My Senior Design project would be an app that assists UCF students on their day to day schedules on campus. It would require the use of the GPS already installed in most smart phones today but may also be used online as a web app. My idea is to allow students to input their schedule for the day and commute around campus as efficiently as possible, saving the student time and energy. In order to do this, the app would need a map of the current campus, which could most likely be found online. Then track the student using a GPS API, which could also be found online, and calculate the best route the student should take in accordance to the student’s current position on campus, but this feature would only be applicable to the mobile version while the web application would require a starting point for the user in order to output an optimal path. In addition, the app would store the current state of all the nodes and edges in a database in order to update or edit the said node or edge. In example, there may be a path closed off due to construction, which would need to be taken into consideration when calculating a student’s route for the day and in addition to that, the app would need to be updated when a building or location is closed off due to whatever reason. To calculate the most efficient and optimal route, some graph theory may be applied in order to calculate what route is best using sidewalks, roads, etc, as edges and destinations as nodes, being one stop or multiple stops. Overall, I believe this would be beneficial to UCF students as it would save them time, energy and lower the chances of a student getting lost or wandering around.

I would not like to pitch this project to the class.

A screenshot of a computer screen

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