



# iOS Engineer Assignment

I hope you like the Marvel Universe because you are going to build a Superhero Directory!

A user should be able to open your app, search for their favorite Marvel characters, and see detailed info and images about those characters.

You will be using the Marvel API at <https://developer.marvel.com/> as a data source.

When your app opens, it should display a list of Marvel characters including their picture thumbnail. If a picture is not available a default image is just fine.

Be sure to include infinite scrolling so when I get to the bottom of the list I can keep loading superheroes.

Please include a search bar, as well, that makes it easier for the user to find their favorite characters.

When a character is selected, your app should show a summary about the character. A bio about the character would be ideal, but feel free to display anything else like stories, events, or comics related to the character.

I would also like you to persist the data that you have already fetched from the server. I live in New York City and the internet service on the subways is terrible, but I'd still like to read about my favorite Marvel characters on the way to work.

Feel free to style the app in a way that will make the experience more fun and enjoyable. We'd prefer interfaces be built with Storyboards or XIB files, not purely in code. And while we love SwiftUI, please use UIKit for your interfaces.

Feel free to implement some unit tests or UI tests.

Also feel free to use whatever third-party libraries you are comfortable with, including Alamofire, but please don't lean on third-party code so much that we can't see your own approach to building apps.

Here is a link that may be useful:

[https://developer.marvel.com/docs#!/public/getCharacterEventsCollection\\_get\\_3](https://developer.marvel.com/docs#!/public/getCharacterEventsCollection_get_3)

Happy Coding! If you have any questions, please feel free to reach out.