Room Usage Application

Project Management Plan

VERSION 1.0.0

Adeline Soerjonoto, Jason Yonathan, Michael Abdelmessih

TEAM 051

15 January 2020

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Introduction and Purpose

The room usage application is a mobile web application to be used by students attending Monash College. It allows the user to create and store an observation of the statistics of a room on campus. This includes the proportion of seats being used, and whether or not any of the utilities systems (ie. lights and the heating and cooling systems) are on. The app can also track the location of the user and show the time of their observations. The purpose of this app is to help Monash College be more eco-friendly by showing users just how much energy and space is being wasted, while also avoiding the utilisation of a paper-based observations system. Our hope is that this will help Monash College utilise its resources more effectively.

Project Information

Background and intended use

This room usage application has been developed to allow Monash College and its students to easily track the campus' room usage. It does this by allowing the user to log an observation of each room with its statistics. These statistics will then be used to assist Monash College with its management of seating and utilities systems.

Scope

The room's statistics that the application tracks are limited to the address, the room number, whether or not the lights are in use, whether or not the heating or cooling systems are in use, and "room utilisation" (the proportion of seats being used compared to the total amount of seats in a room).

Deliverables/due dates

Features	Team Member(s)	Due	Information
1. RoomUsage class	Adeline	First Week	
2. RoomUsageList class	Adeline	First Week	Dependent on Feature 1's completion.
3. New Room Observation	Adeline	First Week	Dependent on Feature 1 and 2's completion.
4. Location Tracking	Michael	Second Week	Dependent on Feature 3's completion.
5. Storing RoomUsageList data in localStorage	Jason	Second Week	Dependent on Feature 1 and 2's completion.
6. Loading RoomUsage data from localStorage	Jason	Second Week	Dependent on Feature 5's completion.
7. Observations page	Adeline	Third Week	Dependent on Feature 6's completion.
8. Deleting observations	Jason	Third Week	Dependent on Feature 7's completion.
9. Searching the observations	Michael	Third Week	Dependent on Feature 7's completion.
10. Bucketing room observations	Adeline	Fourth Week	Dependent on Feature 1 and 2's completion.
11. Worst occupancy by hour	Jason	Fourth Week	Dependent on Feature 10's completion.
12. Building averages	Michael	Fifth Week	Dependent on Feature 10's completion.
13. Buildings with wasteful observations	Michael	Fifth Week	Dependent on Feature 12's completion.
Project Management Plan (PMP)	All team members	Sixth Week	
User Guide	Jason and Michael	Sixth Week	
Class Diagram	Adeline	Sixth Week	

Personnel/HR Management

- Adeline Soerjonoto
  - Contact: 0402 135 704
  - Responsibilities:
    - Creating the classes.
    - Building the observation page and the observation bucket.
    - Making the Class diagram.
    - Making the Project Management Plan.

- Jason Yonathan
  - Contact: 0432 766 736
  - Responsibilities:
    - Managing the storage and retrieval data from the local storage.
    - Working on deleting observations and worst occupancy per hour features.
    - Making the User Guide.
    - Making the Project Management Plan.

- Michael Abdelmessih
  - Contact: 0410 768 848
  - Responsibilities:
    - Building the location tracking feature.
    - Working on searching observations.
    - Making the User Guide.
    - Making the Project Management Plan.

Decisions on Process

We used GitKraken, Asana, Google Docs and Messenger. All coding was done in Brackets and uploaded to a repository using GitKraken. The assignment and management of features were arranged through Asana. In Asana, we assigned each team member with tasks that needed to be done. Google Docs was used to create the documentation for the project (eg. the user guide, class diagram, etc.). We used Messenger to communicate with each other regarding group meetings, issues we had, and anything else that was irrelevant to the code itself. All of these tools were used frequently with the aim of finishing before the due date.

Communications Management

For this project, we utilised Messenger for communication between team members. Because of the short amount of time given, fast responses are essential to the project's success. Therefore, our use of Messenger, an instant messaging platform, allowed us to work much more effectively on our project. We also communicated using the tools and platforms that have been previously mentioned. In addition, weekly group meetings also allowed us to discuss any major issues we had in finishing this project.

When initially starting this project, we committed ourselves to respond to the team's messages within a day of receiving them. However, team members have sometimes had a personal issue which did not allow them to reply within this time. We handled this by loosening up on our guidelines and making sure that we just responded as soon as we could. This approach worked far better and helped our team keep up consistent and healthy communication until the project was complete.

Risk Management

- When pushing changes through GitKraken, there may be conflicts between the files being uploaded and the files already in the repository.
    - We will determine which of the uploaded files or the files in the repository are most recent. If both of them have necessary changes that conflict with each other, we then will merge them manually.
    - As we are new to GitKraken, the risk of this happening is moderately high as we are not used to manually and habitually checking for any updates.
    - This issue can be avoided by pushing and pulling changes regularly to make sure our local code is always up to date.