

# Project Proposal Phase 1 (Revised)

- **Participants Names**

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- **Project Name**

- Exploring Predictors of Student Retention and Academic Success in Higher Education

- **Target Data Set**

- <https://www.kaggle.com/datasets/thedevastator/higher-education-predictors-of-student-retention>

- **Project Proposal Summary**

- This project aims to analyze a comprehensive dataset of undergraduate students from a higher education institution to uncover predictors of student retention and academic success. By examining demographic, socio-economic, and academic performance factors, we seek to identify key variables influencing student outcomes. The project will involve exploratory data analysis, predictive modeling, and interpretation of results to provide valuable insights for institutions aiming to improve student retention and academic performance.

- **Questions**

1. How do demographic characteristics such as marital status, gender, and nationality correlate with student retention and academic success?
2. What role do socio-economic factors like parental qualifications, occupation, and financial status play in predicting student dropout or completion?
3. Are there any trends in enrollment patterns, such as application mode and previous qualifications, that are associated with higher academic performance?
4. How do variables related to the student's academic journey, such as curricular units credited/enrolled/evaluated/approved, influence their likelihood of dropout or academic success?

- **Target users of your visualization system**

1. Higher education administrators and policymakers seeking insights into factors affecting student retention and academic success.
2. Academic advisors and student support services interested in identifying at-risk students and providing targeted interventions.
3. Researchers and analysts studying educational outcomes and looking to understand the complex interplay of variables influencing student success.
4. Education policymakers and advocacy groups aiming to develop strategies for improving access and equity in higher education.

- **End goals of your project**

- The project aims to empower higher education institutions, support services, policymakers, and researchers by providing predictive models and data-driven insights. This system will help institutions implement targeted interventions to enhance student retention and academic success, support services to identify at-risk students early, and policymakers to develop evidence-based policies addressing educational inequities. Overall, it will foster continuous improvement in educational practices and drive ongoing research and innovation to improve student outcomes.