



# App Specification: Capstone App

UDACITY iOS Developer Nanodegree

*[Note that this is an informal app description. It will give you an idea how the app should work, but when you submit your app it will be rated based on the [Rubric](#).]*

The fifth portfolio app is open-ended. Let your own interests guide you. You will invent the app, then design and build it. We hope that you choose an idea that is motivating and challenging.

The app should showcase your iOS skillset. Your app should have a complexity similar to the On The Map app and the Virtual Tourist apps, and should include code from the following areas:

## User Interface

Your app should demonstrate that you can combine the essential UIKit components in effective ways. It should include the following common UI features:

- More than one view controller
- A table or collection view
- Navigation and modal presentation
- Image assets in 1x, 2x, and 3x formats. Or in vector format.

## Networking

Your app should incorporate data from a networked source:

- Choose an API and integrate downloaded data into the app
- Give users feedback around network activity, displaying activity indicators and/or progress bars when appropriate, and an alert in case of connection failures
- Encapsulate networking code in a class to reduce detail in View Controllers

## Persistence

Your app should incorporate data that needs to be persisted between runs of the app.

- Include an object graph that can be persisted in Core Data
- Manage the Core Data Stack outside of your view controllers, either in the App Delegate or in a separate Core Data Stack manager class
- Aside from your primary app state, you should find some additional state that can be stored outside of Core Data, either in UserDefaults, or in the documents directory using an NSKeyedArchiver

## README

The app should also include a README file within the project's directory. The README should accomplish two goals:

- Describe the intended user experience
- Include all specific actions and/or commands necessary for the reviewer to compile, run, and access any aspect of the project

To learn more about creating README files, check out Udacity's [course on Writing READMEs](#).

## App Functionality

The app should function as described in the README. No crashes or other runtime errors should be evident.