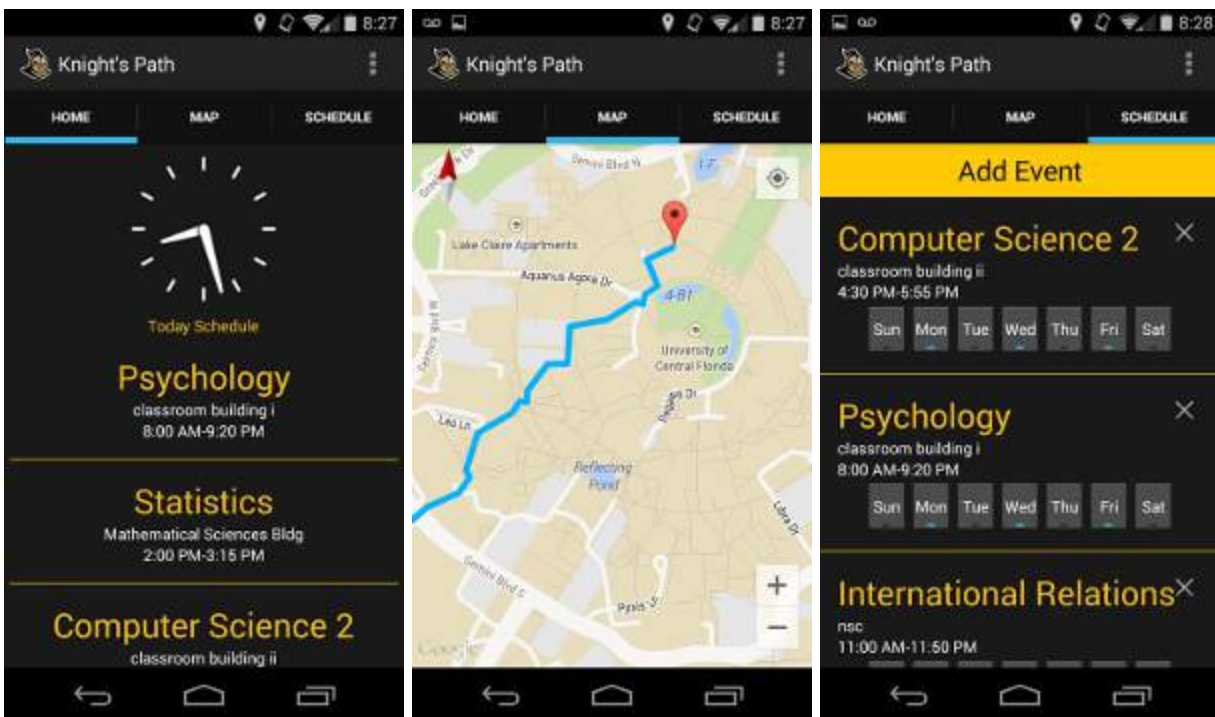# Sevena Skeels :: *Selected Works*

Knights Path

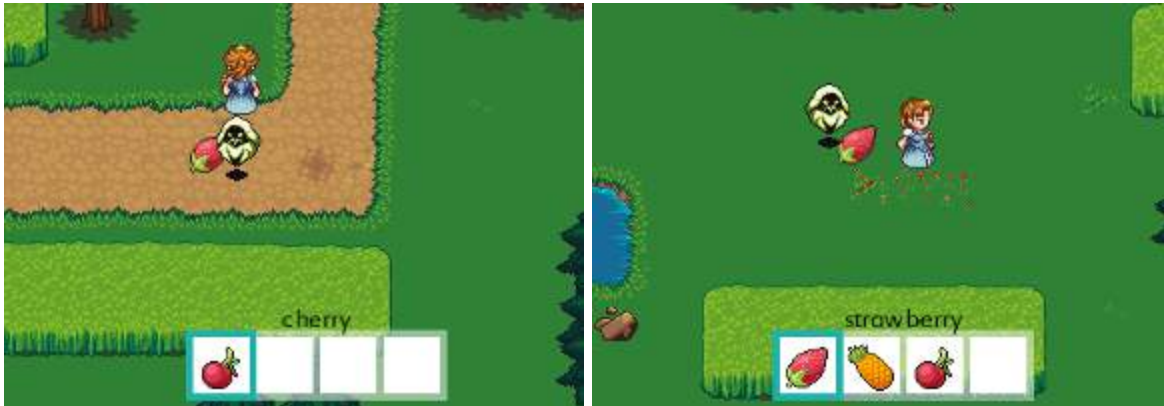*Java, Google Maps API Integration, SQLite*

