SCHOOL OF COMPUTING CS 4500 SENIOR CAPSTONE RIL 25, 2014 APF SCHEDU F 1:30 - 4:30PM ROOM L130 WEB AWARDS & PIZZA 4:30 - 5:00PM



















Team: ??? Project name: Meals Team members: Joshua Boren, Ashley Dunn, Tysen Larrabee Website: thunder.eng.utah.edu

Project description: Meals is a web and Android app to manage everything about what you eat. It organizes recipes, meal calendars, shopping lists, and kitchen inventories. But Meals isn't just a computerized notebook; Meals is smart! Meals will generate shopping lists based on favorite recipes, remind you to take the chicken out of the freezer, and automatically remove from your inventory the components of yesterday's dinner. Meals helps people save time and money by doing the thinking for them.

Team: A-F14

Project name: Turn the Tide Team members: Alan Mieu, Austin Truong, Andy Wang, Fenton Whetstone Website: af14.eng.utah.edu

Project description: Turn the Tide is an Android tracking application and website interface committed towards increasing commuter awareness of the many alternatives to driving a car in the Wasatch Front. For any resident who has spent even one winter in this beautiful valley environment, one thing we can all agree on is that our air quality can be downright dismal during an inversion. Our projectis mission is to iturn the tideî against increasing pollution as Utahís population grows. The Android application is built to track a userís commute by GPS, whether by car, bicycle, mass transit, or even by foot. Users gain points and level up if they take steps towards using cleaner transportation or mass transit. The dirtier the air quality on a given day, the more points a user will earn by leaving the car at home. The app also provides a handy map that provides point-by-point directions to any given destination without even having to drive there. Our website provides an interface where the user can view detailed statistics about their savings or simply look up the weather forecast for the day before they leave their home or office. They can also connect through Twitter to keep up to date with events and news related to Utahís air quality. With Turn the Tide, clearing Utahís air has never been this easy and convenient.

Team: Crazy Fish Project name: BluePrint Team members: Andres Monroy, Eric Olson, Seth Porter, Jared Timpson Website: http://blueprintnav.com

Project description: GPS changed the way we navigate our world, but only outdoors. BluePrint brings these innovations into large buildings, malls, and college campuses. Our mobile app allows users to effortlessly navigate inside in the same way GPS allows them to navigate around town. BluePrint receives signals from inexpensive bluetooth beacons placed around a building, processing these signals in order to triangulate its location. Our app even allows users to search for specific stores, classrooms, restaurants, or even bathrooms, and navigate to them turn-by-turn. Best of all, getting your building setup with BluePrint is a breeze. Using iPad, iPhone, or even the web, administrators can easily add and modify floorplans, place bluetooth beacons, and define points of interest. Navigate your world without limits.

Table 8

Table 4











Team: Data Tamers Project name: Applied Analytics Team members: Lynn Gao, Gwen Knight, Andrew Riley, David Wong Website: http://analytics.davidkainoa.com

Project description: Applied Analytics is a web traffic analysis service that helps businesses quickly identify the important events and trends in their website traffic. While popular analytics services like Google Analytics and Adobe SiteCatalyst focus on collecting and organizing large amounts of website visitor data, we focus on discovering the most significant subsets of this data. Furthermore, we utilize this data to develop previously unseen insights about website performance, and to predict future website traffic behavior. The result of this data processing is a simple web interface that clearly communicates to business owners what they need to know to improve their online marketing efforts.

Team: Epsilon

Project name: CrowdColors Team members: Adam Bradford, William Bunker, Keith Richards, Joe Sturzenegger Website: http://crowdcolorsapp.com

Project description: The lights go down. The stagehand emerges from the shadows to trade the sweaty guitarist's trusty axe for a more subtle acoustic. The crowd erupts. They know what's coming: the band's signature ballad. This is why they're here. This is what they came for. A wispy blanket of flame coalesces above them as lighters are raised into the air and rocked gently back and forth. Why are they compelled to do this? Because it demonstrates their approval. Because it adds depth to the experience. Because it makes them part of the show. CrowdColors is the next step in this evolution of band/ crowd interaction. Cell phones have taken the place of lighters and bands can now exchange those monochrome flames for literally millions of colors. With CrowdColors, the band creates the light show and the fans to bring it to life.

