



Meeting Room Pro

Website: <https://navsingh.org.uk/mrpro>

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Available On:

Github/Virksaabnavjot/MRPRO



Introduction

MeetingRoom Pro (Find, Review, Book)



► Project Context

A room assistant application that allows the user to book rooms, navigate, see the building and the meeting room on the map, look at room gallery and upload images and review rooms .

► Customers

The project has high potential and big corporate companies and educational Institutions are its primary customers

► Which problem did you approach?

Finding the meeting room within buildings is hard and the app gives the functionality to find and book rooms on the same time in the same application and also have other features alongside.

Project Goals

- ▶ How will you solve the problem and What are you trying to achieve?
Finding meeting rooms is a tough in huge buildings.
Solution:
By developing an easy to use iOS application. Which will allow its users to find, book, review rooms along with much more additional functionality to enhance the experience.





App Features Summary

FEATURE 1:



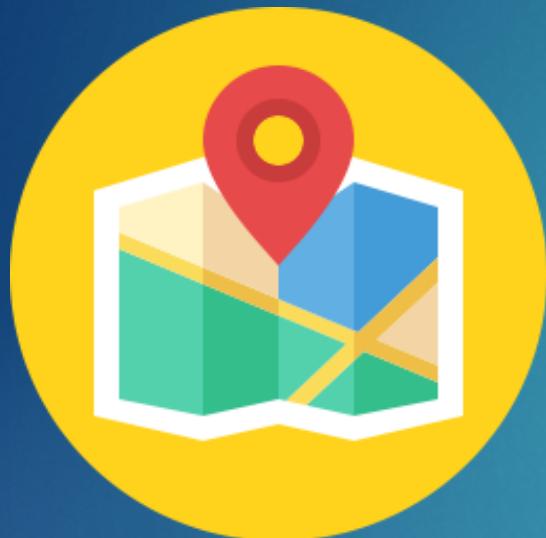
Search Buildings
And
Meeting Rooms

FEATURE 2:



View List of Available Buildings
And rooms available in them
with relevant hints and information

App Features Summary



List of Features



ROOM
DETAILS



SEARCH



LIST AND FIND



MAP



REVIEWS



GALLERY



PHOTO UPLOAD



BOOK ROOM



MY MEETINGS

System

► Description

Client – iOS Application built with Swift 3 using Xcode IDE.



