

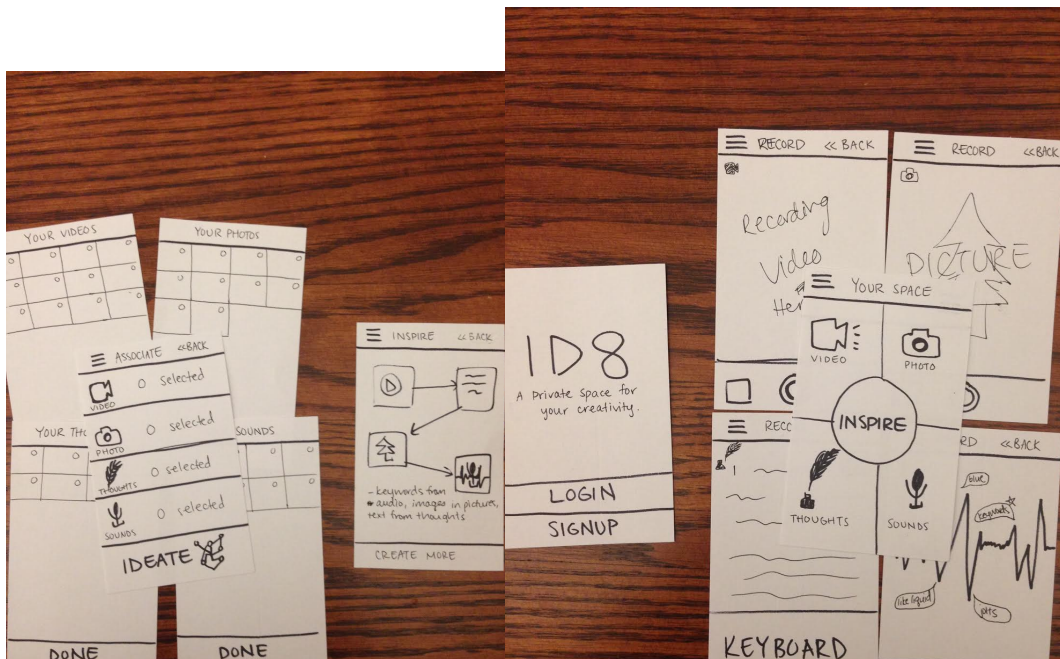
Sukhi Gulati - computer
Lawrence Murata- observer
Alka Nath- note-taker
Julie Ni - facilitator
CS147, Discovery, TA: Nicole Zhu

Introduction and Mission Statement

ID8 is a mobile application in its early development stages. As we move forward, we find it imperative to test the usability of our product at every stage of the prototyping process. For this reason, our team gauged the user-friendliness of our product by asking 4 people without knowledge of the product to use it to perform basic tasks. In the process, we gained valuable feedback regarding the interface we designed as well as regarding the features we think are important for the application in order to achieve our mission. ID8's mission is to create a private space for people to exercise their creativity by capturing spontaneous inspiration and ideation in the moment.

