

# Flow

## Team Members

**Genie Hyatt:** Team Manager

**Trijeet Mukhopadhyay:** Design Lead

**Ken Chhan:** Development Lead

## Introduction and Mission Statement

### Introduction

Starting and finishing a creative project can be extremely difficult for the daily hobbyist, which can ultimately lead to a projects indefinite incompleation. Our product is aimed incentivize and motivate said hobbyists to complete their projects by alleviating difficult phases in the creative process, such as organization, decomposing tasks, and obtaining critical feedback.

### Mission Statement

Starting, continuing, and finishing a creative project can all be extremely daunting tasks. We wanted to find ways to incentivize others to start and carry on in their creative endeavors by easing critical phases: jotting ideas and inspirations, organizing projects, and obtaining critical feedback for works. By streamlining these phases, we aim to lower the motivational barriers to finish creative works.

### Prototype

The low-fidelity prototype, was modeled as paper sketches on 5x8 index cards The user is first prompted with the home screen, and can navigate from there.

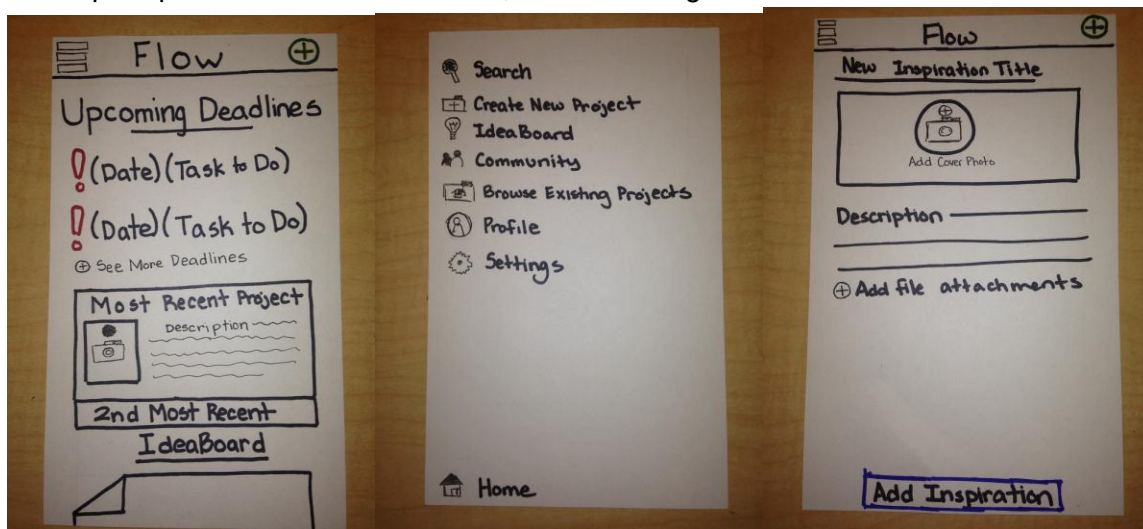


Figure 1: Home Screen, Menu Screen, and New Inspiration Screen, all accessible within home screen.

The user can navigate the menu bar to create a new project, view their IdeaBoard, and perform other functions (see Figure 2).