XCODE



SWIFT 3



JSON



MAPKIT



COCOAPODS



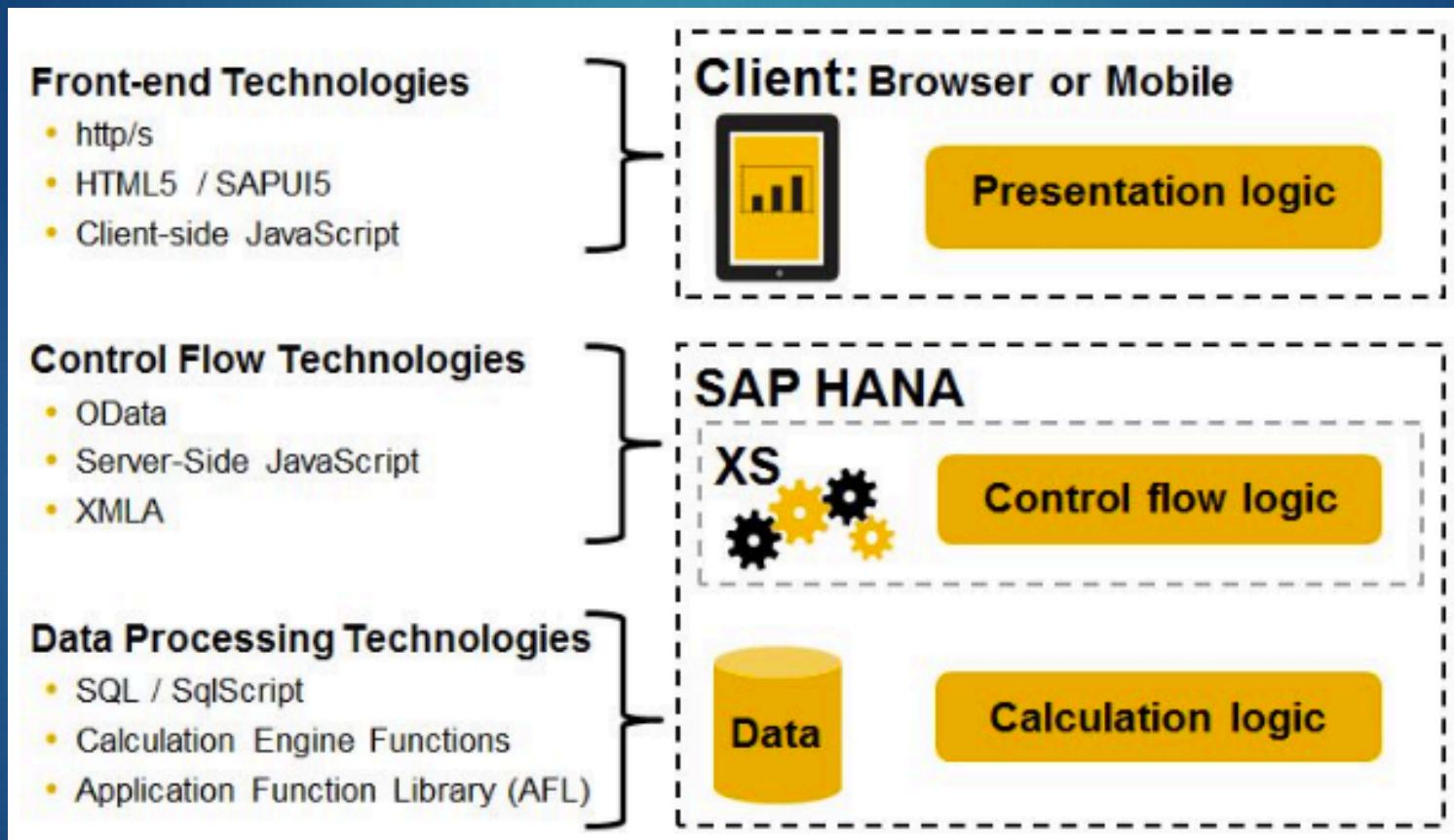
CORE LOCATION

Discussions

- ▶ Advantages, Disadvantages?
- ▶ Opportunities and Limits?
- ▶ Future Perspectives?

