Meeting Room Pro

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

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Available On:

Github/Virksaabnavjot/MRPRO

Introduction

MeetingRoom Pro (Find, Review, Book)

What is the project/product about ?

- Project Context

A room assistant application that allows the user to

1. Book Rooms
2. Navigate
3. See the Building and the Meeting room on the map
4. Look at room gallery and upload images and review rooms .

And more discussed in further slides.

Background

What were the reasons to choose this project?

- Its very hard to find rooms in large corporate buildings.
- Is very hard to find rooms/location in a building if you are new to the environment.
- The idea originated during my internship, when it was hard to find and book meeting rooms.
- People needed easy solution to book and find rooms.
- People needed an organized system, where they can choose b/w rooms based on their

Project Goals

- Build easy and user friendly GUI.
- Build easy to use features and functionality.
- Minimal learning curve to start using the application to its fullest.
- Expand internationally.
- Happy users and Customer.

Target Users

Who can use this product ?

- Corporate companies and their employees.
- Schools, Colleges and Universities
- Teachers and Students
- Facilities department
- IT department

List of Features Users can benefit from ?

SEARCH

LIST AND FIND

MAP AND ROOM DETAILS

REVIEWS

GALLERY

PHOTO UPLOAD

BOOK ROOM

MY MEETINGS

Competitors

- Room Finder

Allows to find and book rooms inside Outlook and Office 365.

Drawbacks: Limited to outlook / microsoft products, plugin and not an independent application.

- Skedda

Online booking and scheduling for meeting rooms.

Drawbacks: Only available to publically available places and only web based.

System (iOS Application)

What are the technologies used ?

Front-end : iOS Application is built with Swift 3 using Xcode IDE.

XCODE

SWIFT 3

JSON

MAPKIT

COCOAPODS

CORE LOCATION

System (WEB Service)

What are the technologies used ?

Back-end : Web service using PHP, CodeIgniter, webhost using Apache server and MySQL database.

