SCHOOL OF COMPUTING

CS 4500 SENIOR CAPSTONE

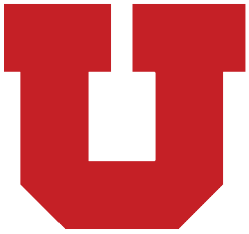
DEMO DAY

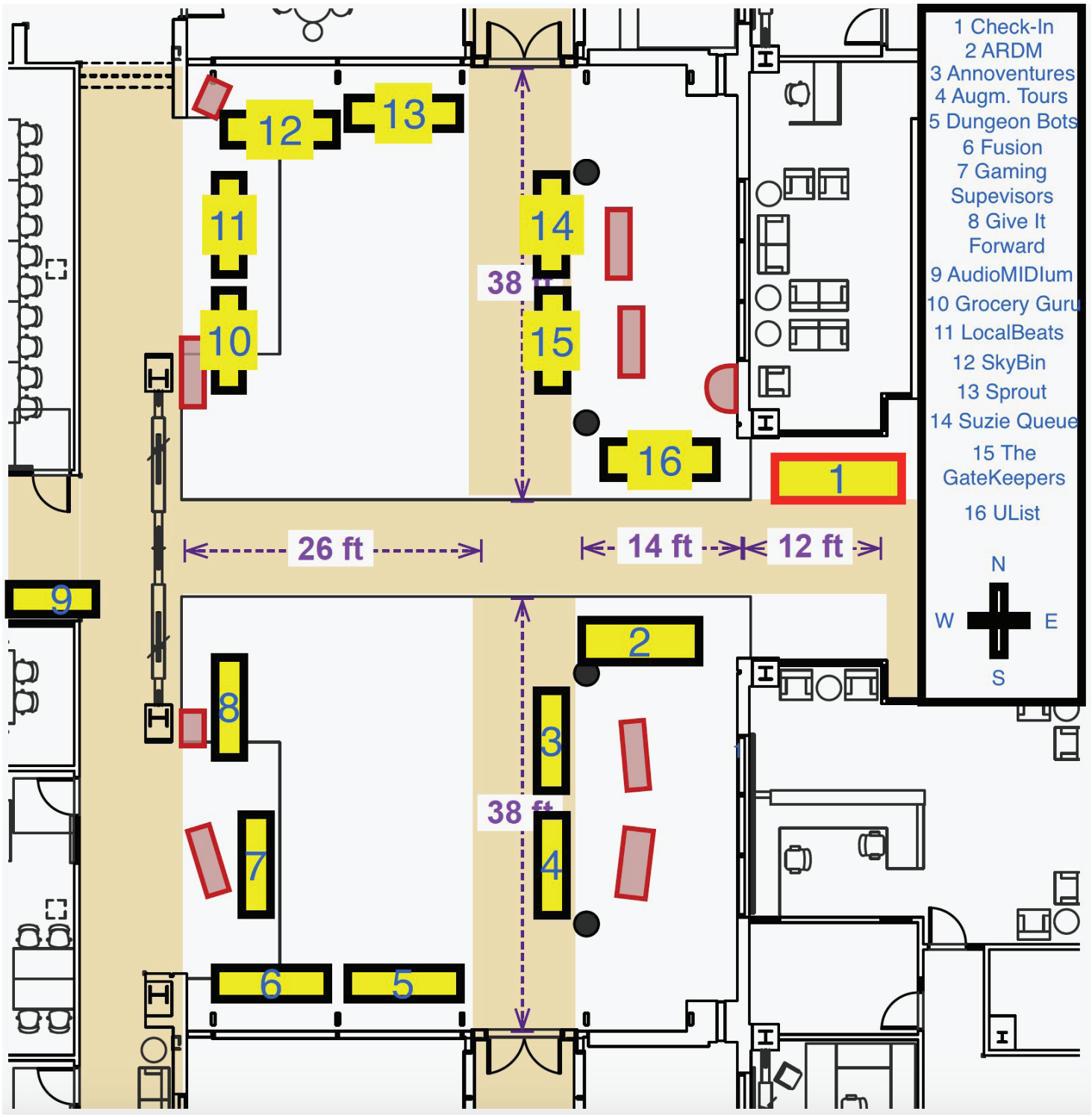
APRIL 25, 2018

SCHEDULE

1:30 - 4:30PM CATMULL GALLERY

AWARDS & PIZZA 4:30 - 5:00PM




1 Check-In
2 ARDM
3 Annoventures
4 Augm. Tours
5 Dungeon Bots
6 Fusion
7 Gaming Supevisors
8 Give It Forward
9 AudioMIDIum
10 Grocery Guru
11 LocalBeats
12 SkyBin
13 Sprout
14 Suzie Queue
15 The GateKeepers
16 UList
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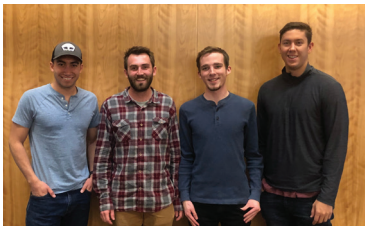