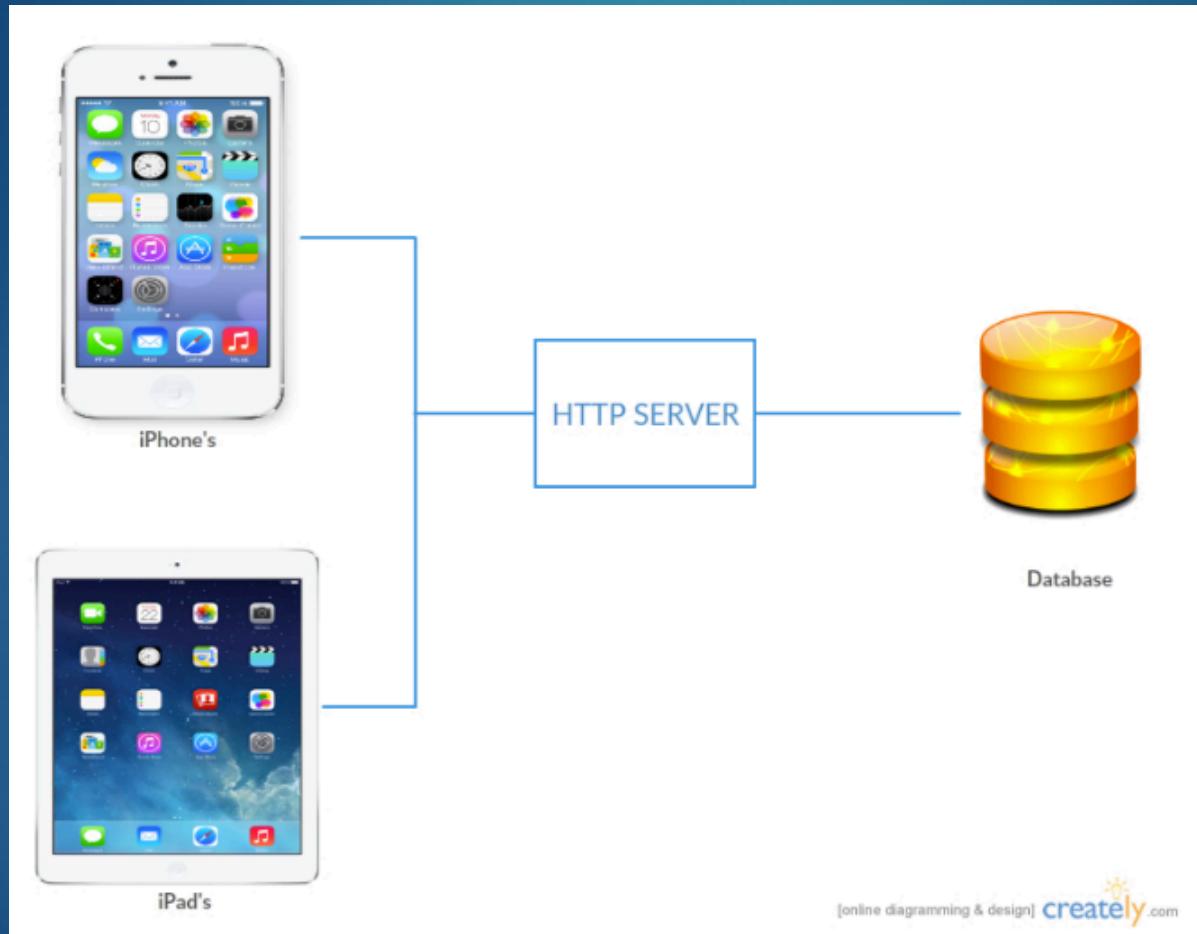
System

► Architecture (SAP XS Engine)



System

► Architecture



System

- ▶ Main algorithms
 - Room Booking
 - Maze Algorithm
 - Parsing JSON
 - Gallery Image Upload
 - Navigation
 - Geo-Location Notifications

Design

- ▶ Overview of the main requirements
 - ▶ Functional
 - Easy to Use GUI
 - List and Find (Search)
 - Map / Navigation
 - Geo Location Notification
 - Booking System
 - Review

Main Requirements

- ▶ System

- Client – iOS 9+ iOS Devices

- Internet Connection, GPS

- Backend – SAP HANA with Geo Spatial Data Support

Main Requirements

► Data

Building and Room information including co-ordinates (Geo Spatial Data – Polygons & Points)