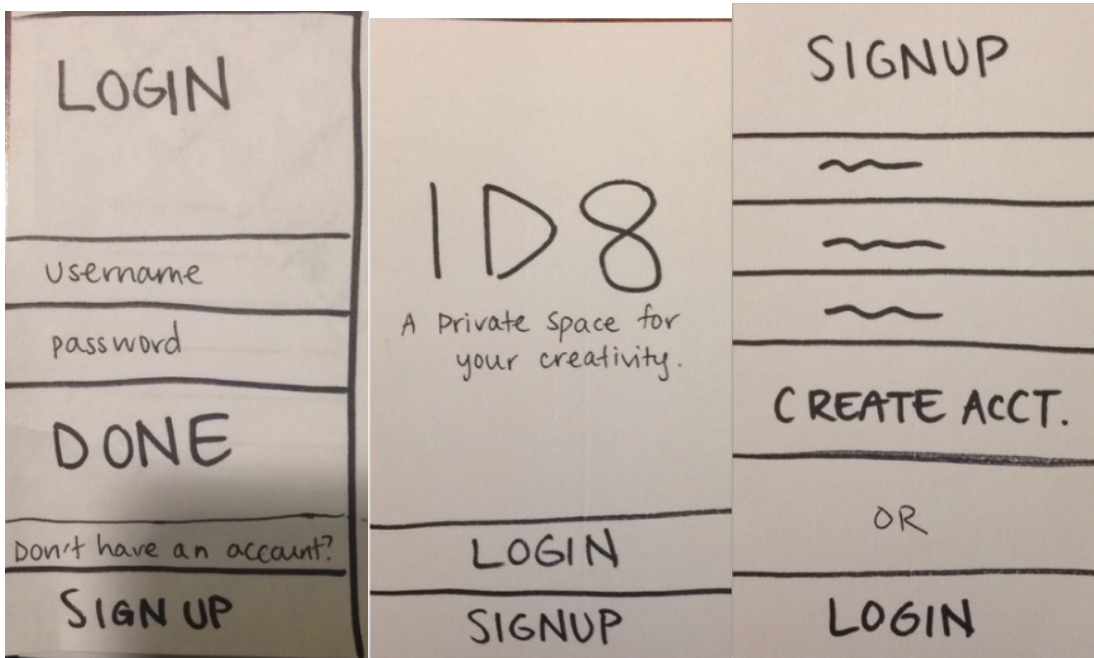
Prototype

This is the entire interface, laid out:

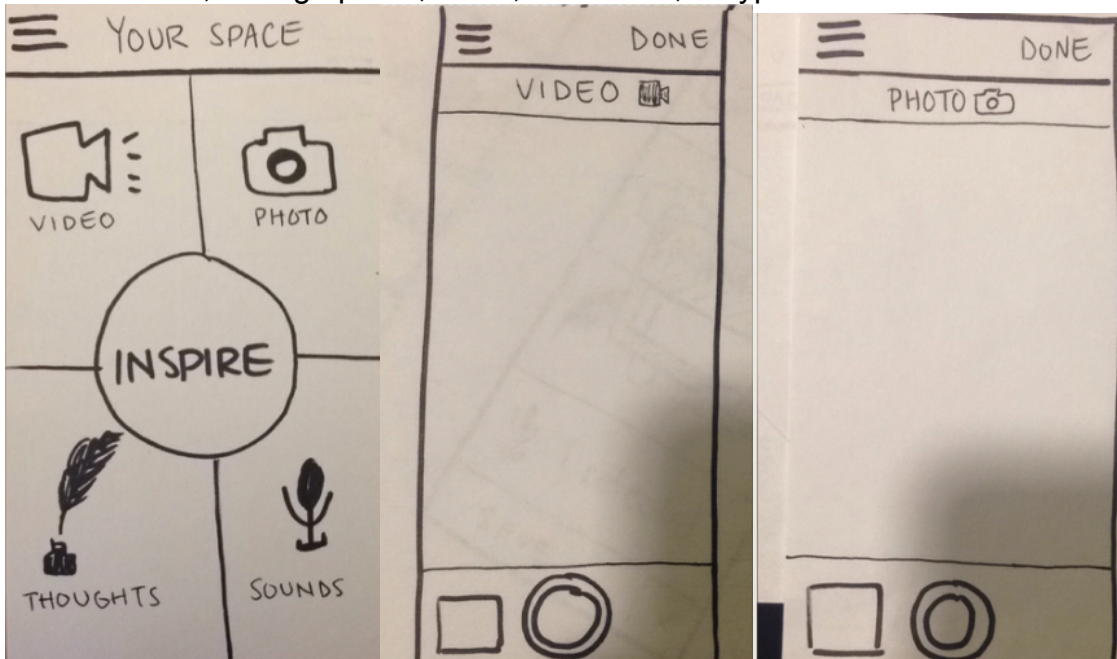


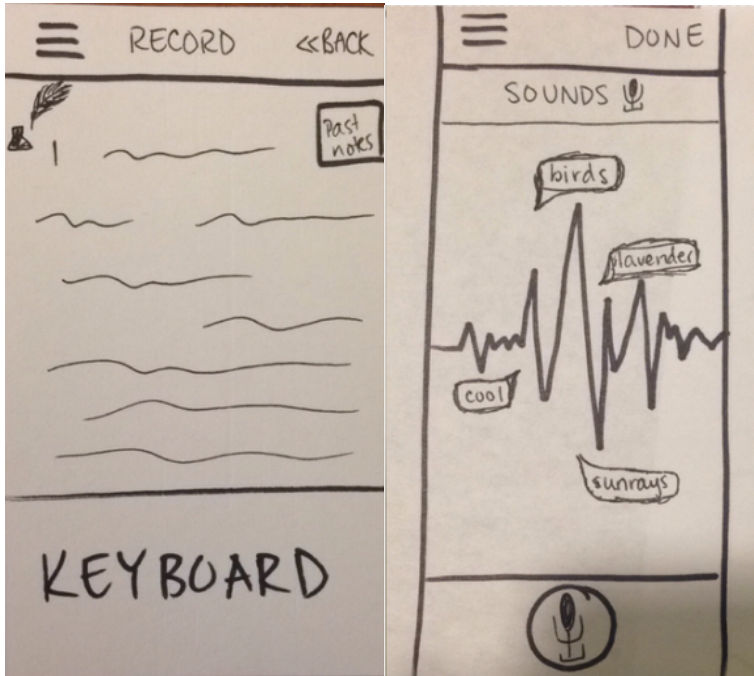
For our prototype, we used the POP app. We decided that it was important for our prototype to be on a mobile phone because our mission dictates an integrated vision of creativity. Capturing spontaneous ideas is something that happens on-the-go, so we wanted a prototype that our users could hold and integrate with their environments.

These first screens are all the potential login screens.

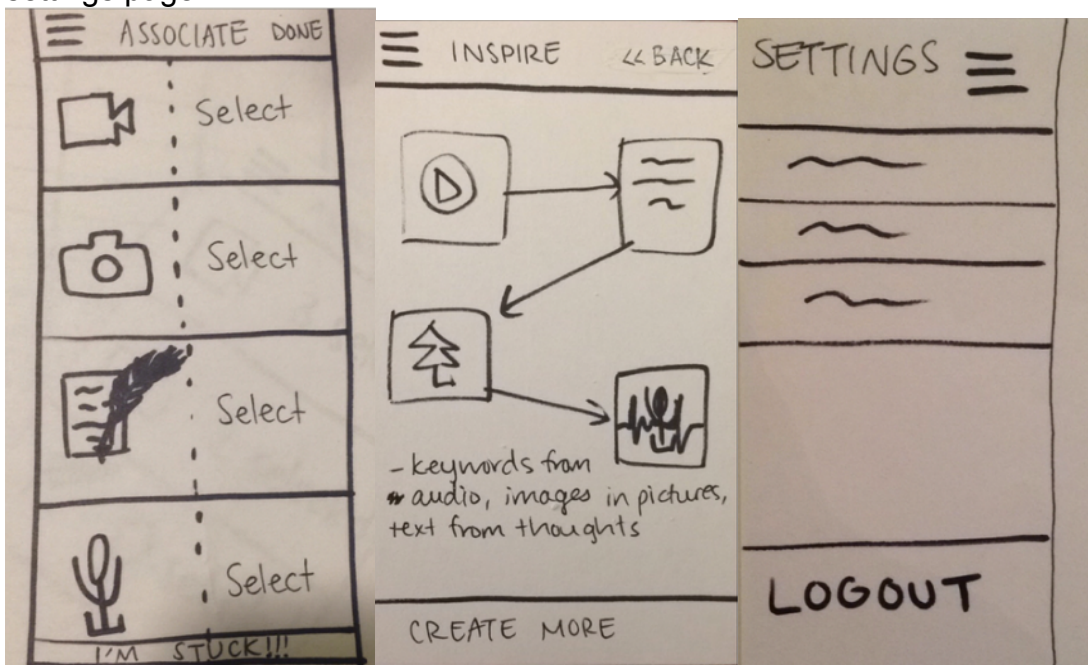


The next five screens show the main user interface, and ways for the user to “record” ideas, through photo, video, audio files, or typed notes.





These next few screen are the “associate” screens, where users can group ideas, make connections, and get inspired with these connections. As well as the settings page.



Method

Participants

We interviewed 3 people that we picked from random locations. We chose to vary the location because we wanted to see how different approaches to

creativity affected the usability of our application. Courtney is a product designer that we approached in the Cowell Cluster. Britt works in marketing – we found her on West Campus. Andrea is a writer who was around the quad. We conducted a partial-interview with a product designer named Jeremy in a dorm room, but his results will not be analyzed as the interview was not completed and we made some mistakes that we learned from.

Environment

We chose to interview people in different environments because the very nature of our app is such that it demands usability in random settings. To capture spontaneous ideation requires an application that can be quickly utilized even in an unpredictable setting. For this reason, we conducted interviews where we found the participants.