PHP

CodeIgniter

JSON

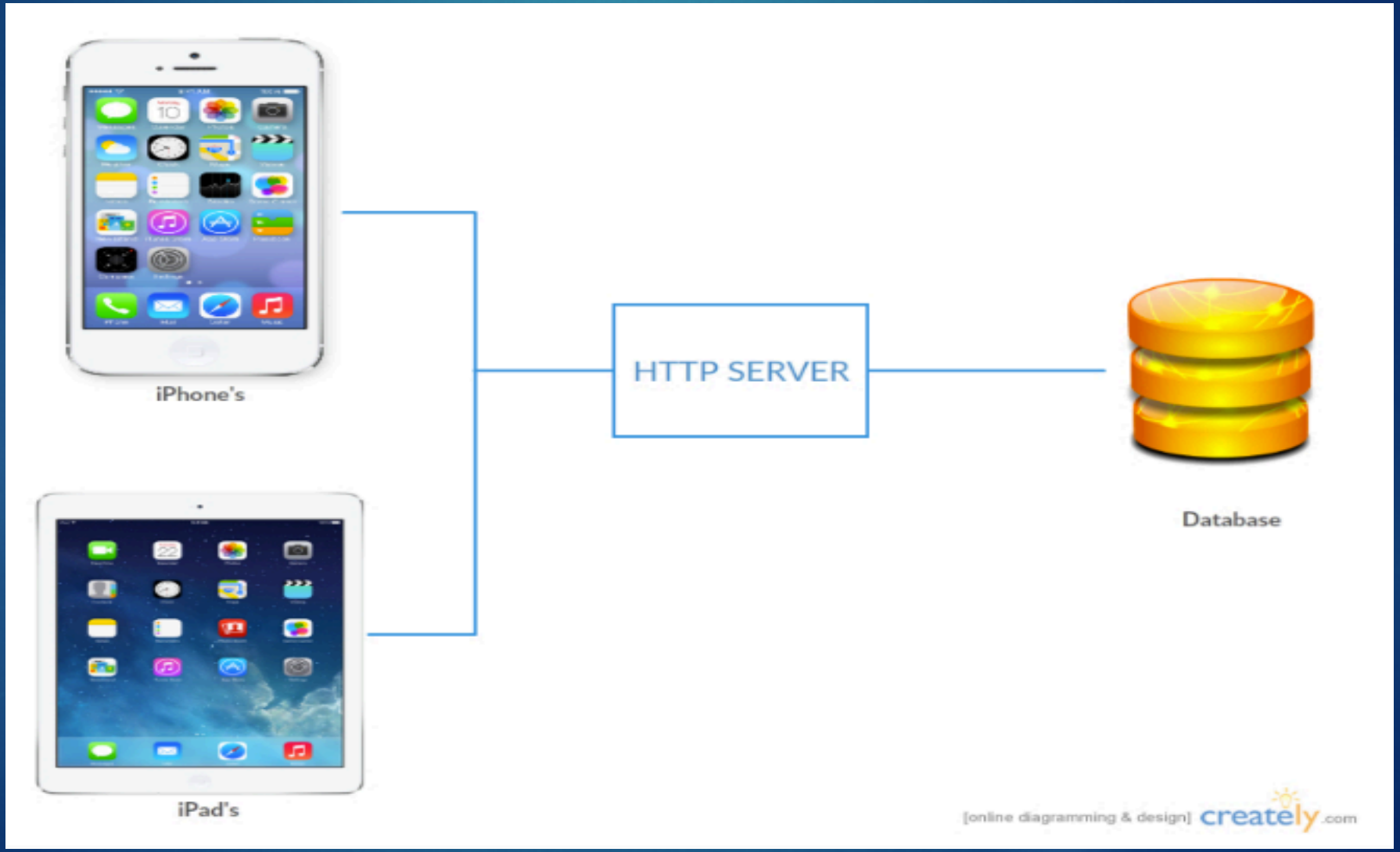
MySQL

000 Web host

phpMyAdmin

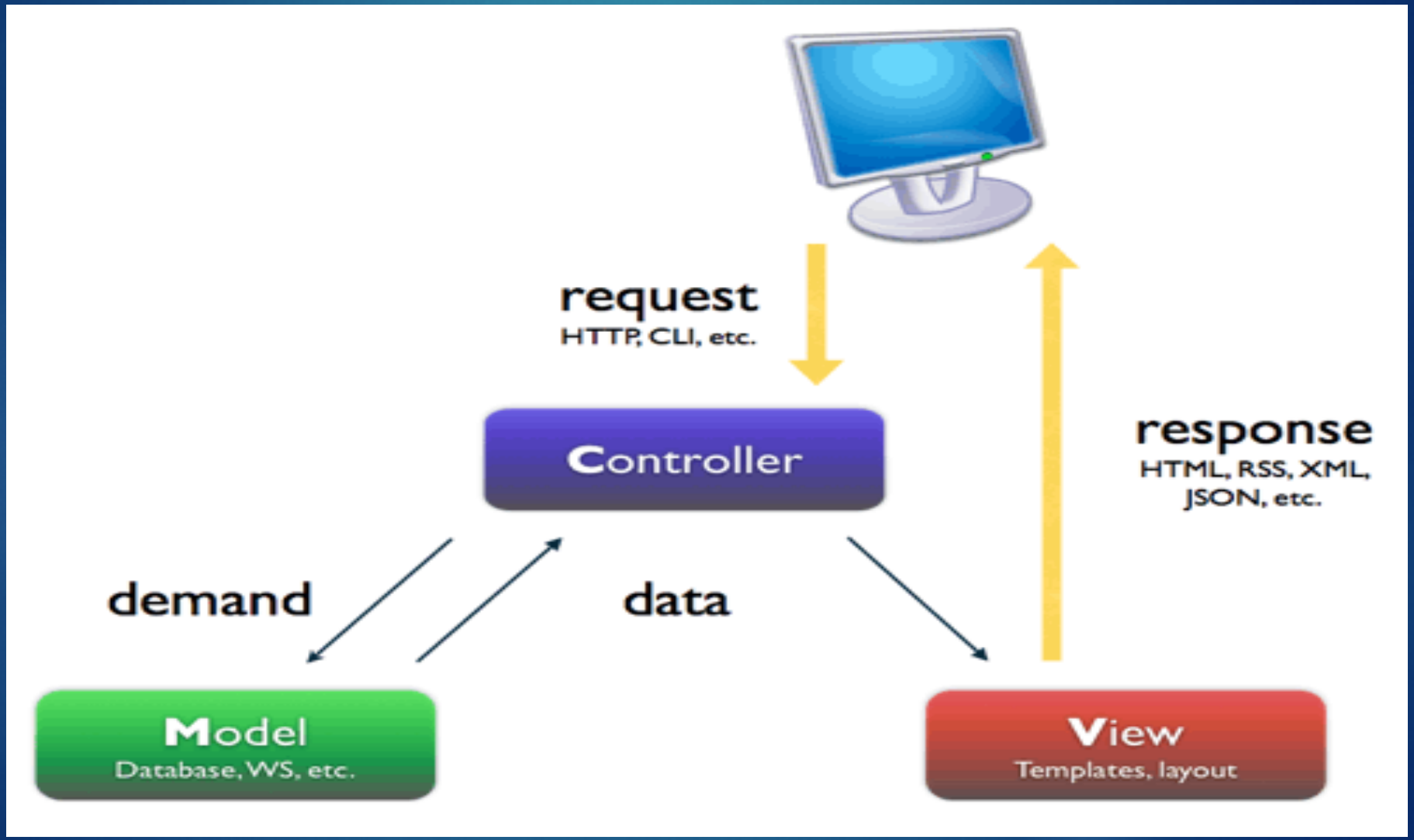
System

System Architecture



System

MVC Architecture (CodeIgniter)



System

Main algorithms

- Room Booking
- Parsing JSON
- Parsing Geo-spatial data
- Gallery and Image Upload
- Review System
- Room Search

Design

Overview of the main functional requirements/features.

- Easy to Use GUI
- List and Find (Search)
- Map / Navigation
- My Meetings
- Booking System
- Review
- Gallery and Photo Upload

App Features Summary and Demonstration

FEATURE 1: SEARCH

Search Buildings
And
Meeting Rooms

App Features Summary and Demonstration

FEATURE 2: LIST AND FIND

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

App Features Summary and Demonstration

FEATURE 3: MAP AND ROOM DETAILS

Allows the user to see the building and room on the map, user can opt between 2d or 3d view of the map to see the actual building and places around it and all the related information to the room.

App Features Summary and Demonstration

FEATURE 4: GALLERY

Allows the user to see pictures of the room, which helps him to make decisions based on his/her requirements.

App Features Summary and Demonstration

FEATURE 5: PHOTO UPLOAD

Allows the user to add/upload Pictures of the rooms and building to the cloud from the camera or phone's gallery.

App Features Summary and Demonstration

FEATURE 6: USER REVIEWS

Allows the user to review and provide the rating for a room based on their experience with the room, this feature helps other users and admin to get more insights about the room.

App Features Summary and Demonstration

FEATURE 7: ROOM BOOKING

Allows the user to book meeting room by choosing a room, title, date and time And the people he wants to invite to the meeting.

App Features Summary and Demonstration

FEATURE 8: MY MEETINGS

Allows the user to view all the booked meetings/rooms.

Discussions

- Advantages ?

  The application is easy to use and very useful.

- Disadvantages and Limits ?

  Huge Data requirements.

- Opportunities ?

  International expansion as the application is very scalable.

- Future Perspectives?

  Indoor Navigation, using beacons or wifi - triangulation.