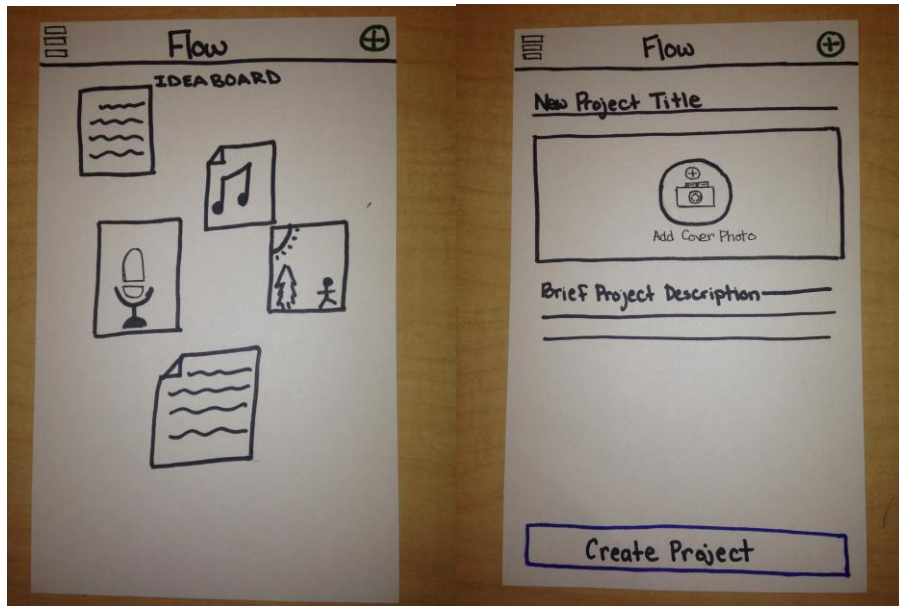


Figure 2: IdeaBoard and New Project View

After a project is created, the user is sent to the project menu view, where the timeline view is accessed by pressing the top right button on the project menu view (see Figure 3).

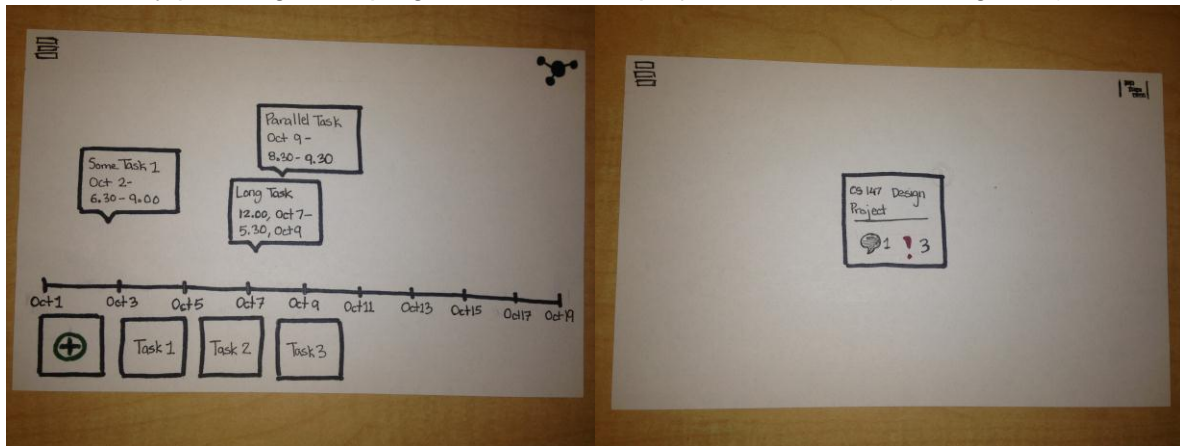


Figure 3: Project Menu and Timeline View

The user can then add new nodes to their project and edit existing nodes on either screen (see Figure 4).

