**Projects**

**Design Thinking Mobile App**

Contribution(s): [UI/UX design] [Front-end code]

Platform(s): Android mobile app via Adobe PhoneGap

Background: This mobile app was commissioned by Helen Liang of UstartX Inc. for the Computer Science/Computer Science & Engineering department’s senior design project course.

Goal: To create a mobile app that simulates the quick-thinking and intuitive nature of the design thinking process and records a user’s progress with each step.

The client, Helen Liang, wanted an app that would facilitate the design thinking process on-the-go, including the following key functionalities:

* Record user interviews (voice or video) while suggesting open-ended questions
* Provide an interactive guided thinking process with imposed time limits for brainstorming and problem-solving
* Suggest creative thinking tools when needed
* Take and save photos at each step
* Generate a project summary, showing the process and the end result

Working in a team of four, I took the reins on designing the interface. My initial idea was to make the app an all-encompassing design thinking “toolbox”. Each step of the design thinking process could be navigated using the color-coded tabs at the top: blue for *Empathy*, green for *Define*, yellow for *Ideate*, orange for *Prototype*, and red for *Test* (inspired by Stanford d.school’s representation of the process).

The iOS- and Instagram-inspired navigation bar would contain different utilities: camera, video camera, voice recorder, notepad, timer, and brainstorming tools, which would vary depending on the current tab, or step, of the process. The user would be able to use any of these at will—no constraints, just constantly accessible tools to meet the user’s current needs.

[mockups for old app here]

After getting feedback on this design, we learned that our client had wanted a more heavily guided, step-by-step demonstration of the process. Basically, each use of the app (which would ideally be completed within an hour) should result in a prototype that aims to solve a problem concerning the topic of interest.

We then opted to model the app’s flow after Stanford d.school’s crash course [http://dschool.stanford.edu/dgift/]. Both beginner-friendly and fast-paced, this procedure would give users a good introduction to design thinking and would yield tangible results in a short amount of time.

My design concept then was to take the above procedure and let it play out like a game—I was thinking *WarioWare* or *Dumb Ways to Die*—in which players were subject to a series of “mini-games” that were to be completed within an allotted amount of time. In the same vein, the app would take the user through sub-steps of the design thinking process, each with a specific goal and with a time limit to keep the user’s ideas as visceral as possible.

We would limit the amount of text displayed on each page and use overlays to provide additional information. We wanted goals to be the focus of the page, when applicable, and every explanation to be broken down to make it easier to digest the overwhelming amount of information provided.

[mockups here]

All throughout, the user would be prompted to take a picture of any notes, sketches, or prototypes to keep track of the progress made.

The mascot, whom we call Dennis the dinosaur, was created at our client’s request to give the app a more “human” feel, with the character accompanying the user at each step.

[Dennis animation]

[final product]

**Business Travel Networking Mobile App**

Contribution(s): [UI/UX design] [Front-end]

Platform(s): iOS & Android mobile app via PhoneGap

Background: This app was a project during my recent internship at UstartX Inc. My team consisted of me and two others who worked on both the back-end and client code.

Goal: To create a mobile app that connects professionals on business travel with locals or with one another to help them feel a sense of belonging in a new environment.

By request of the client, the user would be able to network with other professionals through the app, schedule upcoming trips to meet people ahead of time, and set up meetings with one another by proposing a date, time, and location. Post-meeting, the user would be prompted to rate the meeting experience with the other user to establish and reinforce user credibility.

My teammates and I decided to go with a Tinder-style UI as it has proved very effective in allowing users to browse through profiles and network with desired people. Because of the wider scope of functionalities, we included a tabs bar to keep navigation more organized and consistent.

The user’s home page shows a list of upcoming trips and a user’s hometown pinned at the top. From there, the user can look through other user profiles and choose whom he/she/they want to meet. Two connected users become “friends,” and a chat automatically forms between them so they can get to know each other and discuss meeting places and times. On the Calendar page, users are able to view their upcoming meetings, accept or decline pending requests, and also schedule new meetings with friends.

Regarding the app’s aesthetics, the client wanted a fun and energizing look. I decided to go with an orange color scheme with teal highlights, influenced by a Taiwan airport brochure a friend showed me from his travels. As the app’s target demographic is professionals, I tried to keep the app’s style simple and thought a flat design would work best. However, I added dimensions when I saw fit, such as giving certain elements shadow effect to simulate layers and for emphasis.

[moodboard here]

Users log in the app through LinkedIn so that we can pull information about their professional lives to display on their profiles.

Friends are categorized by trips so users can find them more easily by associating them with the trips they’ve been on.