Team: Fortis Project name: Workout Wars Team members: Joseph Gibson, John Hanks, Charmaine Keck, Cody Tanner Website: http://www.workout-wars.com/

Project description: Nothing pushes you harder than a friendly competition. Here is where you can join a public competition and compete with other users on the site or start your own private competition and challenge your friends in the exercise(s) of your choice. You can get fit while having fun competing with your friends and challenging yourself to achieve new levels of fitness. Whatever

your fitness goals are the key to achieving results is consistency. We keep you motivated by using your friends and others on the site to challenge you to keep going. We're leveraging positive peer pressure to keep you in the game. We make things even easier by including a native iOS app to help you log your progress on the go.

Table 7A











UHealth

Table 10



Team: GKLL Project name: Social Mapper Team members: Dylan Garahana, Max Kofford, Jiyuan Li, Yi Li Website:

Project description: Social Mapper is an Android app that retrieves data from Twitter and Instagram and analyzes this data into various visualizations that are displayed on a map, which include displaying individual geotagged tweets or trending keywords and hashtags in the form of a map-based word cloud. Users can also apply various filters to display only the data that they are interested in via keyword search, such as only showing data about his/her favorite sport. Social Mapper also retrieves popular locations and places of interest from Yelp and Foursquare and gives users the ability to see individual reviews and ratings about these locations.

Team: Goldfish

Project name: Goldfish Video Management System **Team members:** Trevor Needham, Derek Richardson, Taylor Scott, Jeremy Trujillo **Website:** http://beta.cloudvp8.net/

Project description: The Goldfish Video Management System (GVMS) was created to allow friends and families to watch their home videos and movie collections without having to plan ahead. GVMS allows ordinary people the opportunity to become the administrator of their own online video library. As the administrator, a user is able to upload their own movies or home videos, invite other people to join the library, and watch their entire video library on the go through the convenient Android application. GVMS gives you the flexibility you've always wanted.

Team: HJ^3 Project name: UHealth Team members: Todd Johnson, Hutch Jorgensen, Jamie Lowder, James Mitchell, Brenden Tyler Website:

Project description: UHealth is a comprehensive patient education application that will enhance and improve the perioperative patient experience. With the widespread use of mobile devices and evolving cloud-based technologies, UHealth will achieve its mission by capitalizing on these technologies. The application will have many key features including:

- Dynamic patient education presented in multiple formats (video, images, pdfs)
- · Personalized patient access
- A direct line of communication from the application to clinical staff
- · Active perioperative reminders
- · Personalized medication and appointment information
- · Navigational assistance to appointments
- Recovery monitoring tools for care providers
- · Convenient Pre/Post-Op Checklist Instructions

Few patient education solutions utilize the user base that has resulted from widespread use of mobile technology. UHealth is the ideal solution for all care providers, because it offers a comprehensive, mobile, and electronic patient experience for all stages of perioperative care.



Table 16

IronPlot











Team: Iron Pilot Project name: IronRacket Team members: Scotty Bauer, Graham Pedersen, Sarah Spall Website:

Project description: Inspired by projects like IronPython, which created a cross platform implementation of Python that compiles to the Microsoft .NET runtime, we set out to create IronRacket. We created a compiler and the accompanying tool suite in Microsoft Visual Studio to allow development in our new cross platform Scheme-like language, IronRacket Using our tool set you can develop in IronRacket with the ability to utilize any library, system or user created, that has targeted .NET. People unfamiliar with Scheme, or those who want to utilize language integration can write IronRacket using Visual Studio. Visual Studio provides core IDE features, such as syntax highlighting and intellisense, which aide in guick development of IronRacket.

Team: Local Sense **Project name:** Localytics Team members: Jon Mcdonald, Garrett Flanders, Jake Guckert, Josh Bell Website: http://teamlocalsense.com

Project description: Localytics is a web application that allows smaller retailers to be competitive with larger retailers. It provides detailed analytics to store owners and managers which are based on sales, inventory, employee performance, etc. Localytics analyzes provided data (through CSV upload) and displays it in a way that is easy to understand and allows for store owners to make informed decisions based on the provided data analysis. It was written using the Ruby on Rails framework, Bootstrap, and other various JavaScript libraries.