Team: Annoventures
Project name: Annoventures
Team members: Keanu Interone, Leonardo Roese, Zach Warrell, Anthony Wilkinson
Website: https://www.annoventures.com/about-project/

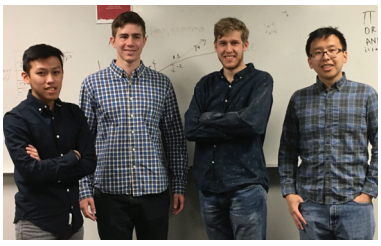
Project description: Annoventures is a social networking app designed to enhance the outdoor experience by allowing users to record and share a gps track of their adventures with each other. People who are new to an area or to outdoors activities in general often need advice beyond what they can find in outdoors blogs and websites. Our app is designed to help outdoors enthusiasts share their knowledge with each other by not only allowing them to record the paths of their adventures, but also annotate them. Annotations let users share helpful tips or interesting experiences of their own, making the outdoor gps more interactive. Annoventures is the perfect way to share adventures, follow friends' adventures, and find new places.

Team: ARDM
Project name: Autonomous Robotic Drink Maker (ARDM)
Team members: Braden Klunker, Jared Echols, Charlie Barber, Quinn Luck
Website: www.ardmdrinks.com

Project description: The Autonomous Robotic Drink Maker (ARDM) makes life easier by automating the drink making process. It also keeps us at the forefront of new technologies. With robotics on the rise, automating daily tasks is essential to keeping us updated with the rest of the world. When we buy a drink at coffee shop or a bar, the ingredients can be inconsistent. Sometimes customers can feel cheated with watered down drinks or cups that were half filled. This is a problem for both customers and the businesses that serve them. For example, Starbucks was recently faced with a $5M lawsuit over putting more ice in the cups than necessary.
The ARDM combats issues such as the one at Starbucks by making drinks with the exact amount of ingredients. This means that customers know what to expect each time they order a drink from the ARDM. By making drinks using a series of dispensers and a hydraulic piston, the ARDM could potentially help to reduce lines in businesses and local parties/ events. With the ARDM, businesses or people hosting local events can now make drinks they don't know how to make.

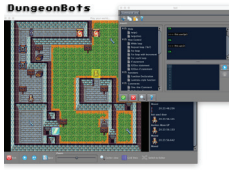
Team: Audiomidium
Project name: MelodySmith
Team members: Alex Blackburn, Trung Le, Dan Mattheiss, Steven Sun
Website: https://melodysmith.herokuapp.com/

Project description: For musicians, ideas are currency. After so many years, and so many composers, however, unique ideas are harder than ever to come up with. Wouldnít it be great if a computer could generate hundreds of unique ideas all on its own? Wouldnít it be great if writing the next hippest song was as easy as hitting the go button? Obviously, the answer for both of those questions is yes, and we here at Team audioMIDIum are making it a reality. With the MelodySmith, producers will never again need to worry about coming up with unique ideas! The MelodySmith is an algorithmic composer that learns its style from the artists and genres you like, and writes original melodies for your music.



Team: Augmented Tours
Project name: Augmented Tours
Team members: Ben Durrant, Chris Hoffman, Taylor Hogge, Neal Phelps
Website: about.augmentedtours.io

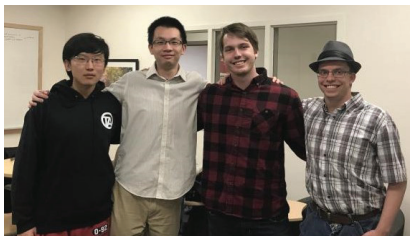
Project description: Augmented Tours is an augmented reality tour assistant. The application is designed to give or assist in tours of a particular location. A user can either create or view a tour. A tour is created by scanning in objects and then entering information about that object. A path can also be created to guide those from object to object. Those viewing the tour consumes/interacts with the information through either audio recordings or 3D models or text presented in augmented reality. Augmented Tours is a mobile application that is available on iOS



