**Project Plan Document**

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| Project number | 41 |
| Project Title | Forecasting of Air Conditioning for commercial complex |
| Document | Project Plan |
| Creation date | 10th January 2020 |
| Created By | Akshat Goyal, Kanish Anand, Sridhar M, Nikunj Nawal |
| Client | Siva Prasad Tekumudi  Indriyn Data Analytics Private Limited |

# Brief problem statement

Given the energy consumption data of any building we have to estimate the future energy demand of the complex on an hourly and daily basis. We are supposed to create a web application for the pre-stated problem statement.

# Team Members

Akshat Goyal : Backend, Machine Learning

Kanish Anand : Backend , Machine Learning

Nikunj Nawal : Frontend, Documents

Sridhar M : Frontend, Documents, Managing Meets

# Team Communication

We meet twice or thrice per week and have meet for around 1 hour. As we all stay in Bakul we meet in one of our rooms on Tuesday, Friday, and Sunday according to a time convenient for everyone and share each one’s progress with his part of the project.

# Development Environment

The major tools that are being used or will be used during the development of the project are:

1. **Coding Platforms** :

* VSCode - To write the codes and integrate with gitlab using gitlens.
* Jupyter Notebook - For Machine Learning code.

1. **Programming Language :**

* Node js - For coding the backend of the project
* HTML/CSS - For frontend of the project
* MongoDB - For making the database to store information.
* Python - For Machine Learning (along with needed machine learning libraries).

1. **Collaboration Tools :**

* GitLab - Used to share the code and keep track of edits and reviews.

1. **Creating Project Documentation :**

* Google Docs & Drive - for sharing documentation and have a common place for all documents
* Google Sheets - for progress trackers

# Milestone Schedule

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| **Milestone** | **Due Date** | **Release** | **Deliverable?** |
| Create Draft Requirements | 21st Jan | R1 | No |
| Finalize Requirements | 22nd Jan | R1 | Yes |
| Create list of needed Programming languages | 23th Jan | R1 | No |
| Study all listed Programming languages | 30th Jan | R1 | Yes |
| Working on Data | 3rd Feb | R1 | No |
| Data Cleaning Part Finished | 15th Feb | R1 | Yes |
| Data Analysis | 15th Feb | R1 | No |
| Show graphs for data analysis | 21th Feb | R1 | Yes |
| Create Jupyter Notebook | 15th Feb | R1 | No |
| Finish Jupyter Notebook with working code | 24th Feb | R1 | Yes |
| Start making of Webapp | 26th Feb | R1 | No |
| Finished Webapp | 7th Apr | R2 | Yes |
| Thinking about Feature Engineering for increasing model accuracy | 30th March | R2 | No |
| Finalized model with all new parameters | 15th Apr | R2 | Yes |