Team: Octothorpe Project name: NeoConv Team members: Ian Briggs, Matt Day, Chad Miller Website: https://bitbucket.org/ibriggs/seniorproject2014

Project description: New ideas for textual chat. Enhances the XMPP protocol and Prosody chat server. Core features include conversation branching as well as language recognition and translation. Users will be able to hold private conversations in abstract rooms and schedule meetings with other users inside rooms. They will also be able to search conversation histories within a sharp user interface.

Fable 14











Team: Other_Teams++ Project name: Air Warfare Simulator Team members: Thomas Gonsor, Miles Ramsey, Ben Rogers, Kael Russell Website: www.airwarfare.milesramsey.com

Project description: Air Warfare Simulator is designed to change the way the Air Force Reserve Officer Training Corps (ROTC) trains their cadets. By taking a pre-existing pen and paper training exercise, and revamping its intent into a more modern simulator, we hope to provide a better experience. Air Warfare Simulator incorporates all the ideas of the current training exercise, and transforms it into a game-like simulator developed on the Unity engine. The simulator also provides the cadets with a new multiplayer feature to further their training with their peers, as well as a replay feature where they can learn by reflecting on the exercise. These features, along with others, will provide the ROTC with the means to train the cadets in a more modern and fun way.

Team: SIMM Project name: Curo Team members: Abdullah Aldobaie, Braden Edmunds, Robert Kingston, Nathan Patterson Website: www.simm.eng.utah.edu

Project description: People today manage multiple roles, whether they are a first-year college student or the CEO of a large company. In the past, project management tools have focused on a single aspect of these roles, forcing us to use different management systems for different responsibilities. Curo solves this current project management dilemma. It provides a comprehensive set of project management tools that a user would expect from other web-based systems, including task monitoring, the ability to assign team members to certain projects and tasks, and reporting tools that allow managers to visualize the status of each project. In Curo, each person, project, and task can be tied to a parent or manage child objects. This allows the user to see a tree of responsibilities as simple or complex as desired. What sets Curo apart from other systems is the user's ability to view multidimensional projects, e.g. a CEO can view other executives and their projects, tasks, people, and so on down the company tree, creating an in-depth view of the entire company. Regardless of the complexity, Curo gives you a complete project management tool that brings everything into view.

Team: Tortugas Inc. Project name: PT Helper Team members: Julie Jacobs, James Judd, Jeff Thacker, Craig Weight Website: www.physicaltherapyhelper.com

Project description: Life happens. Many people will visit a physical therapist at some point in their lives. Despite the best intentions of physical therapists and patients, recovery and rehabilitation can be a difficult and arduous process. PT Helper is a web and mobile application that aims to improve the rehabilitation experience for both patients and physical therapists alike. For patients it provides access to their rehabilitation program and the ability to track their progress. For physical therapists it provides a system to create and manage rehabilitation programs and exercises, and track their patients' progress. PT Helper can help you and your physical therapist better manage your recovery and rehabilitation.



Zuse Build games on your iOS device.



Table 15







Team: Turing Complete Project name: Zuse Team members: Andrew Butterfield, Michael Hogenson, Sarah Hong, Parker Wightman, Vladimir Zhidkov Website:

Project description: Zuse is an application for iOS 7 designed to teach junior high and high school students how to write code through a simple and modern visual environment. This app caters towards both the novice programmer as well as the experienced programmer. Users can share the games they create on the web, so anyone can play them.

Team: Team Won Project name: DynaWeb Team members: Keith Von Niederhausern, Scott McDonald, Cody Stout, Jonathan Tinker Website:

Project description: Dynaweb is an alternative way for small business owners to obtain online business management software. It cuts the cost of creating a site themselves, paying for several different pieces of software, or going through long and difficult setup procedures. Dynaweb features an easy to use inventory system and storefront that can be administered to display products to employees or customers. In addition it features a calendar system capable of taking appointments from outside customers. That's right, all is available from an easy to use web interface.

Team: Zava Studios Project name: RogueCraft Team members: Zachary Evens, Ariosto Ferro, Aric Parkinson, Victor Siu Website: http::eng.utah.edu/~siu/ZAVA/index.html

Project description: RougeCraft is a fast paced, action oriented game in which you crawl dungeons in search of treasure. Every turn holds new surprises as the dungeon and its components are randomly generated making every play through a completely new and exciting experience! To be successful on your journey you must adapt your play style, craft elaborate weapons, and navigate the challenging dungeons to find treasures beyond your wildest dreams. To top it all off, RougeCraft is designed and implemented on the new and exciting OUYA micro-console.