

Airmee tech tasks iOS Mobile Dev interview P1

Task description

A company owns 10 apartments: 4 one-bedroom, 3 two-bedroom and 3 three-bedroom.

They are located all over Stockholm.

They were handling booking manually until they decided to go digital.

They published their list of apartments as a json file at the following endpoint:

<https://s3-eu-west-1.amazonaws.com/product.versioning.com/apartments.json>

The company wants to have an application that manages its apartments, gives its users the ability to search for availability based on the number of beds and a specific date range ('from' and 'to' dates).

Business requirements:

- ☐ Search by date range and number of beds
- ☐ The apartments must be ordered by distance from the user's current geolocation in an ascending order.
- ☐ After the system shows the available apartments the users can select and book an apartment.
- ☐ If the users search again with the same parameters the booked apartment shouldn't appear in the available apartments. (optional)
- ☐ Keep user booking persistent across app sessions. (optional)

Implementation details:

- ☐ It should be implemented as a native iOS application
- ☐ The distance to an apartment can be considered the simple displacement between the two coordinates (Euclidean distance) - no need to calculate the actual distance by roadways.
- ☐ The user's current geolocation can be hardcoded to the following coordinates: [59.329440, 18.069124](#) for testing purposes but having a **mechanism of acquiring the phone's location is a must**.
All apartment's data retrieved from json can be stored in the app's runtime memory.
- ☐ The json file retrieved by the given endpoint is just for populating the initial data set - for simplicity the apartment's booked dates must be accounted for within the mobile application runtime.
- ☐ Use Core Data for booking persistence task.

Deliverables

- ☐ Code repository for the implemented app (preferably private repo, accessible via invite)