Lab Assignment – 2
"Using Rest Services"
Big Data Analytics And Applications

SG #17

PG #10

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A) API's USED:

We have used the following API's

1. Google maps SDK
2. Open source weather API– http://api.openweathermap.org/data/2.5/weather?q=**Kansas**
3. Text to speech conversion – http://tts-api.com/tts.mp3?q=**hello**

B) Relavance of API's in our Project:

As we have decided to build personal assistant robot that helps elderly or challenged people in one or the other ways. We have impleted all the three API's individually. As a part of increment 1, we integrated weather and speech API. The integrated code works in the following way:

- The user needs to enter the city name that he needs to find the weather.
- When he clicks on the button, it will tell the weather details.

Uses of these API's in our project:

1. Google maps SDK-

The main use of google maps API is to know the current location. If the user wishes to go to any new place or got stuck at some new place, the user use this to determnine his current location.

2. Weather API –

To know the weather details of any location and to know the weather details of current location we used this API.

3.Text to Speech Conversion –

There may be some challenged people who can't talk or may be it would be difficult for them to talk. Then the use if this API is a very helpful way.

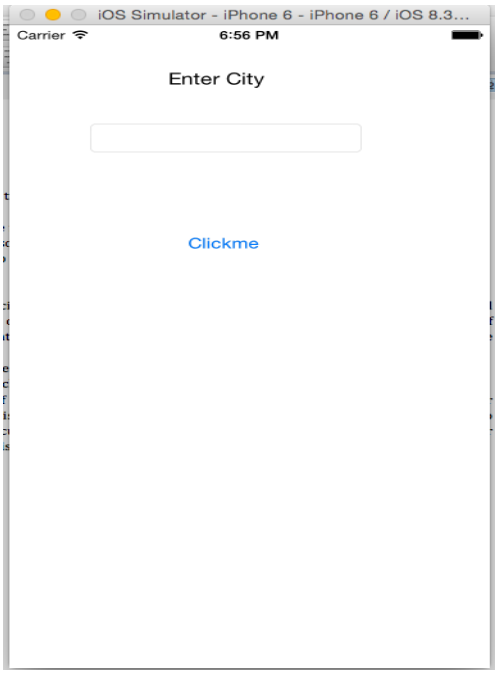
4.Integration of Weather and Text to Speech API –

For any visually challenged people, it may be difficult for themto see the weather conditions before going out. This integrated app is a very helpful feature for them.

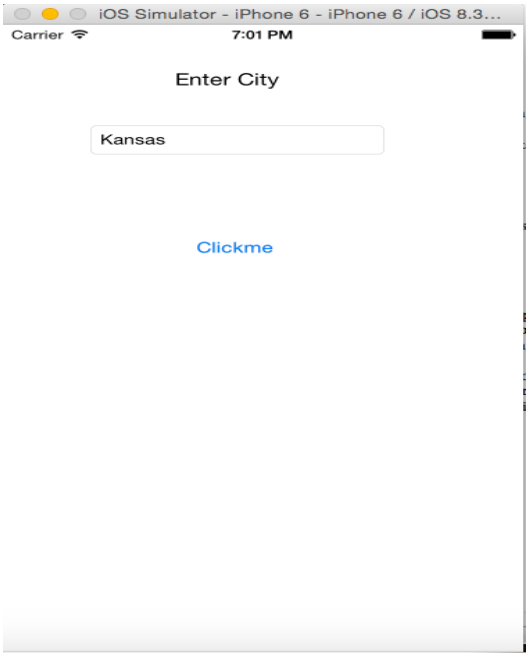
All, these features integrated in a robot will help elderly or challenged people in many ways.

C) Screenshots

1. Integrated Application

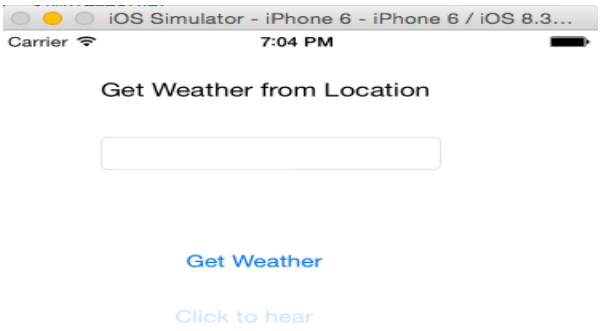


This is the home page.
The user needs to enter the name of the city for which he wants to know the weather.
If the user clicks on Clickme button.
The user can hear a voice message of the weather details in that city.

