

# Testing Environment

1. Candidates should have access to Xcodelt;
2. All code must be compliant with iOS 11;
3. Coding must be done in Swift unless otherwise specified;
4. All questions must be answered in English.

## Application Development

Write an iOS application that shows a list of 20 people that meets the following criteria:

1. Setup
  - a. Each item should contain a profile image and a name. The set of names can be found at the end of this section.
  - b. Use Core Data to store the 'person' entity. The initial dataset should be stored persistently upon first launch of the app. After the data is stored, present an alert to the user welcoming them to the app.
  - c. All data should be persisted between launches.
2. Profile Image
  - a. As each item comes into view, a profile image should be downloaded if necessary and displayed next to the person's name. The URL convention to use can be found at the end of this section.
  - b. All images should be downloaded using the same connection but only one image is allowed to be downloaded at a given time.
  - c. At no point should the UI be blocked.
  - d. (extra credit) Downloads should continue if the application enters the background.
3. Editing
  - a. Tapping on an item should take you to a new view which lets you update the name.
  - b. The edit view should show the current name.
  - c. The name should be saved upon navigating back to the main view in such a way that does not block the UI.
  - d. Updates should be detected using an NSFetchedResultsController causing the UI to be updated accordingly.

Names:

[Adam, Henry, Jeremy, Kyle, Mark, Douglas, Marion, Jade, Madison, Robert, Peyton, Rodney, Lucas, Sam, Eugene, Laurie, Jason, Edward, Toby, Johnny]

Profile Images:

You can download the images with the following convention:

[http://download.glide.me/pre-login-avatars/avatars\\_cartoon\\_animals\\_xx.png](http://download.glide.me/pre-login-avatars/avatars_cartoon_animals_xx.png)

Where xx is a number from 01 to 20. Note, numbers below 10 must have a "0" in front.