

Dataset Link:

The dataset used in the project can be found on Kaggle:

<https://www.kaggle.com/datasets/rkiattisak/student-performance-in-mathematics>

Description of Project:

The project is based on the analysis of student performance in mathematics. It aims to explore the different factors that may affect the students' academic performance and create a predictive model to determine a student's final grade based on various variables. The analysis includes data preprocessing, data visualization, feature selection, and model training.

A brief explanation of the outputs of the Student performance prediction Project

The outputs of the project include:

1. Data visualization: various plots to visualize the distribution of variables and their correlation with the target variable.
2. Feature selection: identifying the most significant variables that affect the students' academic performance.
3. Model training and evaluation: building a predictive model using various machine learning algorithms and evaluating their performance.

Description of Output:

The project includes multiple outputs such as data visualization charts, feature selection results, and model performance metrics. The final output is a predictive model that can determine a student's final grade based on various input features.

Instructions on How to Run the Code/Project/File:

1. To run the code in the notebook, you will need to have Jupyter Notebook installed on your computer. Once you have installed the Jupyter Notebook, you can download the notebook from the Kaggle website and open it in the Jupyter Notebook.
2. Before running the code, you will need to make sure that you have downloaded the necessary data files and saved them in the correct directory. The notebook provides instructions on how to download the data files and where to save them.

3. Once you have downloaded the data files and opened the notebook in Jupyter Notebook, you can run each cell of the notebook by clicking on the cell and then clicking the "Run" button in the toolbar or by using the keyboard shortcut "Shift + Enter".
4. It is recommended that you run the code cells in order, as some cells depend on the output of earlier cells. The notebook also provides explanations and comments for each code cell, so beginners can follow along and understand the code.

Note: Make sure to update the file paths in the code cells to match the location of the downloaded dataset and kernel files on your local machine.