Raw	Parsed
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```
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    "coordinates": [  
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          -6.225108  
        ],  
        [ [ 53.309007,  
            -6.223681  
          ],  
          [ [ 53.307648,  
              -6.224217  
            ],  
            [ [ 53.307801,  
                -6.225655  
              ],  
              [ [ 53.30918,  
                  -6.225108  
                ]  
              ]  
            ]  
          ]  
        ]  
      ]  
    ]  
  },  
  "country": "Ireland",  
  "city": "Dublin",  
  "numberOfFloors": "3",  
  "meetingRooms": [  
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      "id": "6",  
      "name": "Meeting Room",  
      "floorNumber": 3,  
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              -6.224571  
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      },  
      "capacity": 100,  
      "roomType": "Theatre",  
      "buildingId": "DUBLIN04"  
    }  
  ]  
}
```

Parsed JSON Data Sample returned by the Web Service through http request that will be consumed by the client Application.

Evaluation

- ▶ How will you evaluate the system?

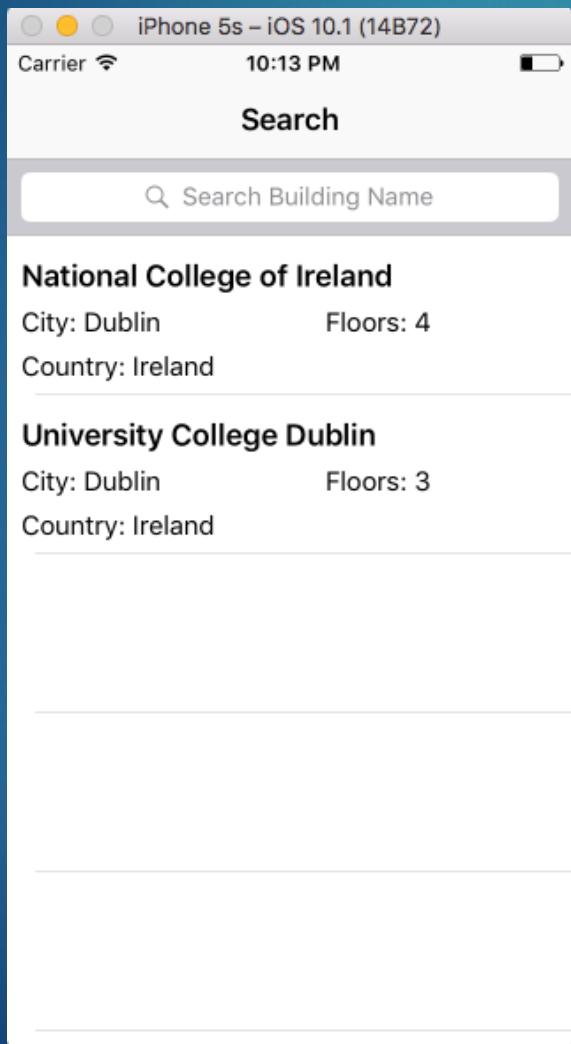
The system will go through –

- Subjective Evaluation
