**Model Development Phase Template**

| Date | 21 June 2024 |
| --- | --- |
| Team ID | 739954 |
| Project Title | Cereal analysis based on ratings by using mechine learning techniques |
| Maximum Marks | 5 Marks |

**Model Selection Report**

In the model selection report for future deep learning and computer vision projects, various architectures, such as CNNs or RNNs, will be evaluated. Factors such as performance, complexity, and computational requirements will be considered to determine the most suitable model for the task at hand.

A model selection report outlines the process of evaluating and choosing the most suitable machine learning model for a specific task, detailing criteria such as performance metrics, computational efficiency, interpretability, and suitability for the dataset's characteristics to justify the final model choice.

**Model Selection Report:**

| **Model** | **Description** |
| --- | --- |
| Linear Regression Model | Linear Regression is a supervised learning algorithm used to predict the value of a dependent variable (target) based on the values of one or more independent variables (features). In the context of cereal analysis, the goal is to predict the rating of a cereal based on various attributes of the cereal Predict the ratings of different cereals based on their nutritional and other characteristics. |
| R2\_Score Model | The R2 Score, also known as the coefficient of determination, is a statistical measure that indicates the proportion of the variance in the dependent variable that is predictable from the independent variables. To evaluate the performance of a predictive model (e.g., Linear Regression) that estimates cereal ratings based on various features of the cereals. |