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| ROLE & NAME | PROPOSED PROJECT STEP/WORK |
| Sebastian(Project Manager) | Lead the group, assign roles and task. Make sure all group members perform adequately and on schedule. Overlook all members and aiding with any issues. |
| Matteo(Developer/Tester) | Receives software plans and designs and implements them using java topics developed through the course. Implements the data from the analyst into a database which calculates the emissions. Along with creating the program, this member tests the code for errors and optimizes it for optimum results. |
| Rytis(Designer) | Receives main objective from the project manager. Creates a plan for the program. Designer reduces any complications within the plan to facilitate the job of the developer. |
| Shahroze (Analyst) | Gathers data and analyzes it with the information received from the other groups. This member verifies the number of lights. Once confirmed, analyst creates a file with the values and presents it to the developer. If any issues are spotted with the data, the developer informs the analyst, so that he may consolidate the data. |

**Step 1: REQUIREMENTS DETERMINATION**

Analyst develops an understanding of the problem.

Goals outlined

Tasks established

Data requirements gathered.

Define an overall system architecture

Specify the applications and databases

Understand when to use each requirements-analysis technique

Creating a requirements definition

Requirements are what ensures that the new system will actually provide the expected value

Separates the high level request and splits it into small sub tasks the system must do.

**Step 2: REQUIREMENTS SPECIFICATION**

Purpose- to calculate the carbon emission caused by the lighting in Loyola catholic secondary school.

System features- Ability to calculate the amount of lights and their emissions. In addition, the system will be able to calculate how many trees must be planted to offset the negative effects of the school.

Operating environment- Used for Loyola Catholic Secondary school, but may be applied to other facilities that are interested in calculating their emissions.

Users- Currently only used by the school of Loyola, but may be used by anyone that has a facility and wants to count their emissions.

Design constraints- Java is required to run the system.

Hardware interface- Interaction with the hardware is normal input into a computer. This includes a standard mouse and keyboard along with a medium sized monitor.

Software interface- Software used is Dr. Java, Eclipse and GitHub. This software is familiar amongst the group members.

Performance requirements- The program must run relatively quick, but there are no specific requirements for performance as long as it does what it was created to do.

Timeline

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| DATE | PROPOSED STEP & YOUR NAME BESIDE YOUR INFORMATION |
| Thursday | Meeting up in the groups for the first time.  Assigning the roles.  Gathering initial data. |
| Friday | Finalizing the data.  Initializing progress on the software and experimenting with ideas.  Conversing about how to set up the program. |
| Monday | Completion of the UML.  Progression on the software.  Placement of data into a file. |
| Tuesday | Main methods complete.  Errors in data removed.  Optimization of software design. |
| Wednesday | Continuation of creating the software.  Communication between the data and the software.  Input and |
| Thursday | Completion of the software. |
| Friday | Testing for glitches in the software and reading the data. |

**Step 3:**

**Step 3: FEASIBILITY ANALYSIS**

***Economic feasibility***: (The likely benefits outweigh the cost of solving the problem which is generally demonstrated by a cost/ benefit analysis.) The analysis of the problem and solving it has no cost. In addition it does not cost anything to access the data. In conclusion, the solution will not be used for economic gain. Therefore the cost/benefit analysis is neutral.

***Operational feasibility***: (Whether the problem can be solved in the user’s environment with existing and proposed system workings?) The problem is solvable in this environment. All the data is to be collected from this location, while all electronic resources are available to every member of the group. In the current environment, the members can work optimally.

***Organizational feasibility***: (Whether the proposed system is consistent with the organization’s strategic objectives?) The proposed system will only be used to achieve the organization’s strategic objectives. Objective being to calculate the amount of energy and trees used yearly by this school; this program adequately calculates these objectives.

***Technical feasibility***: (Whether the problem be solved using existing technology and resources available?) There are no extra resources or equipment needed to calculate the solution. All software and hardware required to complete the task is available.

***Social feasibility***: (Whetherthe problem be solved without causing any social issues? Whether the system will be acceptable to the society?) The problem may cause a small amount of nuisance to certain classroom administrators that may have issues if counting classroom light fixtures causes disturbances. The completed system will be acceptable and helpful in society. It may even be used by other parties to calculate their energy consumption.