ASES
2014
Bootcamp Calendar

Stanford University

*Assignments based off of CS147
Week 3
October 7, 7pm

Needfinding

- Bootcamp Overview (Presentation)
- Design Thinking Introduction + Needfinding (Presentation)
  - Empathy/Define
  - Observations + Interviews
  - Brainstorming

Assignment 1: Needfinding
Due: 10/14

During this week’s meeting you formed groups around a particular problem or interest. Use this general problem or interest as a starting point to go out in the real world to observe people (ideally as different from you as possible) doing a particular task related to this general problem.

You will conduct at least two interviews utilizing strategies we discussed in our meeting. Remember, during your interviews, tell your participants to perform the task as realistically as possible while communicating to you as appropriate. During your observation, take notes and even pictures on what people are doing especially noting potential problems you want to solve.

Your Deliverable: Brainstorm 8-10 problems/user needs. You are not looking for solutions/ideas yet – focus on problems and user needs and goals only. An example of a problem and user need might be “Sometimes, when Scott takes the Caltrain home, there is no room for his bike and he has to wait for the next one. Scott needs a way to plan what train to take based on how much room is available in the bike car”.

It is helpful to use phrases like, “needs a way to” or “needs to be able to” as you list your user needs.

Week 4
October 14, 7pm

Prototyping I

- Due: 2 Interviews, 8 - 10 Problems/User Needs
- Prototyping (Presentation)
  - POV
  - Storyboarding
  - Rapid Prototyping

Assignment 2: Rapid Prototype I
Due: 10/21

With your team, review the user needs you brainstormed last week. Decide which one your team is interested in focusing on for the rest of bootcamp. For this assignment you will flesh out this design idea by creating a point of view, an inspiration board, a storyboard, and rapid prototypes. The main deliverable is the prototype so if you are time-strapped, focus your efforts there. That being said however, the POV, inspiration board and storyboard will be very helpful in designing a good, creative prototype.

POV
A POV is your high-level take on a user need/problem before actually designing a solution. A POV comes from the intuition and understanding of a user need you gained from your observations and interviews. For instance, if you wanted to improve the waiting in line experience, your POV might be: “waiting in line is time consuming, with a good scheduling interface, no one should have to wait in line.”

Inspiration Board/Competitive Landscape
Compile a board (whiteboard, Pinterest, Google doc, etc) of “inspirations” that relate to your design idea. Inspirations can be words that describe your idea, competitors, similar products or anything that relates or inspires your design. Inspiration boards
allow you to see what exists already, and helps highlight your opportunity to innovate.

**Storyboard**
Using your inspirations, come up with 2 design ideas/solutions that address your point of view. Create a storyboard that illustrates each idea and how it will be used/implemented in a real-world scenario. The goal of the storyboard isn’t to be detailed or to be a work of art; rather, it illustrates the use case for your idea (the problem) and the outcome of your design. Your storyboard shouldn’t display your actual product or solution (that comes next).

**Prototype I**
Review your storyboards and discuss the strengths and weaknesses of each design. Keeping your POV in mind, decide on one idea to prototype. Group buy-in and joint ownership are critical here. As a group, take your time to decide what you want to prototype and how you want to do it. If this discussion takes time, that’s completely normal and fine.

Keep your prototypes simple and easy to create. You don’t want to be coding up a shippable product. Use paper, google drive, email, etc to replicate or imitate the features and effects of your product. If you feel like it, prototype two solutions!

**Your Deliverable:** POV, Inspiration Board, Storyboard, Prototype I

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### Week 5
October 21, 7pm

#### User Testing I

- **Due:** POV, Inspiration Board, Storyboard, Prototype I

- **User Testing**
  (Presentation + Workshop)
  - Tactics for Testing
  - Pair Groups for User Testing

- **Assignment 3:** User Testing I
  **Due:** 10/28

Go out and find real people to test your prototype. Conduct at least 2 user tests and collect observations that will help you improve your product. Like we discussed in meeting, collect observations via video, photos, notes, interviews, and surveys etc. What’s important is that you’re capturing this information – user testing is incredibly valuable and will often yield surprising and deep results! Look for ways to improve and refine your idea. As a result, you may learn that your prototype completely fails to work as intended. This is normal and why your prototypes are rapidly created. Low fidelity prototypes allow you to easily throw away old prototypes and create new ones, allowing you to fluidly move from design idea to design idea.

Using the feedback, create a list of changes you wish to implement. For each change, make sure your entire team understands why this change needs to be implemented. Each change should have real-world evidence from your user testing to back it up. Rapidly prototype an alternative design.