Tasks

We presented the participants with three tasks of differing complexity. For the easy task, we asked that participants record something around them that they found inspirational. For the moderate task, we ask participants to take note of an idea they randomly thought of. For the complex tasks, we asked participants to use the app to draw connections between the observations they previously wrote or recorded.

Procedure

Julie was the facilitator. Sukhi and Alka alternated between the roles of note-takers and “computer”. The computer’s job – in this case – was to make judgments on relative speed. Lawrence observed. The facilitator approached possible participants and explained the project. We asked for help as a favor, and did not provide compensation.

The facilitator introduced the team members, read the demo script, and then handed the participant her mobile phone. The demo script simply explained that we were testing a mobile application, that the participant’s words would be noted, and we ask that the participant think aloud.

The facilitator then presented the 3 tasks to the participant one after another. We observed the participant and took note of their behavior. We asked them what was particularly confusing about the application. We asked what they particularly liked. We asked them to explain what they thought the application was about and what they thought it was intended to do.

Test Measures

This is a part of the test where I think that we could have improved by choosing more formalized measures. However, we got better as time went on. As it was, we had Sukhi or Alka take note on speed and perceived uncertainty. We observed flow and perceived ease of use as well.

Results

Participant 1

Participant one completed the first two tasks with speed and ease. However, she gave pause with the third task. She was not sure which button to click and said “uhm” a few times before realizing what we intended. She believed that the app was a digital logbook for creativity when asked. She especially liked our large icons and pictorial representations. She was confused by our choice of the word “inspire” to represent drawing connections.

Participant 2

Participant two completed task one with ease. Task two seemed to demonstrate some confusion with the interface. She accidentally swiped when switching from notes to camera and was surprised when she landed on the voice recording screen. She exclaimed “ahh!” when she didn’t end up where she wanted. For task three, she did not find the prompt very clear. She asked if the ideas she associated had to be unrelated or if they could be anything at all. However, she wanted to be able to save the associations that were created between ideas. She thought it was a cool tool for brainstorming and for spontaneous ideation.

Participant 3

Participant three was the only participant to complete all three tasks with relative speed and ease. She liked the application and found it simple and intuitive to use. Afterwards, she described to us her current processes of ideation. She said she frequently takes pictures of things she finds inspiring but they become lost in her iPhone camera. She thought the application was a way to solve this problem.

Discussion

Overall, our usability tests yielded a lot of information about what we did well and what we will have to change. On a high-level, we altered our mission statement after usability tests by narrowing its scope. We found that users were more impressed with the ability to record and store inspiration than they were with drawing connections. This is why we decided to focus on the aspect of “capturing” creativity while moving forward.

Previously, we thought that “drawing connections” aspect of creativity would be the most innovative part of our application. Participants actually found this feature

