

Unleashing the potential of our youth: A

Student Performance Analysis

Introduction:

A Country's growth is strongly measured by quality of it's education system. Today it is stereotyped as an industry and like any other industry it facing challenges. Major challenges of higher education being decrease students success rate and their leaving a course without completion.

Analysis student work is an essential part of select and examine student work. Many factors can influence student performance. include the influence of the parent's education background, test preparation and so on.

The dataset contains the marks secured by 1000 students from a school. The analysis aims to understand influence of important factors such as parental education.

Specify the business problem:

A business problem can be defined as any hurdle, situation, or variation that leads to a difference between the desired objective and accomplished results. Some problems present themselves, while others require in-depth analysis of the organization.

gain great insight into target markets

Enhance decision-making capabilities

Create targeted strategies and marketing campaigns.

improve operational efficiency and minimize risk

identify new product and service opportunities.

The identification of a problem holds tremendous value, once identified, rectify problem efficiently. The issues are involved in business.

Business Requirement:

Business Requirement, also known as Stakeholder Requirement Specification (SRS), describes the characteristics of a proposed system from the viewpoint of the system and user like a Concept. products, systems, software and processes are way of how to deliver satisfy, it meet business requirements.

- gathering Stakeholder Requirements
- Categorizing Stakeholder Requirements
- Analysing and interpreting Requirements
- Documenting Requirement.

Literature survey:-

A literature survey is an overview of the previously published works on a topic. The term can refer to a full scholarly paper or a section of a scholarly work such as article. Either way literature survey is supposed to provide researcher with general image of the existing knowledge on the topic.

A good literature survey can ensure a proper research & theoretical framework.

- Identifying the finding in each study that answer your research questions (aim)
- Condensing and summarizing these finding
- Grouping the finding thematically into categories that speak to your research questions.

Social and business impact:

Social impact is a significant change that positively addresses a pressing injustice or challenge such as, climate change, human right or the education gap.

When business and organisations establish social impact initiatives, the difference is felt beyond the communities the effort's activities touch.

- gender equality promotion
- climate change mitigation
- public health enhancement
- Community development
- Human right's protection.

Conclusion:

This brings us to end to the student performance prediction. Let us review our work. First we start by defining our problem statement. Looking into the algorithms we were going to use and the regression implementation chart table. Then we move on to practically implementing the identification and regression algorithms. Moving forward, we compared the performance of these models. That proved that it works best for student performance prediction problems.

Key takeaways from this student performance are: Identity of student performance is important for any institutions.

Least regression gives better accuracy compare to other regression problems.

Least regression is the best fit for the problem.