Task System Design Documentation

The model used for the completion of the product was **CRISP-DM (Cross Industry Standard Process for Data Mining)** which consists of 6 phases *viz. Business Understanding Phase, Data Understanding Phase, Data pre-processing Phase, Modeling Phase, Evaluation Phase, Deployment Phase*.

1. Business Understanding: In this, the business problem and the motivation of that problem had to be understood in order to act accordingly further in the project.

2. Data Understanding: In this step, the roles and meanings of different variables present in the Dataset had to be understood.

3. Data Preparation: In this step data cleaning is performed in order to prepare data for further analysis and for building the machine learning model.

4. Modeling: In this step the appropriate machine learning model is selected, then dataset is divided into the training and test sets, and then finally the model is trained on the training data in order to get the best results.

5. Evaluation: In this step, the model is evaluated against the test set using various performance metrics like looking at R-squared, Adjusted R-squared, Residual Plots, etc.

6. Deployment: The model is then finalized after getting satisfied results in the previous step and finally delivered to the client for their use or presented as per requirement.