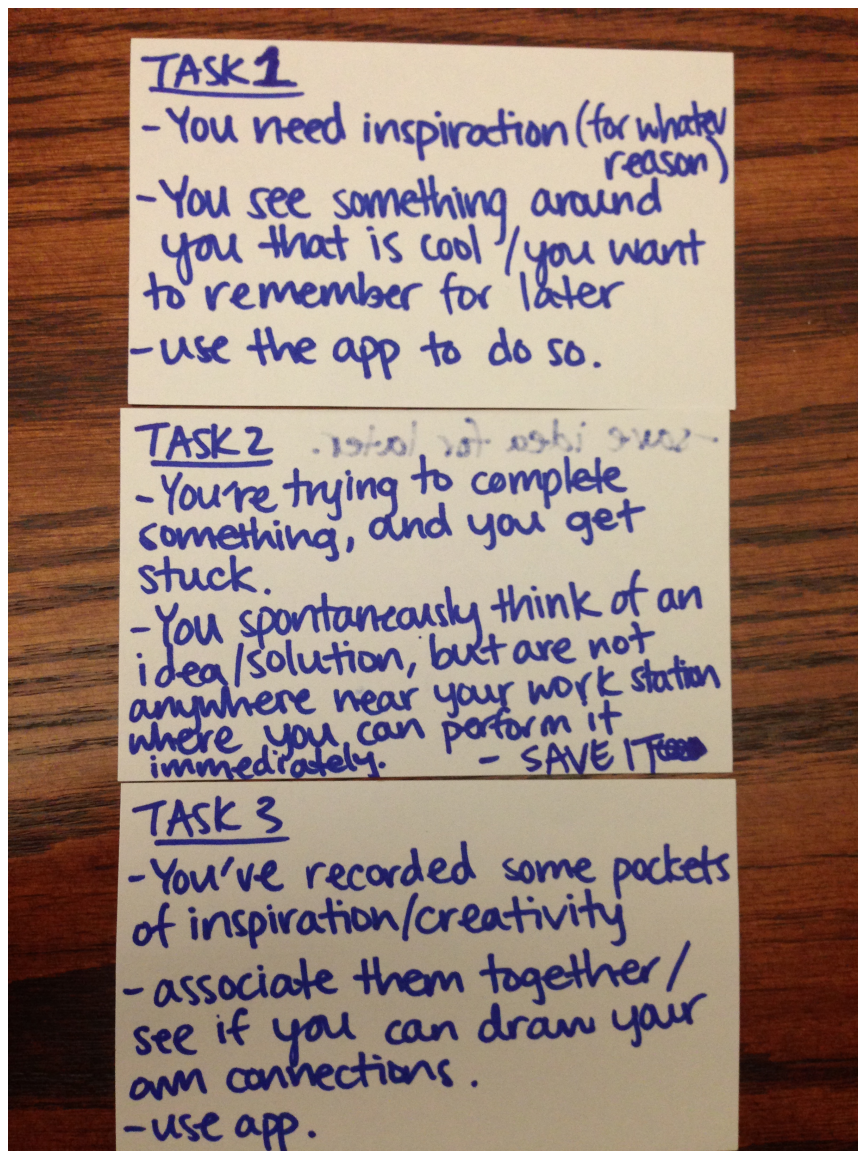
a bit confusing. And, it didn't seem to be a natural part of their creative process. We also think gearing the application towards recording inspiration is a clearer task that applies to all different iterations of the creative process.

On a user-interface level, we found that participants loved the large icons and self-explanatory representations of functionality. However, we found that our use of swipes was confusing. Users ended up on unexpected screens. For this reason, we think that we will implement a hamburger menu to facilitate screen switching. This will be much more self-explanatory than screen swiping.

If we decided to maintain the "associate" or "drawing connections" functionality moving forward then we will not label this button "inspire". Users did not find this intuitive. We will change the label to "connect". Users also did not see the point of drawing associations that they could not save. For this reason, we will add the ability to save any associations that one creates. We have not yet decided if this will be in a separate gallery, or in a gallery integrated with other photos.

Appendix

1) Tasks Script



2) Demo Script

Hi [name]! My name is Julie. Here is my phone - here you will see a prototype of a mobile application we are developing.

Note that you can use this the same way you would a fully functional mobile application. To demonstrate, I'll sign in.

Signs in using application to enter application home page.

We'll ask you to perform three tasks using ID8. We ask that you think out loud during this process, walking us through your thought process as you use the app, as well as sharing both positive and negative thoughts. Our team (introduce Alka, Sukhi Lawrence) will be taking notes on what you say. Do you have any questions before we begin?

3) Consent Form Text

Consent Form

The ID8 application is being produced as part of the coursework for Computer Science course CS 147 at Stanford University. Participants in experimental evaluation of the application provide data that is used to evaluate and modify the interface of ID8. Data will be collected by interview, observation and questionnaire.

Participation in this experiment is voluntary. Participants may withdraw themselves and their data at any time without fear of consequences. Concerns about the experiment may be discussed with the researchers Sukhi Gulati, Lawrence Murata, Alka Nath, Julie Ni, or with Professor James Landay, the instructor of CS 147:

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Participant anonymity will be provided by the separate storage of names from data. Data will only be identified by participant number. No identifying information about the participants will be available to anyone except the student researchers and their supervisors/teaching staff.

I hereby acknowledge that I have been given an opportunity to ask questions about the nature of the experiment and my participation in it. I give my consent to have data collected on my behavior and opinions in relation to the ID8 experiment. I also give permission for images/video of me using the application to be used in presentations or publications as long as I am not personally identifiable in the images/video or I give consent to be identified. I understand I may withdraw my permission at any time

Name _____

Participant Number _____

I give consent to be in pictures with my face showing: Yes No

Date _____

Signature _____

Witness name _____

Witness signature _____