- Unit Testing
- System Testing

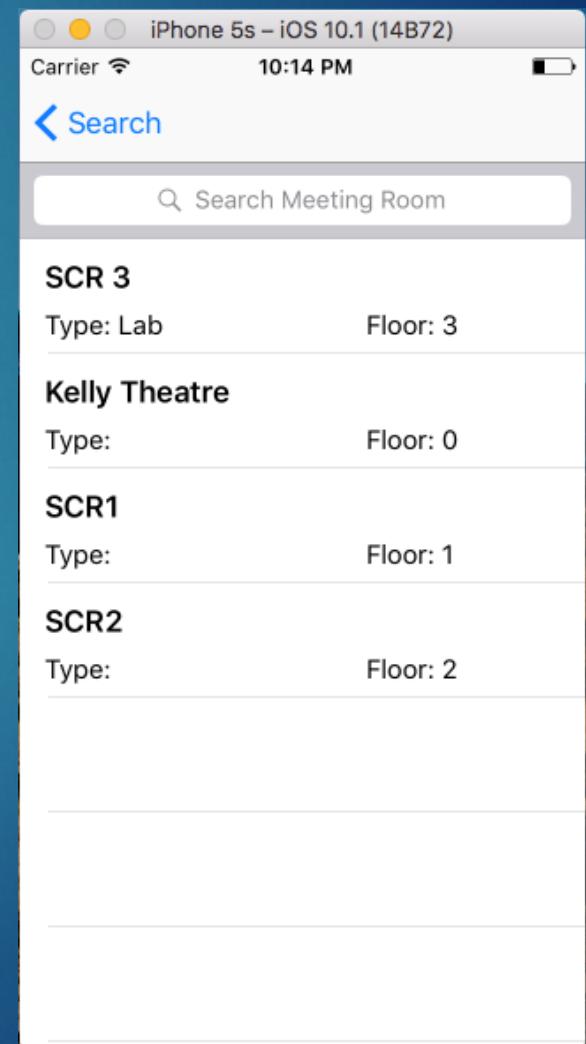
Demonstration

► GUI (Screen Shots)

List of
Buildings

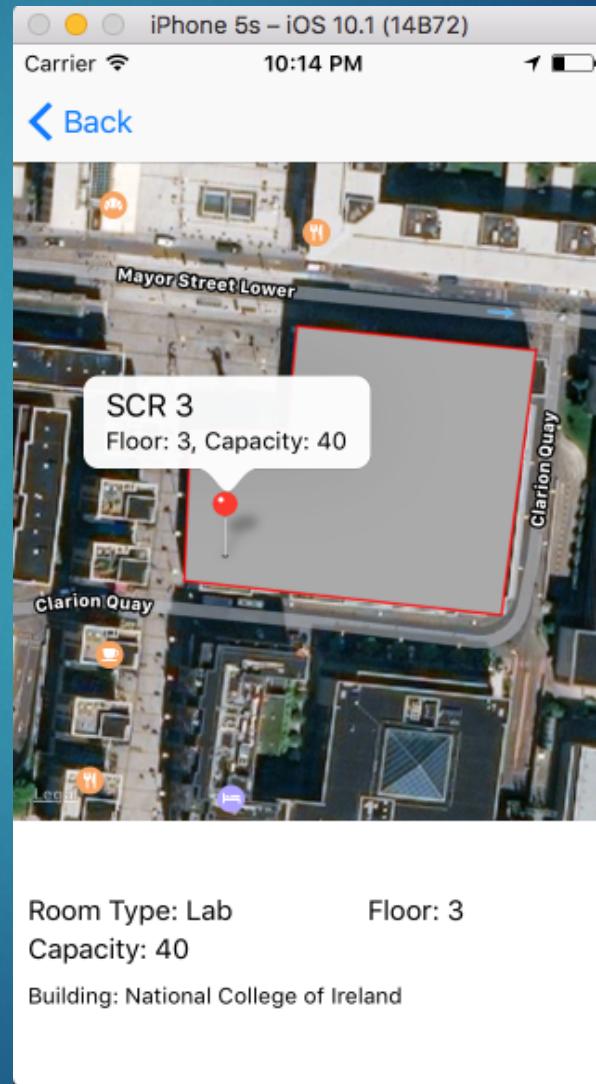
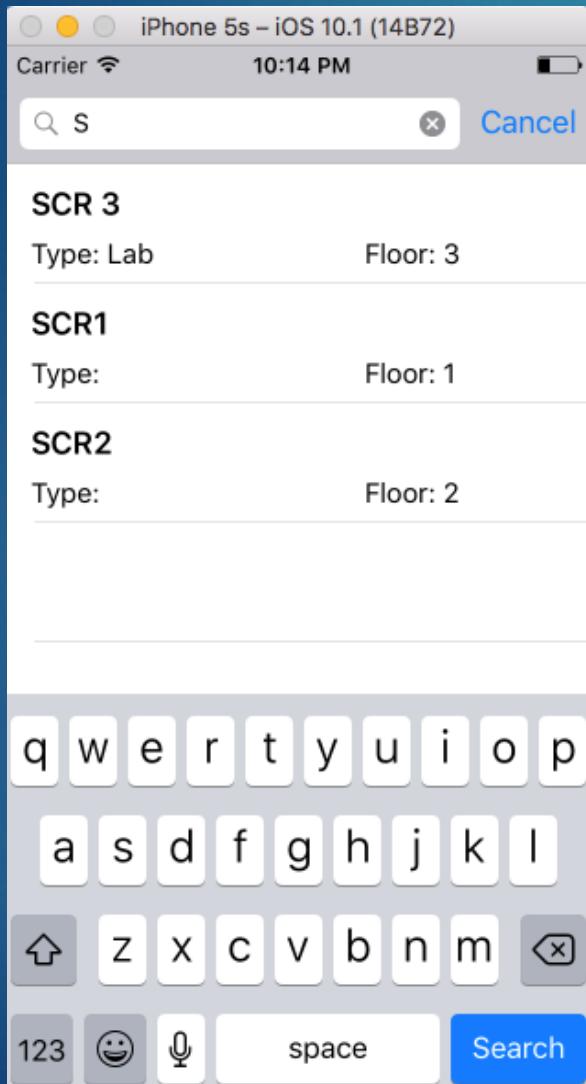


List of
Meeting
Rooms



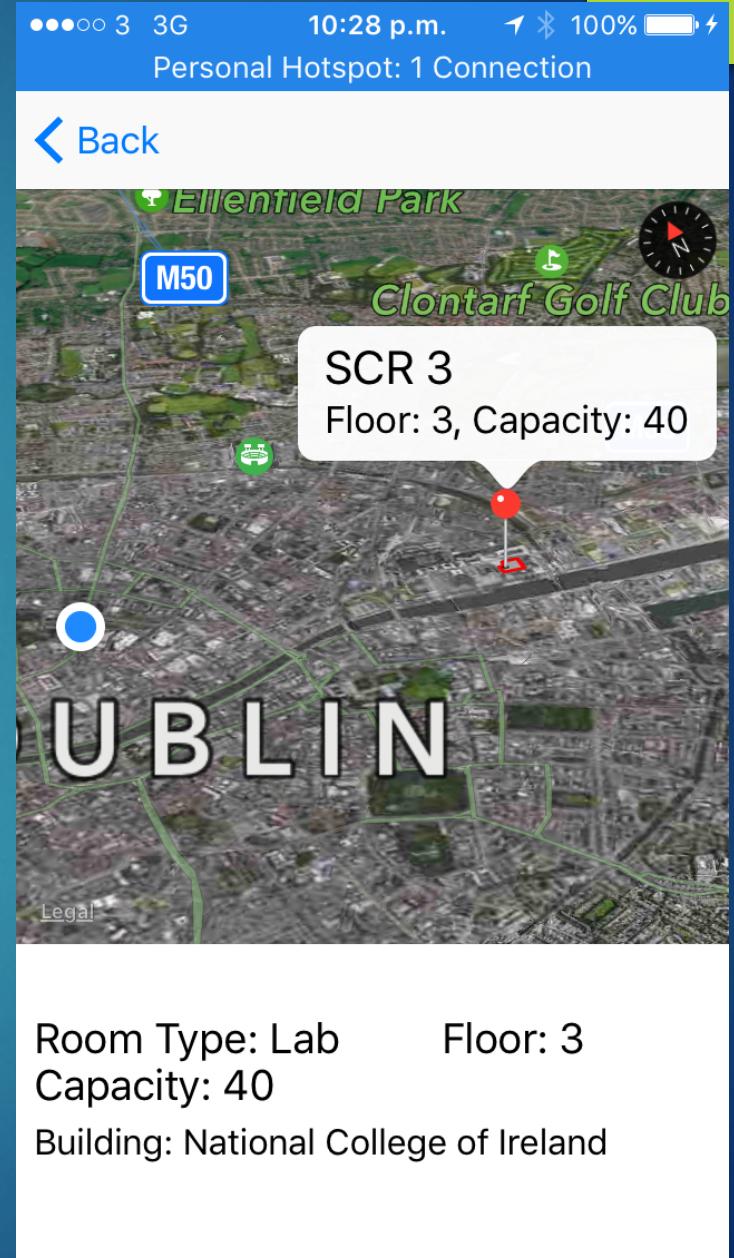
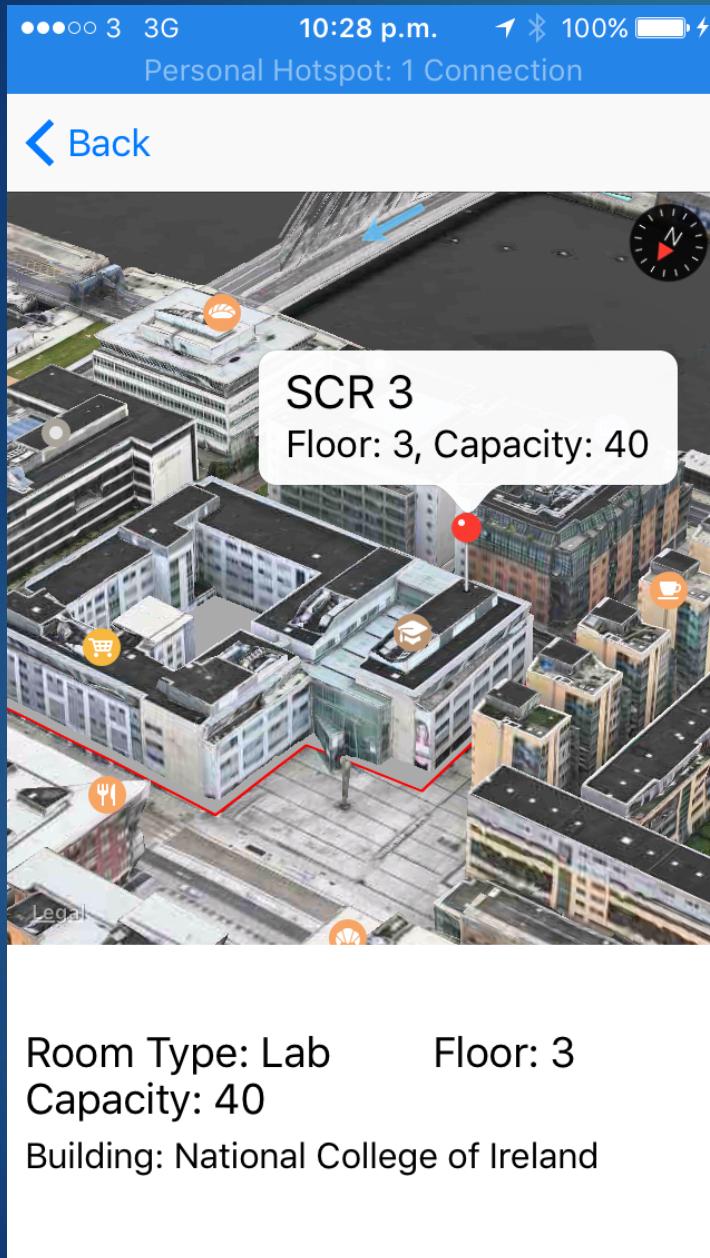
Demonstration (GUI)

Search



Building drawn
on the map
&
With Selected
meeting
room

3D View Available through Apple Maps and Shows Current Location



Going Forward

► Project Plan

Next Step after exams is to implement Room booking and Navigation features and then the rest of the features.

Discussion

- ▶ General Discussion
- ▶ Feedback