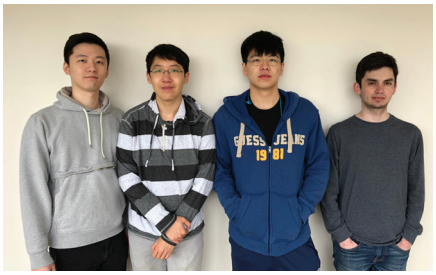
Team: DungeonBots
Project name: DungeonBots
Team members: Stewart Charles, Wesley Oates, Kevin Parker, Ken Richard
Website: https://dungeonbots.herokuapp.com/about

Project description: DungeonBots is the coding education game which encourages students to interact with real code to solve engaging problems. Students from elementary school to college can learn how to program in this flexible and customizable education environment. Players control the game through scripts written in Lua, a powerful scripting language used across the gaming industry. Educators can use the teaching advantage that gaming provides by using DungeonBots to create custom lessons or reuse existing ones from the DungeonBots website, a community of educators, students, and even hobbyists. Packs of these lessons can be shared with others through the website.

Team: Fusion
Project name: Project Fuse
Team members: Qixiang Chao, Cole Gordon, Xuanyang Luo, Matt Tolman
Website: https://project-fuse.com



Project description: Project Fuse improves the group formation process by expanding upon a previous team formation software made in last year's capstone class also called Project Fuse. Our application is a rebuild of the previous application and improves team formation by restructuring the application to lower server costs, allow multiple groups to use the same server, and adding key features such as interview management and an advanced search. Our project permits multiple classrooms or businesses to use the same server by grouping classrooms and businesses into "organizations". Each organization can manage their users and projects. We also provide statistical insights to organization admins about their members.



Team: Gaming Supervisor
Project name: Gaming Supervisor
Team members: Jeremy Pope, Andrew Yang, Yucheng Yang, Haochen Zhang
Website: https://haochenlucas.github.io/GamingSupervisor/

Project description: Gaming Supervisor is a gaming support software that helps new players more effectively play the multiplayer online battle arena (MOBA) game DotA 2. The game has a steep learning curve, and it can take time for new players to learn the strategies needed to win. It can also be frustrating to new players if they 'die' in the game frequently. Therefore, our software aims to help new players to stay alive, and will analyze data from real games available online. The analysis will determine the best action players can perform in certain scenarios. Users will receive real-time feedback via a graphical display overlaid on a live game, advising the player on actions that will prolong survival while working toward victory. The user will also have the option of analyzing replays to learn from their own mistakes, with Gaming Supervisor showing optimal actions to perform when these mistakes occur. Gaming Supervisor helps a new player learn the tactics and strategies necessary to become a seasoned player without losing their enthusiasm.

Team: Give It Forward
Project name: Give It Forward
Team members: Sara Adamson, Boo Chalhoub, Kenzie Elliott, Jen Simons
Website: www.giveitforward.us

Project description: Give It Forward is a social website which connects people in need with those who want to help. Our website makes giving and receiving financial assistance quick, easy, and anonymous by allowing individuals to submit and fulfill requests for financial assistance. The goal is to provide any opportunity to assist individuals without the hassle that many other programs require. Using PayPal as a payment processor, an individual can directly fulfil requests with the simple click of a button. Additionally, our platform is a segway to connecting with organizations who may be able to provide other means of assistance. So, if you find yourself in need or with a few extra bucks, visit our website, log on, and Give It Forward.

Team: Grocery Guru
Project name: Grocery Guru
Team members: Michelle Nguyen, Grant Olsen, Adam Sorensen, Tanner Wilson
Website: http://groceryguru.herokuapp.com

Project description: Meal planning and grocery shopping can be time-consuming tasks for the average family or individual. While many solutions exist to streamline the grocery shopping experience, there is currently no existing application that integrates meal planning and grocery shopping into a seamless process. Grocery Guru aims to fill this gap by serving as a recipe sharing platform with the technology to transfer ingredients directly from recipes into online shopping carts. The application allows users to select one or more recipes and converts them into a grocery list. Ingredients from the grocery list are then forwarded to the online grocery shopping provider of the user's choice with the option of modifying ingredients as well as the choice to pick up their groceries or have them delivered. Other features of the application includes searching for recipes using titles, ingredients, or tags; importing personal recipes using a variety of tools; creating sets of recipes with personalized meal plans; viewing and adding recipe ratings; and adding/removing recipes to time slots on a calendar to easily plan out meals for the week, month, or year.

Team: Local Beats
Project name: Local Beats
Team members: Brandon Koch, Snehashish Mishra, Nick Porter, Adam Rosenberg
Website: https://www.localbeats.live

Project description: The music industry predominantly relies on agents or labels to make event bookings for artists. This dramatically raises the entry barrier for new musicians. LocalBeats aims to disrupt this pattern by providing a web platform where artists can seek events for employment while event hosts can also seek artists to employ them.

