

# PROJECT PROPOSAL

## Executive Summary

This is the project proposal for the Final Data Science Project. This project focuses on the data from the Program for International Student Assessment. The data that we will analyze focus on student questionnaire data. This Project Proposal will detail the following:

- Objectives of the Project
- Background of the data and data collection
- the project scope: elements of the project
- Functional Requirements of the project
- Personnel Requirements: Project Team Players
- Delivery Schedule
- Other Project Requirements
- Assumptions
- Limitations
- Risks

This document is dedicated to Zaya and Danielle's Project and it will explain the purpose and scope for the project.

## Significance of the Study

This project is important as both Zaya and Danielle were once international students and the ideas and experience of international students and their experiences as students is important on a personal and professional level. Business objectives should offer the details for why the project is important. Gaining insight into the needs and requirements of international students from their perspective gives stakeholders and those who are responsible for the acclimation of these students to an unfamiliar system, the information they need to improve students chances of achieving success. The goal of this project is to analyze the if gender affects an international student's chances of success in Math, The other goal of this project analyze if an international student's nationality affects; their chances of success in Math, Reading and Science.

## Background

This project is important as both Zaya and Danielle were once international students and the ideas and experience of international students and their experiences as students is important on a personal and professional level. It is also interesting for the team members to understand the difference between culture and education system in chosen countries.

The database that will be used is from PISA (Programme for International Student Assessment). PISA is the OECD's Programme for International Student Assessment. PISA measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges. The dataset contains mean (Pisa) attainment scores in math, reading and science by country and gender.

## Scope

*The Project will include data analysis of PISA Data that displays the Mean Math, Reading and Science scores of international students of certain countries located in Europe, Asia, and North America. The project will focus on the effect of gender and nationality on standardized test scores. The project will only focus on 3 countries and the mean test scores of students from these countries.*

## Functional requirements

*This project analyzes whether gender influences the standardized test scores of international students score in Math, Reading and Science. The independent variable will be gender and the dependent variable will be the mean test score for each subject for each student. We will perform a t test on all 3 data sets to answer this question.*

*The next question that we will answer from the data is if a student's nationality influences the capability of a student to score well on Math, Reading and Science tests. The independent variable for the analysis of this question is the nationality of the student and the dependent variable will be the mean value test score for each subject. The test that we will perform on the data sets will be ANOVA.*

## Personnel requirements

*The team is composed of Danielle Barnes and Zaya Gombodorj. Both Zaya and Danielle have worked in education and they are both immigrants.*

## Delivery schedule

Week 1 Project Planning

Week 2 Data Wrangling

Week 3 exploratory analysis

Week 4 Analyze Data

Week 5 Data visualization and recording

Week 6 Presentation

## Other requirements

*Entity Final Project requirements*

## Assumptions

To be determined

## Limitations

*To be determined*

## Risks

*To be determined*