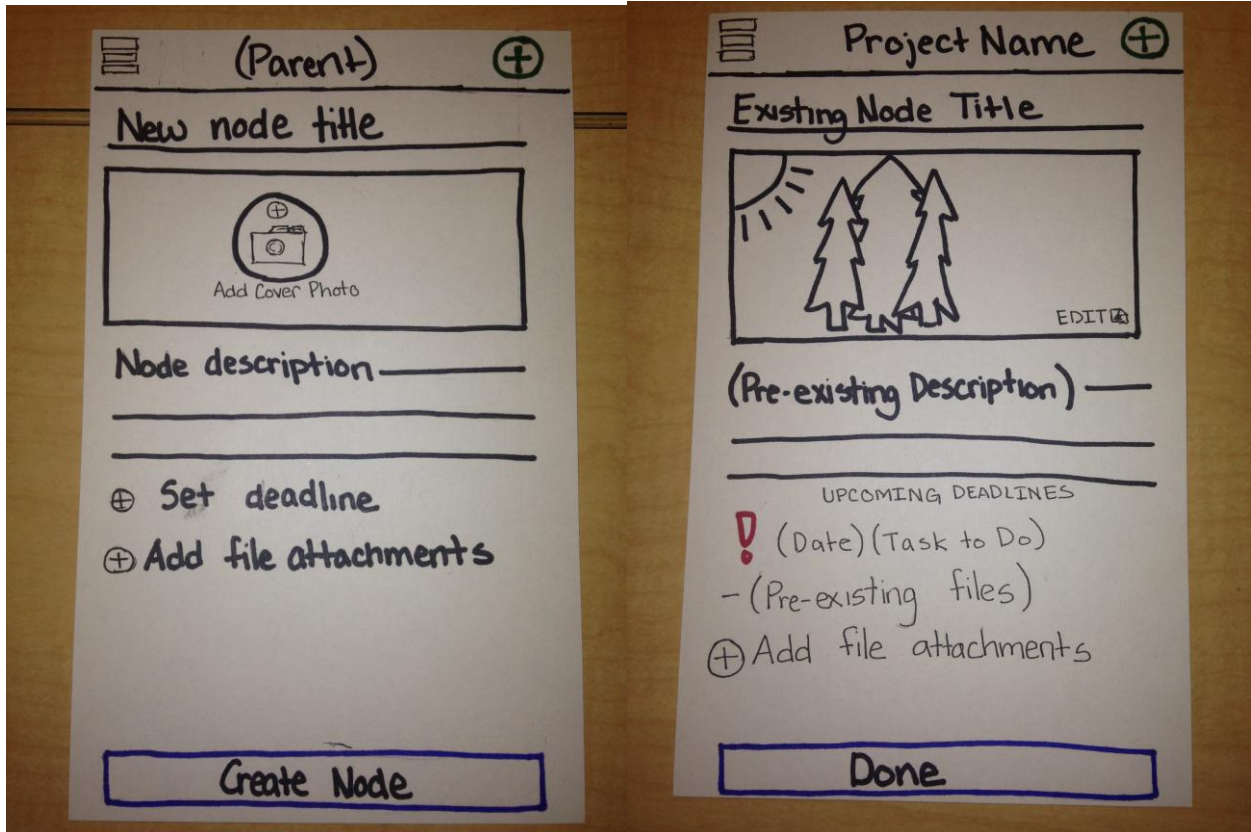


Figure 4: Add and edit node screens

The user can also use an item from the IdeaBoard as a node for one of their projects, as well as get comments for a node from other users by pressing on the node for these options. (see Figure 5).