Team: SkyBin
Project name: SkyBin
Team members: Gradey Cullins, Zak Peters, Kincaid Savoie, Alex Steele
Website: https://uofu-skybin.github.io/

Project description: SkyBin is a peer-to-peer file storage system designed to offer a cheap, secure, and privacy-oriented alternative to cloud storage providers like Google Drive and Dropbox. It allows users to store and share their files online as well as rent out their unused disk space to their peers. To keep users' data secure and accessible, SkyBin encrypts all files and stores them redundantly using an erasure coding scheme, allowing users to access their content even when some peers are offline. It also regularly checks the integrity of files stored on peers' machines, re-replicating data that has been corrupted or lost.

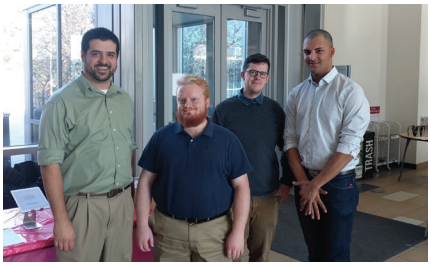
Team: Sprout
Project name: Sprout
Team members: Nico DiSera, Simon Redman, Guy Watson, Graham Zuber
Website: sproutseniorproject.com

Project description: Sprout is a growth tracker designed for the specific needs of special education students. Our app aims to paint a better picture of special-needs students' academic and behavioral progress so that educators can make informed decisions to positively guide their student's growth. By working with special education professionals, our team has identified key functionality missing from mainstream learning management systems like PowerSchool and Canvas that will help paint that picture. We believe that no child should be judged based on one datapoint, and we've created an app to make sure that doesn't happen.

Team: Suzie Queue
Project name: Suzie Queue
Team members: Blake Burton, Ryan Welling, Zane Zakraisek
Website: https://suzie.eng.utah.edu

Project description: Each class in the Computer Science department at the University of Utah has teaching assistants (TAs) assigned to help the students with their homework, and studying for exams. To manage this amalgamation of students, and student helpers, there is an existing TA Queue that allows TAs to manage which students are getting help, on a first come first serve basis. The current TA Queue for The College of Engineering is difficult to start, hard to manage on the backend, and is bereft of features and a modern UX. It needs an overhaul on the backend, and a clean and modern front end to remain viable and useful. Suzie Queue is an effort to rebuild this queue for the College of Engineering at the University of Utah. With this project, we will provide a clean and modern tool that will increase productivity, and allow for better collaboration between students and those engaged in their betterment.

Team: The GateKeepers
Project name: GateKeep
Team members: Alex Anderson, Kyle Heaton, Brayden Lopez Lopez, Alan Mouritsen
Website: https://gatekeep.io



Project description: GateKeep is an event management system targeted towards schools. It has two main components, an iPad Kiosk and a Companion Application. With the companion application, school administrators can create and share events with volunteers and track their hours. Administrators and volunteers can generate reports based on individual hours, event attendance, and overall school traffic. Administrators can also get a live feed of the visitors/volunteers that have signed in, knowing exactly who is in the school at a given time. One of the the best features of the companion application is that it can be accessed by any device with an internet connection. The second component of the system is the iPad Kiosk. The iPad Kiosk allows visitors and volunteers to quickly sign into an event by either providing identifiable information or by using any standard government issued identification.

Team: U List
Project name: U List
Team members: Amit Athani, Matt Brownell, Andrew Katsanevas, Robert Weischedel
Website: projectulist.com

Project description: Students have to buy many textbooks throughout their college career. Most of the time, these textbooks are purchased at a premium through the campus bookstore or an online retailer such as Amazon. Some campuses have bulletin boards that allow students to post such items for sale, but colleges need a more modern solution that's quick, safe, and inexpensive. That's where UList comes in: a website and Android application that create a centralized marketplace for university students to buy and sell items directly to each other. Students can search for books and other items sold by other students on campus. Sales are made at agreed upon times and GPS locations. Before making a request to purchase, a buyer may use in-app messaging to ask the seller what works best for them, or ask about the product in the FAQ section. Users can choose to handle payments outside of the app, or use integrated online payment systems. While textbooks are the focus, students can also choose to sell furniture, electronics, school supplies, or any other products. UList is the modern, cheap, convenient, and better alternative for university students looking for books and other supplies on campus. Before you check Amazon or the bookstore, check UList!