An Android application that allows UCF students to store their weekly class schedule and provides navigation to specific UCF classrooms and local destinations. The application was a group project for a software development class. The Google Maps API was used to search for nearby locations using inputted keywords and to provide navigation from the user's location to the specified destination.

AI for Game Programming Final Project
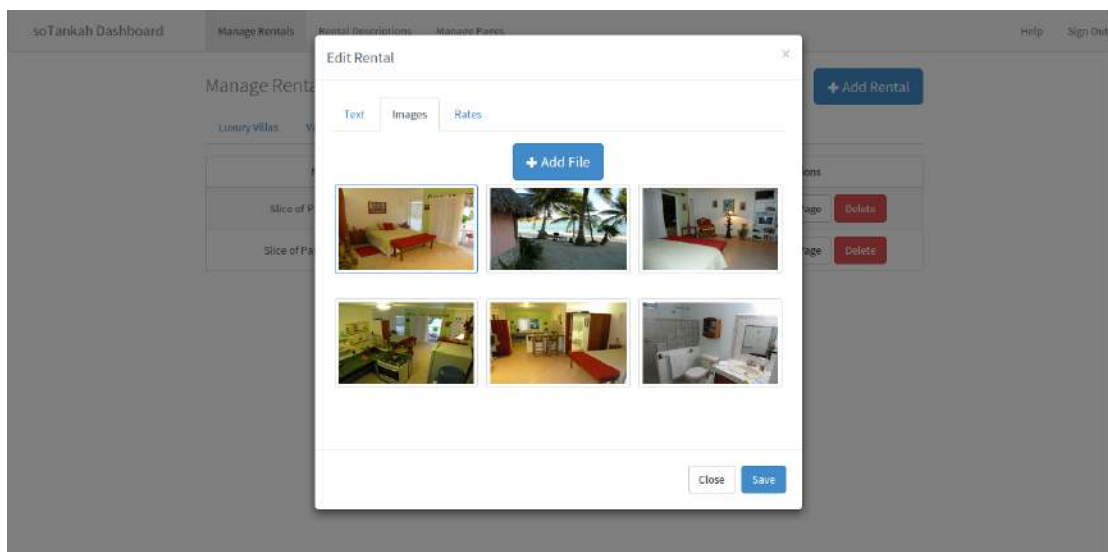
C#, Monogame Framework

The final project for an elective class, AI for Game Programming, in which I used concepts learned throughout the semester to create a simple game with autonomous agents. Using A*, collision detection, and finite state mechanics, the ghosts in the game operate as enemies that wander around the map, seek out the player and items (when in range), and "investigate" discovered items. When the game is instantiated, a navigational graph of nodes is generated using the map, which is used to calculate the shortest path between game objects. An important mechanic of the game is the ability of the player to "distract" the enemy ghosts by dropping items. A ghost will greedily seek the closest agent of interest at any given moment, so a player can strategically drop an item when a ghost is in pursuit in order to get away. The pixel art was provided by the Liberated Pixel Cup.

Admin Dashboard

PHP, CodeIgniter MVC Framework, Javascript (JQuery), MySQL

A web application that was built for a client initially as an expense tracker for property management and later as a rental property advertisement site. The client could log in as an administrator and add users, expense reports, and contracts. Users could also log in to view their monthly expense reports, contract, and profile. Before all functionality could be finished, the client requested a shift in design. Instead of expense reports, the client was interested in displaying rental property information. I added functionality for managing rental information and images.