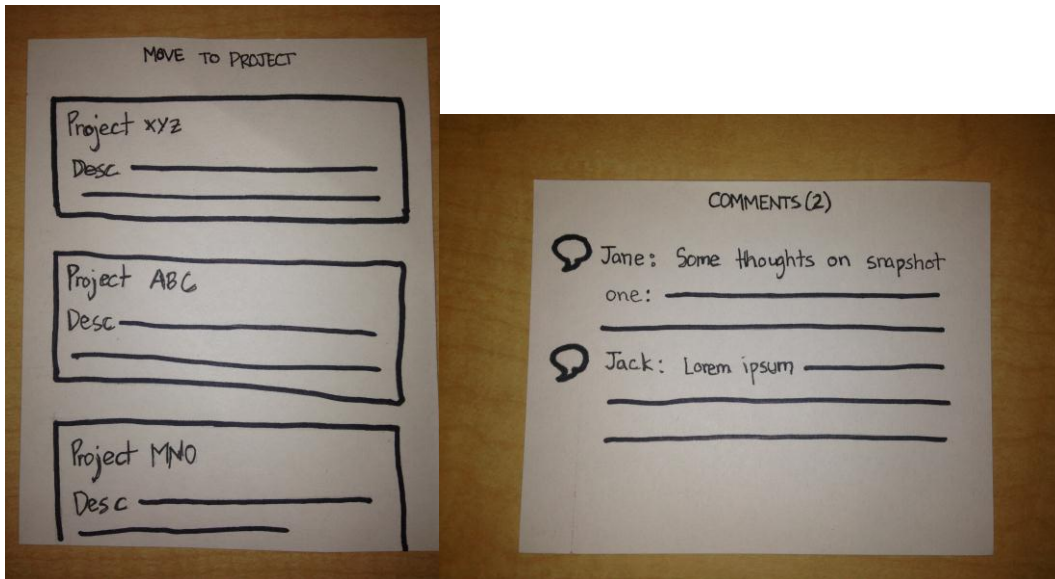


Figure 5: IdeaBoard to Node and Comments view

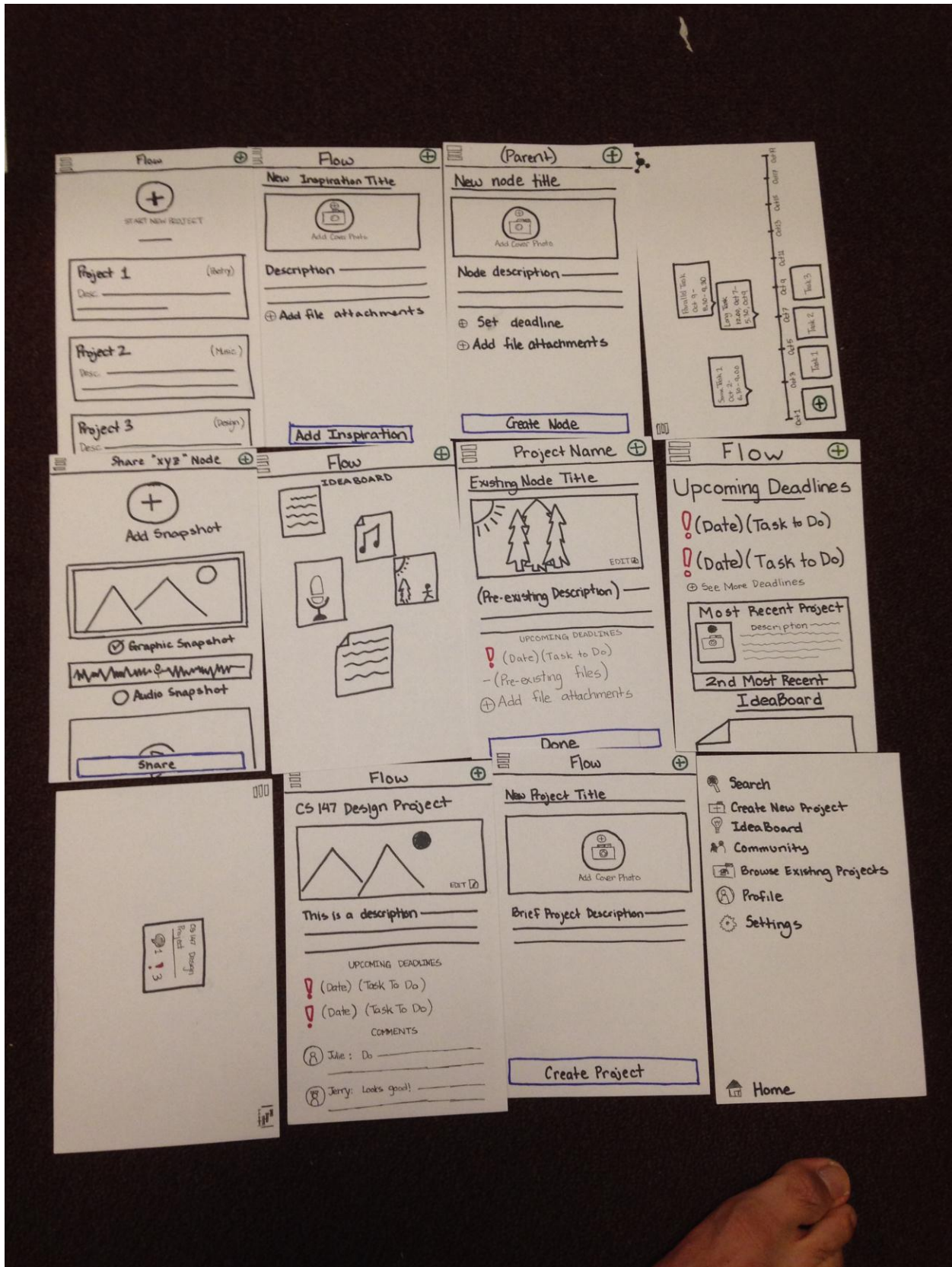


Figure 6: Entire storyboard (please ignore the foot)

## Method

### Participants

Three participants were selected on the Stanford campus. Each participant was asked a small series of questions to verify if they were our target audience: a person that frequently undergoes a creative process. The first participant is a female artist who works in an office at the Cummings Art Building. Her interview was fairly informative because she is relatively tech illiterate, and helped demonstrate how an audience with a similar level of technology skills would interact with our app. The second participant, a male undergraduate student, is a creative writer, who displayed an apt level technological shrewdness. The third participant, also a male undergraduate, was a musician that also displayed technological prowess.

### Environment

Because quiet and solitude were not crucial factors for our environment during interviews, each participant was interviewed at the location of their convenience. The prototype was placed on top of a table in front of them, one index card at a time, to simulate our eventual platform, iPhones. Each participant was given a cookie at the end of the interview as compensation.

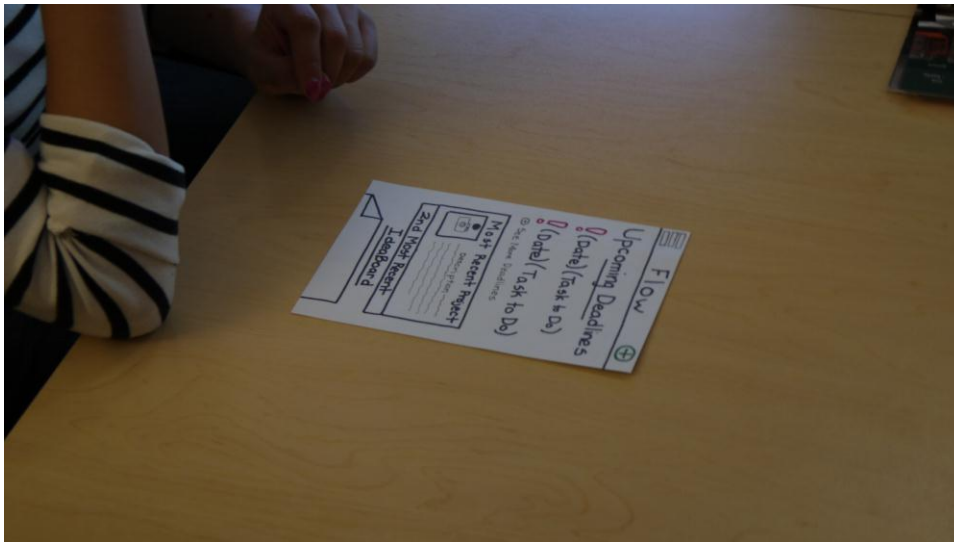


Figure 7: Environment and prototype setup for all interviews

### Tasks

Each interviewee was given the same three tasks to perform, ranging in difficulty and demonstrating the core functionality of the app. The first task was to add an idea to the IdeaBoard, which only required the participant to press a green plus button on the top right corner of the screen, fill in basic information, and press add.

The second task was to create a new project, which required the user to press the menu button and click "Create New Project." Afterwards, the interviewee was given a subtask of

adding the previously recorded inspiration to their new project, to demonstrate the app's capability to integrate random inspirations and ideas to an existing project.

The third task was to add more information onto the newly created project. The interviewees were prompted to create a task for the project and then set a deadline for said task. Afterwards, the user was prompted to mark that task as completed and share it for feedback.

### **Procedure**

Trijeet served as the facilitator, and prompted our interviewees with tasks. Genie served as the computer, and updated the prototype screen as the interviewees interacted with it. Ken served as the documenter, taking pictures and documenting the behavior and reactions of the interviewees as they interacted with the prototype.

Trijeet sat in front of the interviewee to instruct and converse with the interviewee. Each interview began with Trijeet introducing the purpose of the app, showing some basic functions, and then briefed the interviewee to perform tasks as described in the "Tasks" section. Afterwards, the interviewees were asked for their opinions on the app and any areas that could be improved. Each interview required a minimum of 30 minutes, but no more than 45.

During the interview, we observed and measured the speed and certainty of our interviewees as they navigated through the app. A crucial focus of the app is a highly intuitive interface, which is measureable through the speed and certainty of the interviewee as they navigated through the app to perform their tasks. Though not prompted to, all participants explained their thought processes as they were performing the tasks, which helped us understand and measure the intuitiveness of our app. Sounding confused while performing a task indicated a low level of comfort while navigating the app, which indicated an area of the app was not obvious to the user.

### **Results**

Our first interviewee was not tech savvy, and so had a hard time navigating through the app, often dubious with her choices of action while she was narrating them. However, our other two interviewees were fairly tech savvy, and navigated through the app with relative ease. When our participants were prompted to add a task to their project, they went to the timeline screen and added tasks there. This was because the timeline screen had an explicit add button, and did not know that the nodes on the project screen were interactive. Additionally, they were often confused on the difference between the screens for adding an item to their IdeaBoard and adding a node to their project because they looked very similar.

### **Discussion**

Our results indicated that some key features of the app were not intuitive as they needed to be. One of these key features is interacting with nodes on a project map. Users were simply unaware of being able to press on the node, which would prompt a pop-up screen with interactions for that node (e.g. adding a node, deleting a node, etc). They were also unaware that the same nodes on the project map would be displayed on the timeline view because the

shape of the nodes was different. To make this more apparent, we need to make the shapes consistent across the app.

Another key issue users faced was understanding the relationship between the IdeaBoard and their existing projects. They were unaware that they could add an item to their project from the IdeaBoard screen and from the project map screen. This issue, again, stems from not knowing that the nodes were interactive. We will adjust the shape of the nodes to make them look more interactive to entice the users to press the node.

## **Appendix**

### **Consent Forms**

**Consent Form**

The Flow 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 Flow. 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 (Trijeet Mukhopadhyay, Genie Hyatt, Ken Chhan) or with Professor James Landay, the instructor of CS 147:

James A. Landay  
CS Department  
Stanford University  
650-498-8215  
landay at cs.stanford.edu

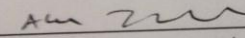
Participant anonymity will be provided by the separate storage of names from data. Data will only be identified by participant number. No identifying information about the participants will be available to anyone except the student researchers and their supervisors/teaching staff.

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 Flow 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. I understand I may withdraw my permission at any time

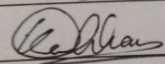
Name Aleksa Zivkovic

Participant Number 2

Date 10/23/14

Signature 

Witness name Ken Chhan

Witness signature 



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Name LINDA ESQUIVEL

Participant Number 1

Date 10/23/14

Signature [Signature]

Witness name Ken Chhan

Witness signature [Signature]

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Name Aditya Dev Gupta

Participant Number 3

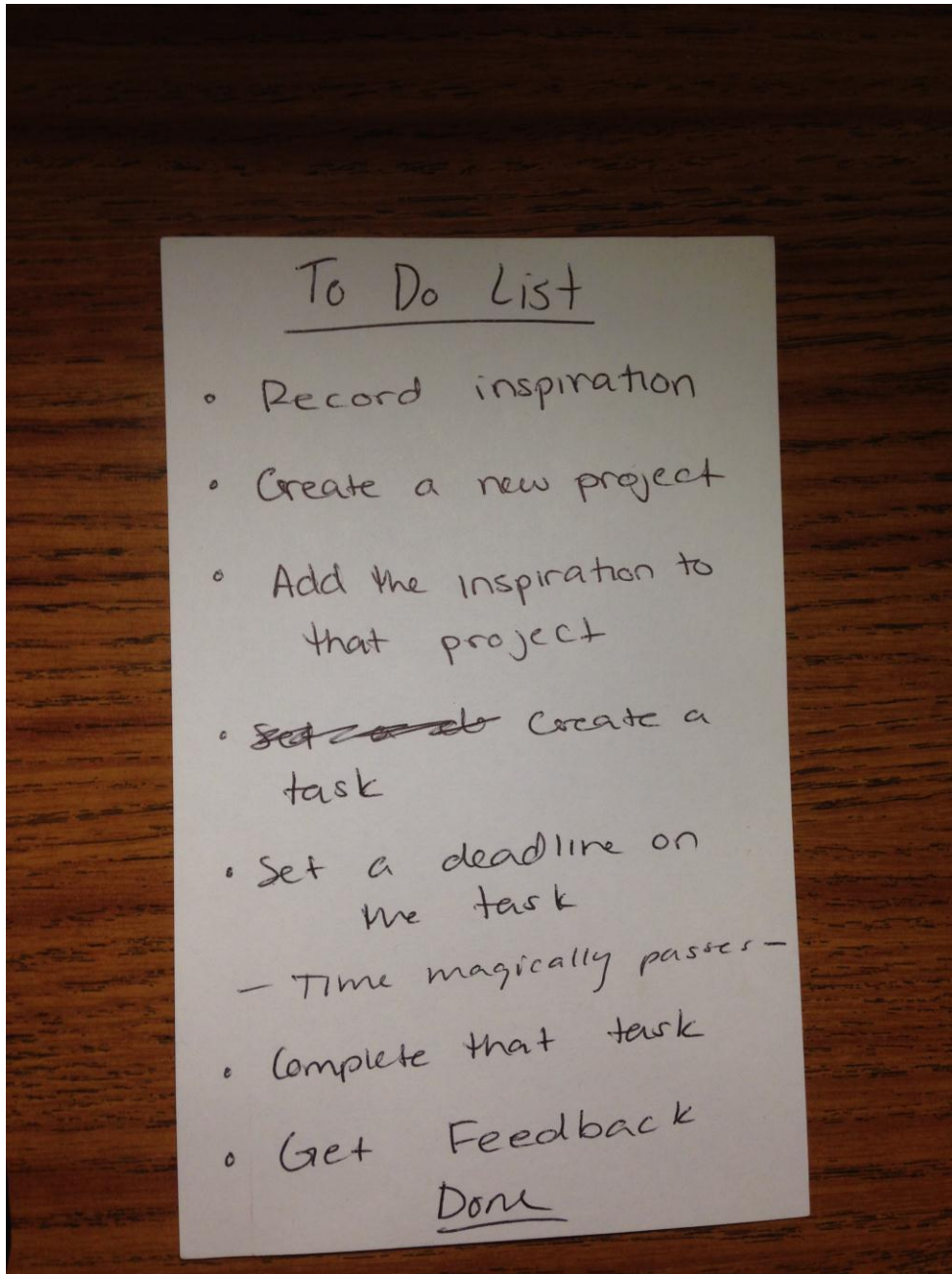
Date 10/23/2014

Signature Aditya

Witness name Ken Chhan

Witness signature Ken

## Interview Task List



### Interviewee Speed and Certainty

On a 1-5 scale, 5 being the highest.

Participant #	Speed	Certainty
1	2	2
2	4	4
3	4	5