

NYC Schools Application

Design Decisions

The application is a straight forward client application that pulls Schools and SAT scores data from New York City API service. The architecture design used for this app is MVP (Model-View-Presenter) over MVVM (Model-View-Viewmodel) since the data from the service doesn't change constantly and is ideal for a small application.

iOS

The Models are defined by structs, Views by ViewControllers and Presenters communicate with views through Delegates.

The Schools list is shown in simple UITableView. Search functionality is enabled using UISearchBar. The School Detailed View shows a MKMapView with a pinned location of the school along with displaying other data in a custom built cell UITableView.

The data is pulled from the api service using a third-party network service library - Alamofire.

Android

The Model classes are simple Java POJO classes, Views are Activity and Fragment and Presenter classes are bound to Views by contract interfaces.

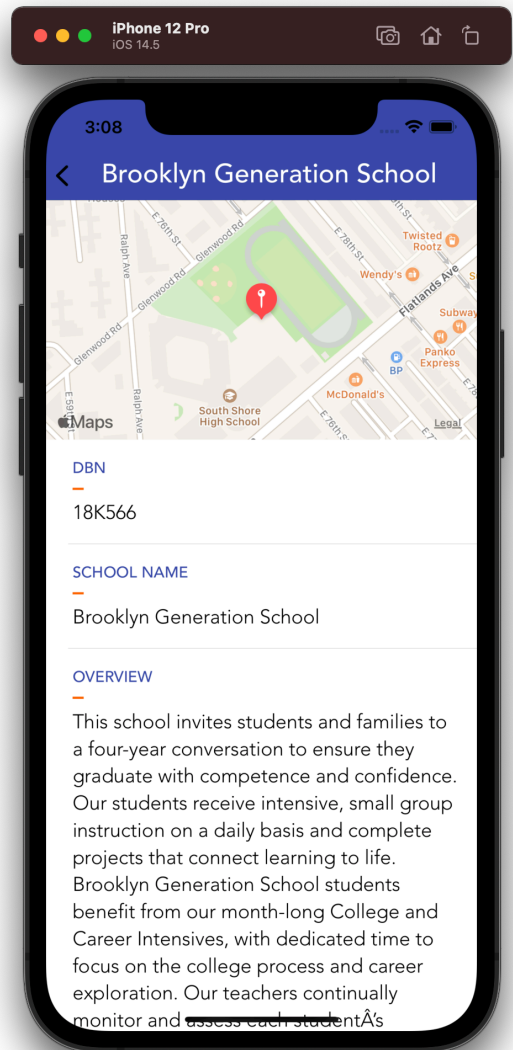
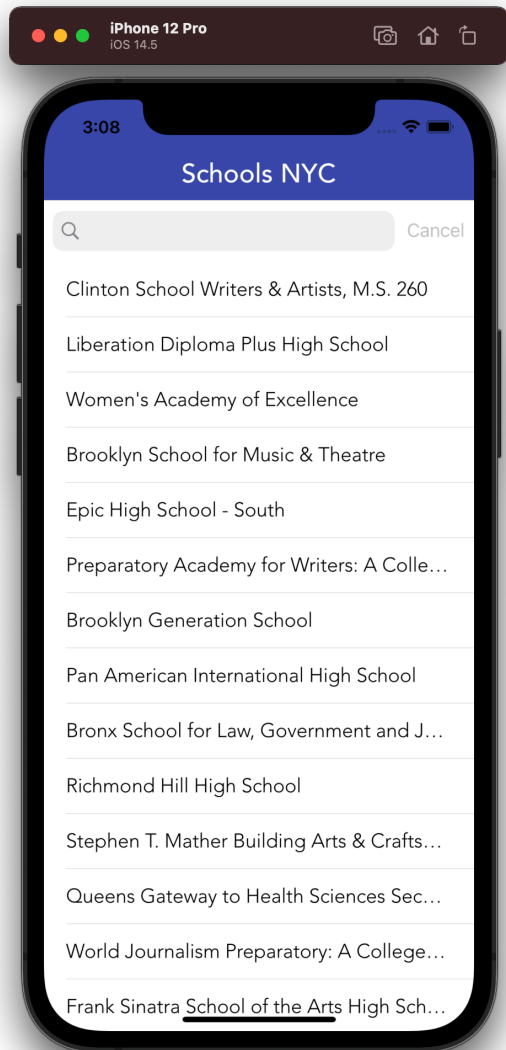
The Schools list is shown in a simple RecyclerView. Search functionality is enabled using Search menu item in the navigation bar. The School Detail View is displayed in a built RecyclerView with custom adapter implemented using ViewHolder design pattern.

The data is pulled from the api service using Retrofit library and is carried in the background thread asynchronously using ReactiveX.

Future Enhancements

Provided more time, this application can be extended to include a lot of features including but not limited to - offline data caching, interactive UI widgets such as using Maps to locate the place, placing Phone call, opening websites in external/internal browser.

iOS app screenshots



Android app screenshots

