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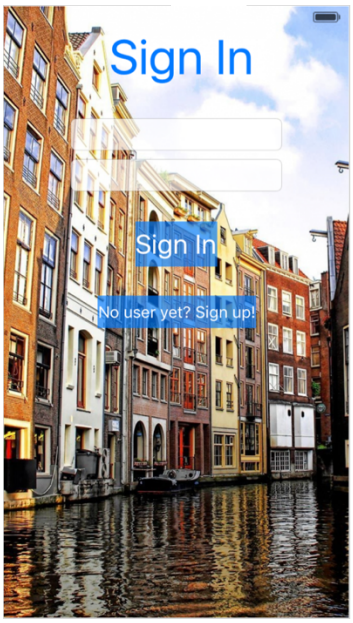
TourGuide – Report

Application description

These are the basic features that form the MVP:

- User gets a notification when near a sight.
- User can read the information about a certain site, information stored on a parse database.
- User can look up nearby sights on the map.
- User can add a sight on his current location.
- User can add a sight on a location that is not his current location (location by choice).
- User can rate information added by other users.

1.



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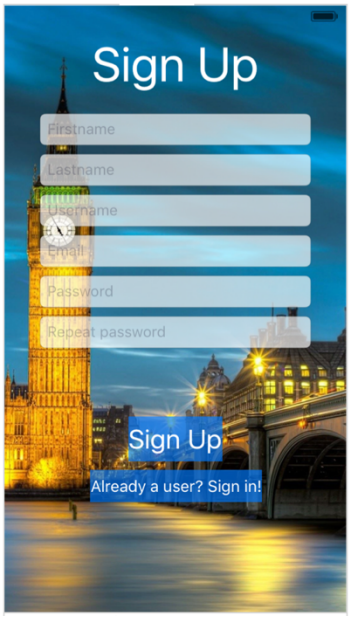

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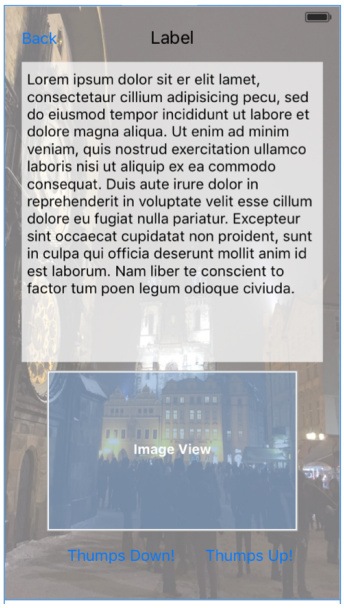

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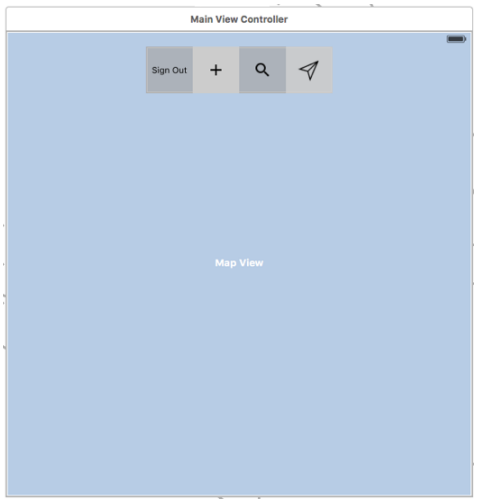

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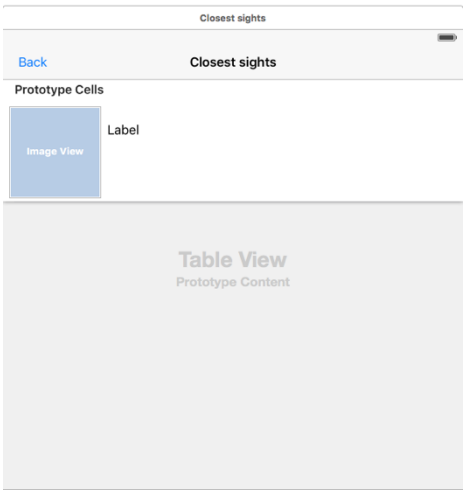

