Team 2 - Higher Education Statistics Since 1996
ITSC 3155 Final Project Proposal

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1 Introduction

When searching for college statistics like admission rate, tuition costs, GPA information, etc… there isn't a singular source that presents this information in an easily digestible format. Our goal is to create an easy to use dashboard with multiple filters that let you view a variety of college information to help you make an informed decision when choosing a college to attend. Our reasoning behind the need for this is a severe lack of credible usage of education that contributes to poor decisions in education infrastructure and planning. Wide access to credible data that is presented in an unbiased way is necessary for prudent decision making from the student level to the university level to the lawmaker level.

1.1 Product Vision

Our goal is to utilize open source data provided by all universities in the US to the Department of Education and the Office of Planning, Evaluation and Policy Development to create a multilayer dashboard that allows a variety of end-users from all different backgrounds to see quality representations of data that help them see trends and make decisions accordingly. This would include data that would help students make choices between colleges and universities based on their admittance information and information on the graduating classes in the past. This would give students an idea of the competitiveness of the schools and their chances of getting admitted. For policy makers, using this information allows insight into the trajectory of tuition, how much federal grant money is provided and the amount of money provided in the form of subsidized and unsubsidized loans for students year over year. This information is invaluable in the long term decision making of the US Legislature.

1.2 Customer Description

- Policymakers and Legislators
    - US House Representatives and Senators
    - State Governments
    - Department of Education
- Potential Students
    - Graduating high school students

- Adult students that are returning to school
- Accreditation boards
    - Find areas of concern
        - Abnormal grades
        - Abnormal tuition rates

1.3 Project Scope and Objectives

- 4 pages
    - Tuition
        - Cost of Tuition over years
        - GPA on Graduation vs Tuition
    - GPA
        - GPA per FT/PT Students
        - GPA Per State with Private/Public/All Toggle
    - SAT/ACT Trends on Admittance
    - Federal Loan Information
- 10 charts (Some TBD as we delve deeper into the dataset)
- 8 interactable components (2 per page)
- Use full range of data (1996-2020)
- Implement Dash Plotly
- Landing page to provide surface information and lead the user into the data visualizations

2   Project Resources

2.1   Group Members

1. Christian Bradley
2. Spencer Sipes
3. Justin Patterson
4. David Grant
5. Will Ingersoll

2.2 Data

College Scorecard Data from *data.ed.gov*, the Office of Planning, Evaluation and Policy Development (OPEPD) dating back as far as 1996.

This data include admissions information, tuition costs, graduation rates, GPA information, private/public status of school, location and more.