IntercomGuest
invite to customers within 100km
GitHub URL: https://github.com/Pushkar-Deshmane/IntercomGuests---Take-Home-Test

I have created small iOS app using Swift programming language as a solution of **Intercom - Mobile Engineer - iOS - Take Home Test.** This is the READ ME document for the application **"IntercomGuest",** This document gives brief introduction of versions of the language and IDE, installation process, framework used, how to execute the code and how to run tests etc.

Tools and Versions

Purpose	Tool	Version
Programming Language	Swift	Swift5
IDE	XCode	11.4.1
Operating System	iOS	13

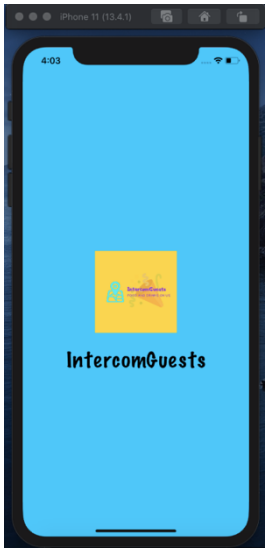
Please open **IntercomGuests.xcworkspace** file as I have used ChameleonFramework cocopod

Problem Statement: Given the GPS coordinates for our Dublin office 53.339428, -6.257664. and List of customers with user_id, name, latitude and longitude, Write a program that will read the full list of customers and output the names and user ids of matching customers (within 100km), sorted by User ID (ascending).

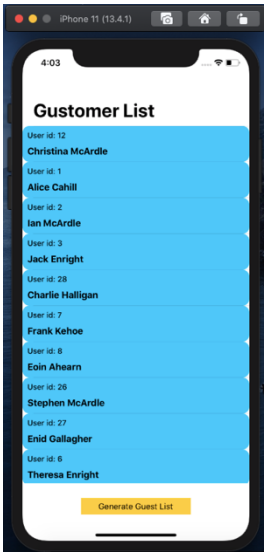
Solution:

- I have created and iOS mobile application which shows list of all customers from the list on first screen
- On click of the button **"Generate Guest List"** List of the customers within 100km from Dublin office is shown. The resulting list also include distance of the customer from Intercom Dublin office in kilometre
- I have used UITableView to show list of customers on screen and used custom designed cell to populate data from customer list
- The result list on second screen is sorted ascending on user_id of the customer
- I have used **Great-circle distance** Formula as suggested. The great-circle distance or orthodromic distance is the shortest distance between two points on the surface of a sphere
- For these I have converted degree to radian using **"atan2"** inbuilt swift function

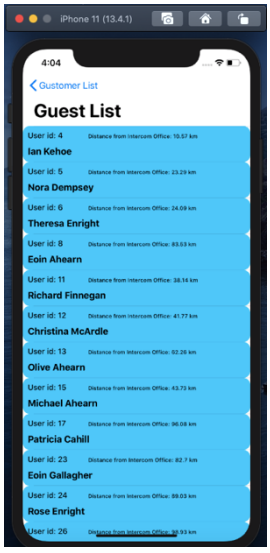
Output Screenshots:



Launch Screen



Customer List



Guest List

I have also attached output.txt file which contains final output (customers within 100km distance)