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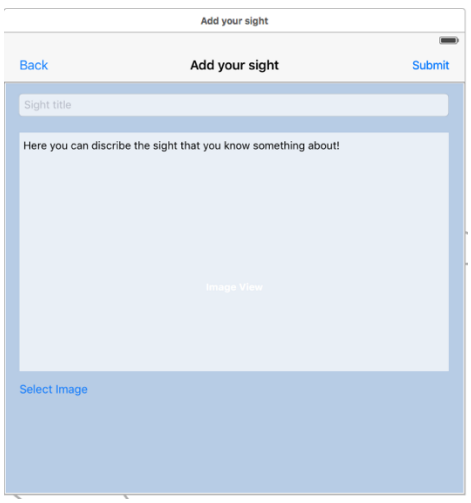

The TourGuide application is a new sort of tour guide. With this app you don't need a real life person to show you around a city. Now you can just walk around and the app will give you information about sights nearby. The app uses your GPS location to determine witch sights a close to you. When you enter a certain radius near a sight you get a notification. The difference with other similar app's is that this application does not use a set database. This because the user has the opportunity to add information about sights himself and he can connect that information to a certain GPS location. The user can add a title, information and a picture corresponding to the sight. This way the users fill the database themselves and the database will get bigger when more people start using the app.

When the user starts up the app he is prompted with the question to login (1.). When the user does not have an account he has the possibility to create one (2.). After login in the user arrives at the main screen (4.). This screen is connected to the MainViewController. This screen shows a map with pins that represent sights that are already added to the database.

On top of this screen there is a menu containing four buttons'. The most left button is the sign out button. The one to the right of that button is the button that allows the user to add information about a sight to the database on his current location. The button next to that button (a magnifying glass) directs the user to a table view connected to the SightTableViewController (5.). This table view shows the ten most nearby sights that are in the database. The rightest button centres the map around the users' current location.

When a user wants to add a sight that is not on his current location he can do so by tapping and holding the location on the map where he wants to add the sight.

When a user is adding a sight to the database on his own location or on he different location he does that in the AdSightViewController (6.). When the user is nearby a sight and gets a notification he is directed to the ViewSightViewController (3.) when clicking on the notification.

Technical design

This application uses a parse online database. There all the information about a sight is stored in the class AddedSight. In this database titles, information, images (PFFile), latitude, longitude and geopoints are saved. There is also a separate database where all the user information is stored.

For temporary storing of information the app uses NSUderDefaults. This is used to pass information between ViewControllers.

The map is created using MapKit.

Challenges

A problem that a faced while building the app was getting the images back from the parse database where they where stored. Eventually I found out that they had to e stored as a PFFile and I had to get them back with a separate query.

Another difficult problem was the placing of the pins on the map. This because they had to be placed on location's stored in the parse database. But because the placing of the pins had to be a function the pins where placed over and over again. This resulted in a black shadow behind the pins and other errors. I solved this problem by putting the placing of the pins in an if-statement, now the pins where only placed when the hadn't been placed before.

Future improvements

When I created the app there existed an online database called parse. Unfortunately did this database disappear. So al the data stored is lost and it is not possible to add new data. So to get the app running again I have to change the parse database into something else. It has to be an online database because otherwise (when there are lots of users) your phone will be full in no time. This is the most important bug that has to be fixed.

I was also wondering if there is a pre made database somewhere on the internet that I can use to store in the new database. This to attract users, because an empty app is not very fun to use and I don't have the time or knowledge to fill it up myself.

Overall I really like the idea. I think it could be something very nice to use while traveling abroad or within your own country. It is an easy way to learn and teach your fellow users.