviewee #3:

#### Interesting Quotes

- “My mom forced me to go on reduced course load. I wouldn’t have done it if it weren’t for my academic advisor who told me no one would care.”
- “At that moment, I was concerned about people finding out that I couldn’t handle what normal Stanford students can”
- “To resolve my anxiety and stress, I focused on things that reduced my cortisol level -- sleeping, exercising, reading fiction.”

### Interviewee #4:

#### Interesting Quotes

- “Even when I’m ill, I don’t want to email professor. I feel like being annoying, and it’s so much hassle to say anything”
- “When I’m travelling a lot, I take classes that aren’t group project based and the lectures are recorded. Most importantly, I shop a bunch of classes and take classes based on how accommodating professor is”

## iii) Productivity

### Interviewee #5:

#### Interesting Quotes:

- “Whenever I remember something I need to do, I write it down on my phone because I’m really forgetful. Later, I will go through all my tasks and prioritize.”
- “There’s not enough time to do *everything* you want at Stanford. You need to pick and choose what most closely aligns with your goals and personal values”

### Interviewee #6:

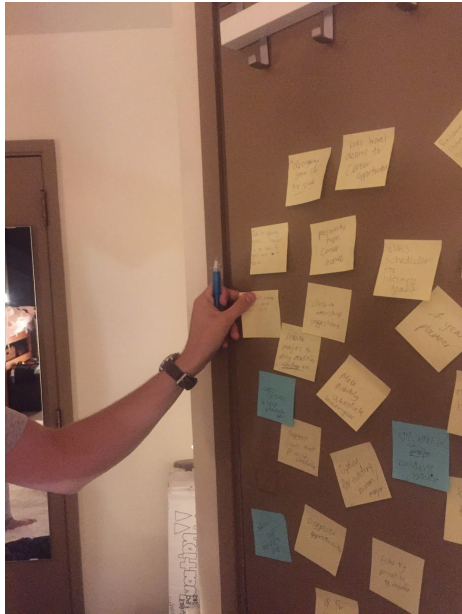
#### Interesting Quotes:

- “I don’t believe in scheduling time for mindfulness on my calendar. I’ve found that it doesn’t work -- when I tried doing that in the past, I

would get into this perpetual state of feeling guilty when I didn't get around to 'meditating' or 'yoga'"

- "I go crazy during shopping week. My days are packed with classes, which unfortunately leads to burn out... fast"

## **<Appendix 2> Brainstorm**



## **<Appendix 3> I'm sick form**

Link: <https://goo.gl/forms/c3wbupAVNnX1NmLD2>

## **<Appendix 4> The Course Puzzler**

Screen grab link: <https://www.youtube.com/watch?v=qDvUeiQojsE>

Photos:

