**Project Writeup**

**PlanIt**

1. Intro
   1. Photo: Cover Photo
   2. PlanIt is a trip planning app for iOS and Android that optimizes for flight, hotel, and attraction costs while maximizing fun experiences. I designed and developed the frontend and the rest of my team worked on the AI for the backend. The app was created for the UW CS NEST 2017 Contest.
2. Planning
   1. Photo: Sketches
   2. PlanIt originally started out as a website. These are a few of the initial sketches I drew. Since we were on a short timeline (less than 2 months), I focused on the overall flow of the app more than the visual design in the prototype.
3. Version 1
   1. Photo: Screenshots of website
   2. I created the frontend of the website in HTML and CSS, and my teammates made the backend in Python. We presented PlanIt at a practice demo day and received feedback that it would be more useful as an app.
4. Version 2
   1. Photo: App Screenshots
   2. We decided to switch to Ionic, an open source framework for hybrid mobile app development. To plan a trip, users input information about their location, travel destination, dates, and budget. They can choose specific dates or utilize the “surprise me” feature to find the best trip in a date range.
5. Version 2
   1. Photo: App Screenshots
   2. The generated itinerary includes flights, hotels, and a daily plan to see the best sights. Users can adjust their preferences (interest in sports, art, history, etc). Our goal is to make trip planning simple and customizable.

**WACM**

1. Intro
   1. Photo: Cover Photo
   2. WACM is the University of Wisconsin-Madison's student chapter of ACM-W (ACM's Women in Computing). I was selected to be the “Web Mistress” of the organization for the 2016-2017 and 2017-2018 school years. I applied for the position because I wanted to redesign WACM’s logo and website.
2. Branding
   1. Photo: Old logo/new logo
   2. I started the WACM redesign process by creating a new logo. I chose a monospace font to give it a tech feel, and a script font for the “W” to draw attention to the fact that we are a women’s organization. It was challenging to incorporate ACM-W’s logo into ours due to its irregular shape, but it ended up fitting nicely under the name.
3. Old Website
   1. Photo: Old website
   2. This is how the website looked before I redesigned it, with a 10-year-old template. The main issues that I wanted to solve with the redesign were: refreshing the look to give it a modern feel, making the website responsive to different screen sizes, and reduce the overall number of pages that had a small amount of content.
4. New Website
   1. Photo: Home page full & mobile
   2. I wanted the website’s home page to be a quick overview of the club with pictures of our members. The site scales across all screen sizes.
5. New Website
   1. Photo: Events page & get involved
   2. The “Events” page allows members to see upcoming and past activities in an agenda format. The “Get Involved” page gives new or prospective members more information about what kinds of opportunities WACM offers. Check out the website to see more.

**Draw3D**

1. Intro
   1. Photo: Cover Photo
   2. I created a virtual reality app, called Draw3D, using Processing for Android (a programming language built for artists). I was inspired by Google’s Tilt Brush, and my goal was to create a simpler version that would let users design immersive virtual environments with just a Google Cardboard.
2. Controls
   1. Photo: Menu
   2. Draw3D allows you to “draw” in 3D by creating cubes of various sizes and colors. Users place cubes by looking in the direction they desire and tapping the button on the Google Cardboard. The duration of the tap determines the size of the cube. The color of a cube can be chosen by a menu that’s visible when the user looks down. To clear the screen, you simply rotate the Cardboard vertically.
3. Drawing Cubes
   1. Photo: Smiley Face
   2. The shade of color and opacity of the cube is generated with a degree of randomness by an algorithm I wrote. Once placed, the cubes “pulse” by growing and shrinking slightly to make the environment feel dynamic.