Project Ideas Charter

Team Members:

- David Grant
- Spencer Sipes
- Christian Bradley
- Will Ingersoll
- Justin Patterson

Potential Data Sets : (One from each member)

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Source of:
Description:
End-Use Customer:
Problem It Solves:
Justification:
Vision:
Major Features:
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Higher Education Statistics Since 1996

Member : Christian Bradley

Source : https://data.ed.gov/dataset/college-scorecard-all-data-files-through-6-2020 Office of Planning, Evaluation and Policy Development (OPEPD)

Description : College statistics, including admission rates, graduation rates, net tuition cost per year, act/sat scores going into and GPA rates coming out of college and far more.

End-Use Customer : Accreditation Boards, Department of Education, Potential students, Political Science students, lawmakers, and other influential education officials.

Problem It Solves : Lack of accurate presentation of data on higher education and misuse of information

Justification : A severe lack of credible usage of education 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.

Vision : Utilize open source data provided by all universities in the US 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.

Major Features :

- Tuition Layer
    - Cost of Tuition Over Years
    - GPA Outcome vs Tuition
- GPA Layer
    - GPA Per FT/PT Students
    - GPA Per State with Private/Public/All toggle
- SAT/ACT Trends On Admittance
- Federal Loan Information

2018 Data On New Coders vs. Employment

Member : Spencer Sipes

Source : https://www.freecodecamp.org/news/we-asked-20-000-people-who-they-are-and-how-theyre-learning-to-code-fff5d668969/

Description : Coders with less than five years of experience and data representing what they did to be successful within their field. This includes what ways they practiced, events they attended, long-term goals, and their degree. End-Use Customer

: Customers would be for those learning to code, whether it be within a school environment or outside of school, to see where the skills may take them. It especially applies to those wanting to get a job somewhere that uses their coding skills, and what to do to achieve that.

Problem It Solves : Uncertainty on where a coder can get a job, and whether their skills are going to be useful somewhere.

Justification : Coding has such a high variety of languages and what you can do with it. In our growing technological world, it can be hard to know your place. This data can help a coder pinpoint what skills to work on, where to practice these skills, and what environments these skills apply to.

Vision : The project idea is to inform young coders, as well as those thinking about becoming coders, by utilizing data provided from a group dedicated to teaching people to code. The data can help these rising computer scientists form a more focused path for their coding career.

Major Features :

- Events to attend for coding
    - Workshops
    - Meetups
    - Hackathons
- Online resources
- Degree levels for coders
    - Degree levels for current employees
    - Degree levels for new coders
    - Type of degree
- Current jobs for employed coders
    - Software dev
    - IT

    - Education

Old Money Versus New Money (2018)

Member : Justin Patterson

Source :

- YOUNG:https://www.census.gov/data/tables/2018/demo/age-and-sex/2018-age-sex-composition.html#:~:text=Table%209.%20Earnings%20of%20Full-Time%2C%20Year-Round%20Workers%2015%20Years%20and%20Over%20by%20Sex%20and%20Age%3A%202017
- OLD:https://www.census.gov/data/tables/2018/demo/age-and-sex/2018-older-population.html#:~:text=Table%208.%20Occupation%20of%20the%20Civilian%20Employed%20Population%2055%20Years%20and%20Over%20by%20Sex%20and%20Age%3A%202018

Description : A dashboard showing many different comparisons between old and younger ages in the United States like population, earnings, poverty, etc.

End-Use Customer : Customers would include people curious about inequalities between ages and gender as well as government officials looking to see which group needs the most assistance

Problem It Solves : Lack of easily accessible format anywhere online.

Justification : While this data does already exist on census.gov it's not presented in an easily digestible format. Making a decision by looking at a spreadsheet will take far longer than just looking at an easy to read dashboard.

Vision : Utilize open source data provided by census.gov to present financial data for different ages and genders in a tasteful manner.

Major Features :

- Age Focused
    - Yearly Earnings
    - Poverty Rate
    - Population
- Gender Focused
    - Yearly Earnings
    - Poverty Rate
    - Population

Computer Hardware Performance

Member : David Grant

Source : https://archive.ics.uci.edu/ml/datasets/Computer+Hardware

Description : The estimated relative performance values were estimated by the authors using a linear regression method. Data set includes relative CPU performance data.

End-Use Customer : Customers would utilize the statistics provided to find their ideal CPU and possibly other pieces of hardware as well.

Problem It Solves : Obscure statistics that are normally provided mean nothing to the common person and cause a lot of confusion.

Justification : This data would provide a much more in depth analysis than what is normally provided when shopping for computer parts.

Vision : Use a data set regarding Computer Hardware to help the user find their ideal parts.

Major Features :

- Filters for price and what the user wants in a computer.
- Suggestions based on filters.
- Compatibility checker.

Behind The Curtain

An ethical film analysis engine

Member : Will Ingersoll

Sources : Wikipedia/DBPedia

Description : A tool for understanding who and what organizations were involved in the production of a film/television show/video game/song/etc.

End User Customer : Conscious media consumers who wish to know exactly who and what is behind the media they consume

Problem It Solves : Not being able to find a concise answer on who or what sponsors/produces/stars in the media that a person is interested in.

Justification : The media-entertainment industry is a complex network of companies and individuals with different ideals, controversies, and contributions to society that are difficult to navigate on your own. This product would help individuals make more conscious decisions about who should get their money and what values they want to uphold.

Vision : This product will give individuals the information they need to make informed decisions about what media they should consume according to their moral values.

Major Features :

- Give detailed information regarding the finances and sponsorships of a particular film as available.
- Give detailed descriptions of on-set controversies
- Give list of key figures in production (I.E Producer, Director, Distribution, Lead Actor)
    - Be able to access controversies and contributions for these figures as available.
- Provide content warning as available
- Give a rough score of how controversial a film is