

iOS Programming exercise

Version	1.0
Created on	6 August 2019

Goal

- * Check programming solving skills and general understanding of iOS Frameworks (Foundation, UIKit)
- * Check understanding of permissions, location and maps
- * Check understanding of how to use REST API's
- * Check programming style and architecture

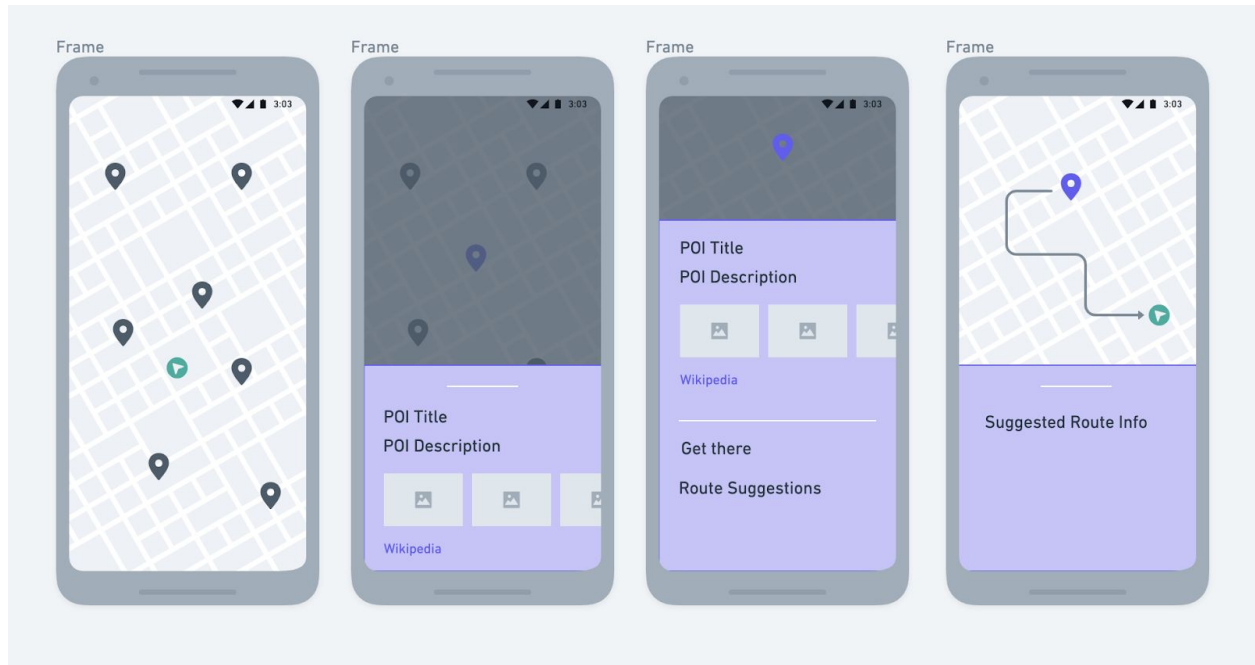
Evaluation Criteria

- * Usage of Swift (Beginner/Advance)
- * Usage of RxSwift (Beginner/Advance)
- * Usage of DI (Yes/No)
- * Architecture usage and reasoning, if any
- * Dependency on 3rd party API's (less dependency is better)
- * Adoption towards native API's
- * Network Connectivity handling
- * Handling of corner cases
- * Additional points - Testing
- * Additional points - Data binding

Exercise

Create a simple iOS application to fetch the current location of the device and get nearby English language Wikipedia articles. These nearby articles should be shown on the map as a point of interest (POI). On particular POI selection, application should show article detail view with map centered on a selected POI. Article detail should include, but not limited to, title, images, summary and link to wiki article. Application should give route suggestions to the user, how to reach selected POI. On selecting "Get there" routes, application should show direction from current location to selected POI.

Wireframe gives you an idea, but use your own imagination.



Requirement

- The app must run in native iOS 12
- Use Swift 5 as programming language.
- You can use any library.
- Present the results in simple but intuitive UI.
- Pay attention to optimization, readability, modularity and maintainability.
- Document your code

Rest API's

Wikipedia API's

Feel free to adapt Wikipedia open API's as per requirement.

Fetch nearby articles
https://en.wikipedia.org/w/api.php?action=query&list=geosearch&gsradius=10000&gscoord=60.1831906 24.9285439&gslimit=50&format=json

Fetch page id and its detail
https://en.wikipedia.org/w/api.php?action=query&prop=info description images&pageids=18806750&format=json

Direction API's

<https://developers.google.com/maps/documentation/directions/start>

or

<https://digitransit.fi/en/developers/apis/1-routing-api/routes/>

Submission

Create a private Git repository on any platform and share your code with us. Add README.md file in the project to explain your high-level decisions and libraries