Assigment Task

Create a simple Parking application.

App should have these screens/features:

1. LOGIN SCREEN. At this screen we should be able to select user (“login”) or add a new user (“register”) or remove.
2. START PARKING.   
   Elements on the screen:  
   - Map with all parking zones on it. User shoud be able to select one.  
   - The text label below the map displays selected Zone’s address.   
   - The text label with default vehicle number  
   - The “START PARKING ACTION BUTTON” (this button will start parking action at the selected zone with selected vehicle and will bring user to the “PARKING ACTION SCREEN”)
3. PARKING ACTION SCREEN.  
   Elements on the screen:  
   - Details over the current parking action (startDate, vehicle number, parking zone address)   
   - The “Stop Parking Action” button (if this is running parking action). This button will stop running parking action and will bring user to the “HISTORY” screen
4. HISTORY SCREEN  
   List of parking actions for the current user (those are finished)
5. USER PROFILE

- User details. Those could be changed by entering new text

- Selected Vehicle number. Click on that row will open “VEHICLES SCREEN”

1. VEHICLES SCREEN.  
   Screen to select default vehicle or add a new one to the user’s account.

The main goal of this task is to see your architecture designing skills. Implementing all screens and functionality is important, but has lower priority than having proper in-app setup. You can leave default UI everywhere (just try to follow Apple HUI guidelines as much as you can).   
If you have doubts on app’s logic or you think description is not clear enough - you can make your own assumption and proceed with it. Just leave a note in the code or in the comments.

Libraries – if possible try to avoid any 3rd party libraries.  
Code repository – please create GitHub repository, so we can check it out upon completion.

As a backend we would suggest to use Firebase Cloud REST (works like a normal REST API, no Firebase iOS SDK needed).  
We created some tables and models here.   
  
<https://testapi-11cc3-657ec.firebaseio.com/>

REST API Endpoints:  
<https://testapi-11cc3-657ec.firebaseio.com/parkingActions.json>  
<https://testapi-11cc3-657ec.firebaseio.com/users.json>

<https://testapi-11cc3-657ec.firebaseio.com/vehicles.json>

<https://testapi-11cc3-657ec.firebaseio.com/parkingZones.json>

(all stored data):  
<https://testapi-11cc3-657ec.firebaseio.com/.json)>

You can find POSTMAN collection with all relevant API calls attached.

Feel free to use your own backend if needed.

Language: Swift is preferred, but Obj-C is still possible.

Estimated delivery time – 4-5 days.   
Mockups and POSTMAN collections are attached.