PENN STATE UNIVERSITY
CMPSC 475

#### 9: WALKING PATHS II

Due: 31 October



# **Description**

In this assignment you will modify your Walking app from last week to include more functionality. This assignment will also require you to implement the required features with your own design. You will be adding support for walking directions using overlays and step by step directions.

You will also be adding in editing support for modifying your building's info page. If you did not include a page with info about each building in your app from last week, you will need to add it in for this week.

# **Required Features**

This list is simply the required features of the app. You need to implement all of them into your own robust design.

- Your app should include the option to get directions from one location to another. This could be between two buildings, from user location to a building, or from a building to the user's current location. The selection process of the source and destination should be an intuitive UI that is simple for the user.
- 2. Your app should show the overlay for the path selected by the user. This overlay should appear above the map's buildings, but below annotations and labels.
- 3. Your app needs to show the step-by-step directions for the walking route. There should be two options for viewing the direction steps. The user should be able to look through each step one at a time or view all of the steps at once. There are many ways to accomplish these two viewing options.
- 4. You should show the ETA for a walking route.
- 5. Your app needs to show info about each building upon selecting the building. The building info should include at least the building's name and photo. Feel free to add other details about the building (i.e., year built). If no photo is available, please display an image that says "No Photo Available".
- 6. The user should be able to modify the photo for a building. They should have the option to take a new photo or select an existing photo from their Photos album. This will require use of a UIImagePickerController and its delegate. If a new image is taken/selected, show this on the building info page instead of what was previously shown. When the user leaves the building info page and comes back, the new image should persist (while the app is running -- if you kill the app, the new image does not have to persist).
- 7. The user should easily be able to navigate on the map to their current location.

#### **Hints**

1. You may find it easier to present the image picker controller programmatically rather than in code. Be sure to follow the recommended presentation styles as described in the UIImagePickerController's documentation.

# **Testing**

PENN STATE UNIVERSITY
CMPSC 475

#### 9: WALKING PATHS II

Due: 31 October



- Your project should build without errors or warnings. Be sure to address any Auto Layout errors.
- 2. Test your app on both iPhone and iPad simulators using both orientations. Ensure that your app does not crash.
- 3. Your project should adhere to the given location services permissions. Toggle this setting in the privacy settings of your iPhone. Make sure when your app is foregrounded, you handle this change in settings appropriately.
- 4. Each of the bullet points in the Assignment section above will be considered to verify that you've completed the assignment correctly.
- 5. Your project should have a clean user interface. User interface elements should be arranged logically, be aligned nicely, etc...
- 6. Create a new bot for this project scheme and make sure it does not have any integration errors.

# **Troubleshooting**

Make effective use of the debugger. Set breakpoints and examine values.

#### **Submission**

1. Usual process, branch is Submit9. Still trying to figure out why Bots are not showing up for anyone. Do be sure to include Unit Tests in your project so that your Bot can run them on the simulator. Be sure your Bot uses a simulated device running iOS 9.