Main Requirements

System

Client – iOS 10+ iOS Devices

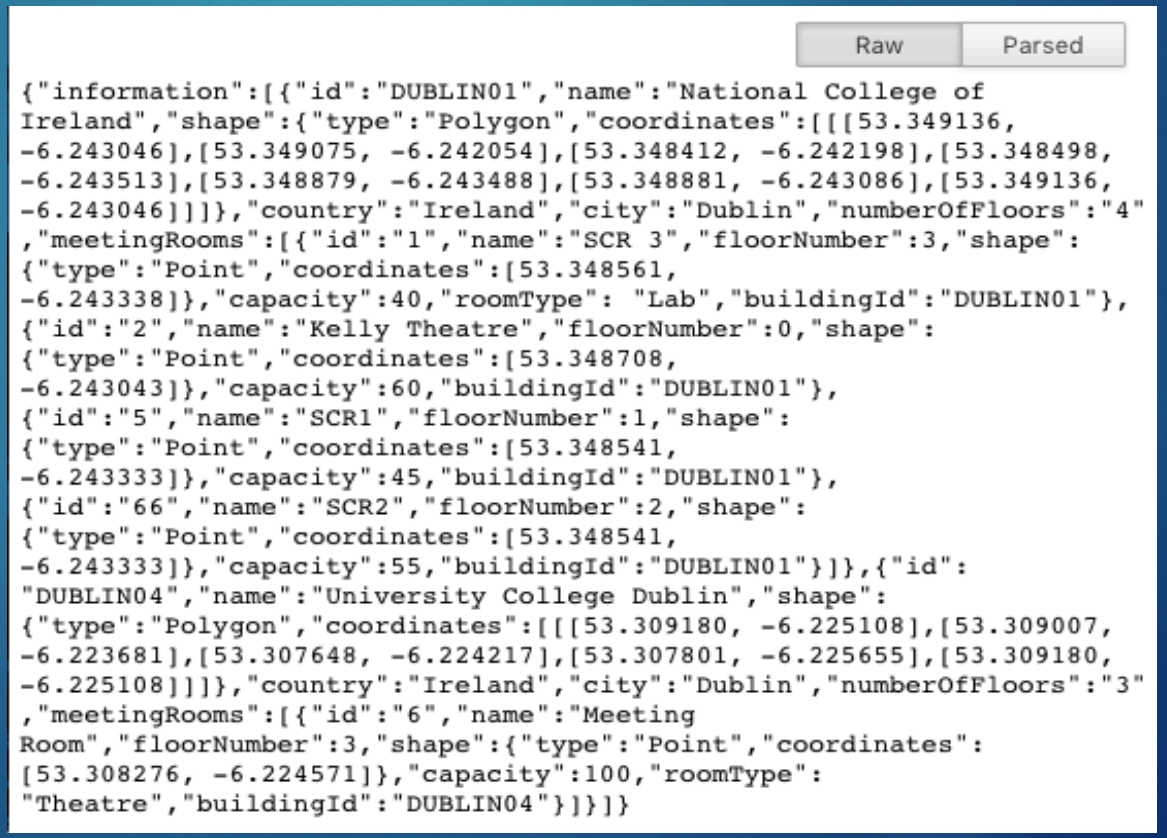
Internet Connection, GPS

Backend – MySQL database version with Geospatial data support.

Main Requirements

- Data

Building and Room information including co-ordinates (Geo Spatial Data – Polygons & Points or saved as String and parse on frontend.)