**Your Deliverable:** Two Interviews, List of Changes
Week 6
October 28, 7pm

Iterating + Prototype II

- Due: Assignment 4: Prototype II
  - Due: 11/04

- Iterating
  - (Workshop)
  - Results from User Testing I
  - Lessons learned
  - Changes/Iterations
  - Feedback + Support

- Assignment 4: Prototype II
  - Due: 11/04

Using the results from User Testing I and the feedback you got from meeting (week 6), rapidly iterate upon Prototype I and create Prototype II. For some of you, user testing might have gone extremely well and there may not be any extreme changes you need to make. Still challenge yourself and try to improve your prototype using the observations you collected from testing. For others, user testing might have gone horribly wrong and you may need to completely redesign your prototype or reconsider your entire design approach – that’s completely ok! That’s the entire point of the design thinking process. Imagine if you dropped out of school, started a company, raised millions of dollars from investors, family and friends for an idea you had never tested and it turned out to be a flop? (This has happened countless of times!) The design thinking process allows you to thoroughly test your design ideas, improve upon them creatively, and turn failures into invaluable knowledge to aid you in solving your problem. Review your observations from user testing and work with your team in figuring out why your design failed to achieve the results you imagined. Using what you now know, iterate and build Prototype II.

Your Deliverable: Prototype II

Week 7
November 04, 7pm

Opportunity + User Testing II

- Due: Assignment 5: User Testing II
  - Due: 11/11

- Opportunity
  - (Presentation)
  - Customer Validation & Acquisition
  - Business Model & Product Market Fit
  - Resources + Future

- User Testing II
  - (Workshop)
  - Pair Groups for User Testing
  - Open Office Hours

- Assignment 5: User Testing II
  - Due: 11/11

Same as Week 5, go out and test Prototype II. Focus your tests on the changes you made in Prototype II and the feedback you gained from User Testing I. If User Testing I went poorly, it could’ve been due to not only your design idea, but also your user testing tactics, so take that into consideration!

After user testing, meet with your group and compile your conclusions about your product. Review your POV, storyboards and user testing observations and write a few sentences summarizing what went well, what went wrong, what you learned, and next steps you would take.

Your Deliverable: Two Interviews, Conclusions
### Week 8
November 11, 7pm

**Presentation Prep**

- Due: Two Interviews, Conclusions
- **Presentation Prep**
  (Presentation)
  - Content
  - Pitching/Presentations
  - Judging Criteria

**Assignment 6: Presentation**
Due: 11/21

This is it guys! Use all that you have learned in the past 5 weeks and create an 8 minute presentation focusing on your journey through the design thinking process. We want to hear about finding a user need, coming up with a POV, developing and designing a solution, prototyping and user testing. Tell us about the hardest challenges you ran into, what pivots you made, how your design and POV evolved over time, how the problem you sought out to solve changed into an entirely different problem, and the things you learned along the way about your problem, your users and your design! Is there a potential business opportunity here? If so, back your claim up with real-world evidence. Include a conclusion with next steps forward. You may have learned your design was ahead of its time and the market wasn’t ready and the best course of action is to call it quits for now, for others this could mean continuing the prototyping process and continuing to test and refine your product. Some of you might be at a point where you’re ready to raise funding and launch a Kickstarter or seek venture funding to start building higher fidelity prototypes and products. Regardless of what your next steps are, the important thing is to let the failures, knowledge and successes of the past weeks inform your decision!

Presentations will be followed by a 5 minute Q + A so be prepared for that as well!

**Your Deliverable:** Presentation

### Week 9
November 21, 7pm

**Presentations**

- Due: Presentation
  - **Presentations**
    - 8 Minute Presentation
    - 5 minute Q + A

**Judging Criteria: Presentations**

1. **Needfinding**
   - How real and urgent is this need?
   - What evidence and observations are provided to back up and validate this need as a marketable business?

2. **Prototyping**
   - How creative and effective are the prototypes?
   - How well did the team iterate upon user testing?

3. **User Testing**
   - Were the user tests carried out effectively yielding useful and actionable feedback?
   - Were user tests well designed and thought out?

4. **Opportunity**
   - Does a viable, potential, business opportunity present itself (i.e. potentially scalable, profitable, and competitive.)

5. **Extra Mile**
   - Was this team’s prototype especially innovative or original?
   - Did this team go above and beyond and achieve an extraordinary amount of progress (apply broadly)?
   - Did this team stand out positively and go above and beyond what was asked?

6. **Presentation**
   - Did this team adhere to the 8 minute time limit?
   - Was the presentation engaging in terms of both visuals and delivery?
   - Was the presentation relevant and make you want to learn more?