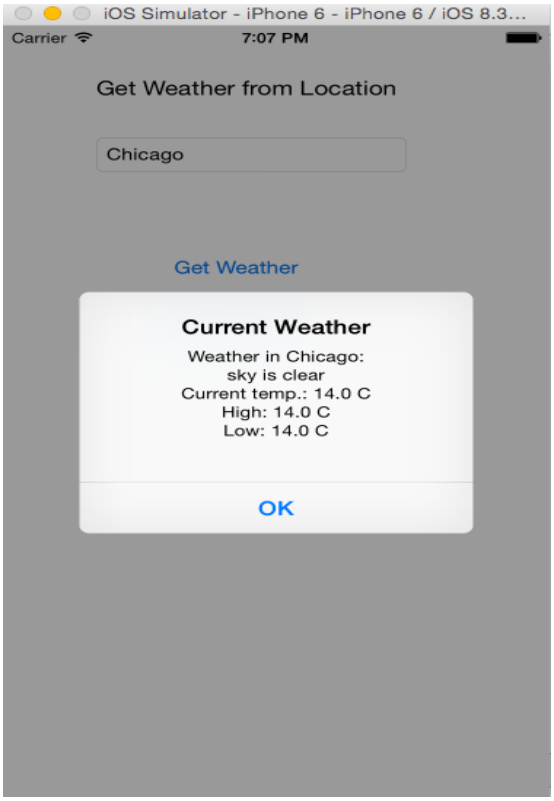


The user can hear the voice message about weather details of Kansas City.

2. Simple Weather Application

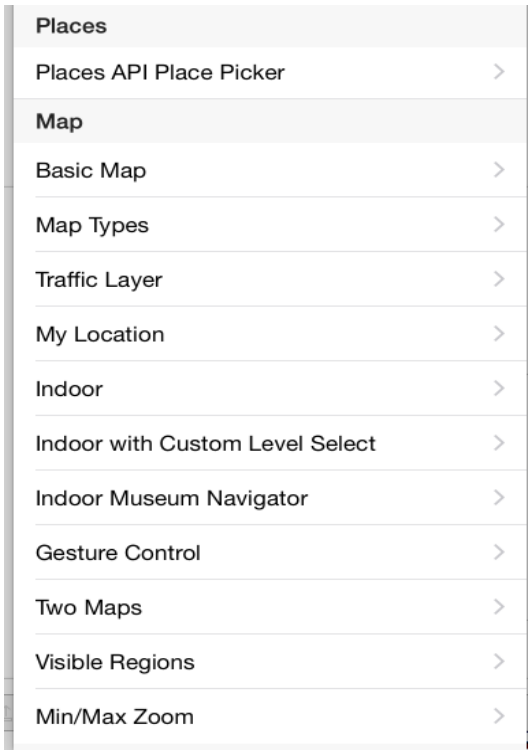


This is a simple Weather application. The user can enter the name of the city to check the weather of that particular location.

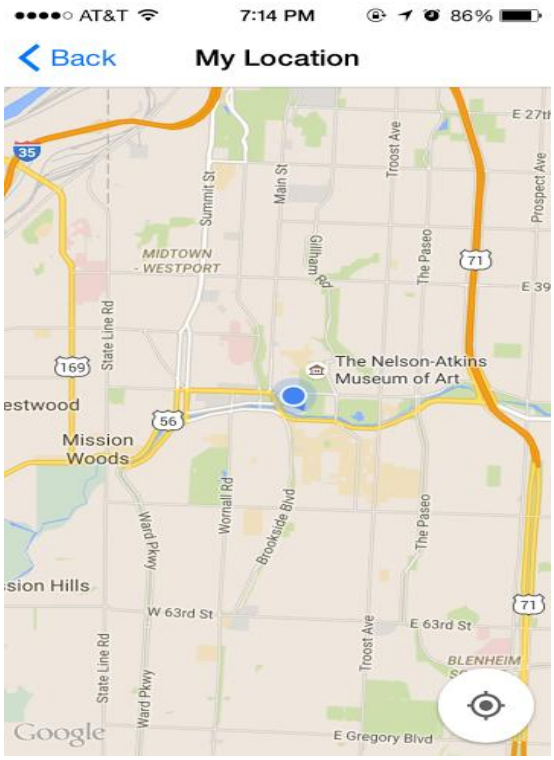


On clicking the weather button, the user can see the weather conditions of chicago.

3.Google maps SDK

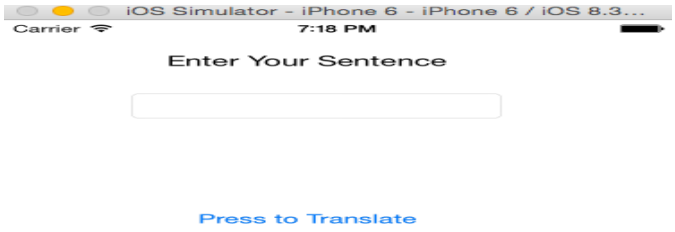


On selecting my location, the user can see his current location on google maps.



The user can see his location in the following way

4. Text to Speech Conversion



If the user wishes to listen to text message he can type the word or sentence here.