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          -6.225108
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      "roomType": "Theatre",
      "buildingId": "DUBLIN04"
    }
  ]
}
```


Parsed JSON Data Sample returned by the Web Service through http request, Similar data is consumed by the client Application.

Evaluation

How will you evaluate the system?

Unit Testing and User Testing and Heuristic Evaluation is incorporated in the project for evaluation.

What is Unit Testing ?

Unit Testing is a testing by which individual units of code are tested to determine whether they fit for use.

What is User Testing ?

User testing is the most effective way to discover any barriers that users will face.

What is Heuristic Evaluation ?

Usability inspection method for computer software.

Unit Testing

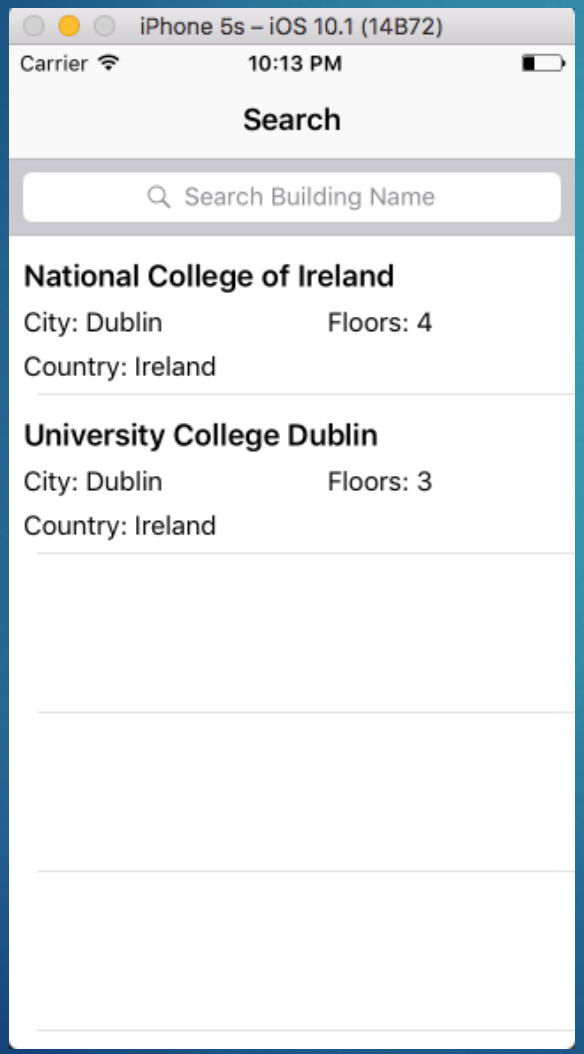
User Testing (Survey)

Heuristic Evaluation

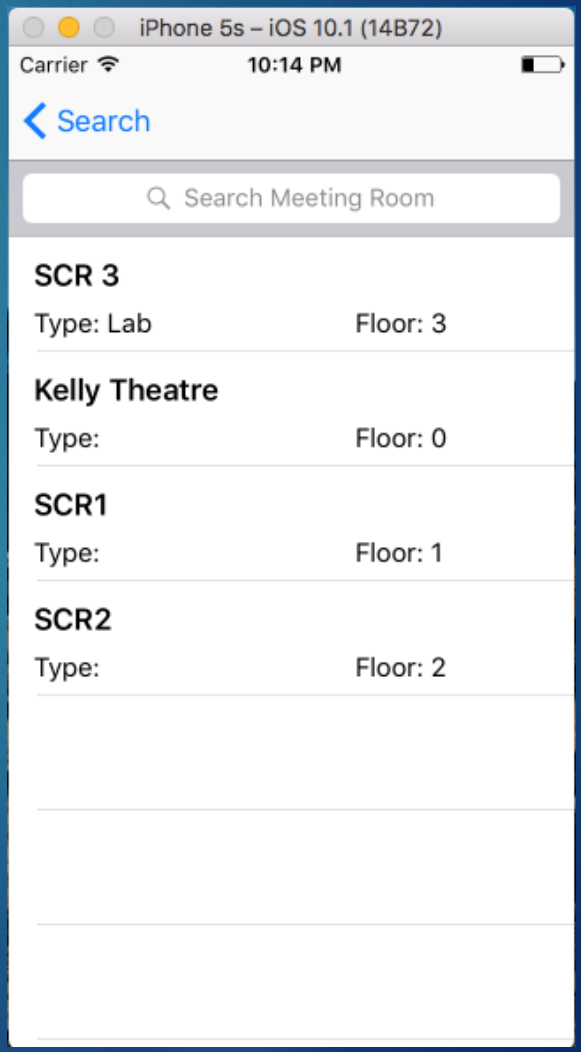
Demonstration

- GUI (Screen Shots)

List of Buildings



List of Meeting Rooms



Demonstration

DEMO OF THE APPLICATION ON REAL DEVICE.

Discussion

- General Discussion
- Questions
- Feedback

The End

Thanks