

Description

This assignment involves using MapKit and the SwiftUI Map. A significant aspect of this assignment is the design of the app. We will only provide requirements and you must decide how to realize the required functionality while providing a good user experience. As always, good code organization and robust code is expected. You will be graded on your design, your code, and the app's functionality.

Requirements

The Campus app provides the user with a map of campus and the ability to find (and plot) campus buildings and the ability to maintain (and plot) a list of favorite buildings.

More specifically the app must support the following:

1. The initial view is a map of campus centered approximately on the center of campus.
2. The user can temporarily display a list of building names (see provided assets).
 - Buildings should be sorted alphabetically by name.
 - Rows in the list should indicate whether or not the building is currently plotted.
 - The user can select/deselect any buildings from this list to be plotted on the map. This action updates the plotted indication (from previous bullet item). They do not favorite/unfavorite buildings from this page.
 - When the list is dismissed the user is returned to the map with all selected buildings plotted with an appropriate icon.
 - Any favorited buildings currently plotted should be displayed distinctly from non-favorited ones (see below)
3. A long-press on a map annotation should bring up a menu containing
 - The building's name
 - A button that when tapped displays a detail view of the building
4. The detail view of a building should contain
 - The name of the building
 - A picture of the building if available
 - An indication of whether the building is favorited or not
 - The ability for the user to favorite/unfavorite the building
5. Favorites and plotted buildings should be persisted.
6. The user should be able to have the map show or hide all favorited buildings.
7. The user should be able to unplot all plotted buildings while viewing the map. Note that this does not change a building's favorited status.

Testing

Thoroughly test your app for all possible user interactions you can imagine, in **all orientations**. Be sure to clean up any compiler or runtime warnings. Be sure user interaction is intuitive and not awkward.

Submission

Your submission should be pushed on the master branch. Be sure to verify that your project builds and remove all cruft and compiler warnings.