

Group submission

The team should:

1. Create a GitHub repo for your project. In that repo add a "Documentation" folder. In that folder create a document called "Project ideas" **(2 points)**

<https://github.com/faustotnc/itcs3155-final-project>

2. Include the name of all of your team members in the document to be submitted **(2 points)**
 - Andrew Pierce, Fausto German Jimenez, Hannah Raju, Linh Hung, Quang Ho

In the "Project Ideas" document each member of the team needs to do the following tasks:

1. List the source of and describe at least 1 potential data set **(8 total points)**
2. Identify who your customer/s would be **(8 total points)**
3. Describe the problem that the proposed project solves and justify its need **(10 total points)**
4. State the product vision and how your web-based project would be useful to society **(8 points)**
5. Identify the major features of each of the proposed projects **(12 total points)**

Andrew Pierce:

- List the source of and describe at least 1 potential data set
 - Source: <https://www.worldbank.org/>
 - Potential Data Set:
<https://databank.worldbank.org/reports.aspx?source=health-nutrition-and-population-statistics>
 - [https://www.nimh.nih.gov/health/statistics/suicide#:~:text=The%20total%20age%20adjusted%20suicide,females%20\(6.0%20per%20100%2C000\).](https://www.nimh.nih.gov/health/statistics/suicide#:~:text=The%20total%20age%20adjusted%20suicide,females%20(6.0%20per%20100%2C000).)
 -
- Identify who your customer/s would be: Teens and adults
- Describe the problem that the proposed project solves and justify its need

Suicide mortality rates are much higher for men than women in many countries around the world. In 2019, suicide mortality rates were over 3 times higher for men than women in the United States and this has been consistent for the past few decades. Suicide rates have been on a steady incline from 1999 to 2019.

- State the product vision and how your web-based project would be useful to society

For: teens and adults who suffer from suicidal thoughts. WHO: want to get help and be aware of annual suicide rates and to find the major causes of suicide between different age-groups and genders. THE: product is informative and non-profit/charity. THAT: shows suicide mortality rates and provides resources and emergency information. UNLIKE: other services, OUR: product will give people a safe and comprehensive platform to help understand suicide, its impact, and its causes.

- Identify the major features of each of the proposed projects
 - Graph: Suicide mortality rates for males
 - Graph: Suicide mortality rates for females
 - Graph: Total Suicide mortality rates in the US
 - Resources for people to find help or talk to someone if they are concerned about someone who may attempt to commit suicide, or for someone who is contemplating suicide

Fausto German Jimenez:

- List the source of and describe at least 1 potential data set
 - Source: <https://www.kaggle.com/>
 - Potential Data Set:
<https://www.kaggle.com/datasets/tjkyner/bachelor-degree-majors-by-age-sex-and-state>
- Identify who your customer/s would be
 - Universities and government agencies who wish to find a better way to fund different college programs across the nation.
- Describe the problem that the proposed project solves and justify its need
 - With so many universities in the United States, and so many programs for all of those universities, it can be difficult to find which programs have the most potential for the future. It can also be difficult to know which programs need more support and advertisement. Having a well-presented, interactive summary of how university programs are spread across the United States can be beneficial when making decisions about where (and how much) educational spending should be allocated by universities and the government.
- State the product vision and how your web-based project would be useful to society
 - FOR universities and government agencies WHO see potential in different university programs that need funding. The UniStats project is a web-based dashboard THAT displays different visualizations about the statistics of college programs in the United States. UNLIKE any other university funding report, OUR product will provide comprehensive and interactive visualizations that will help the users better understand how different programs are spread across the US.
- Identify the major features of each of the proposed projects
 - Graph: University Programs by State
 - Graph: University Program most popular among each gender

- Graph: University Program by age group
- A “Programs of the Future” page, which explains which university programs are going to be most popular in the future.

Hannah Raju:

- List the source of and describe at least 1 potential data set
 - Source: [WHO \(World Health Organization\) — Open data repository](#)
 - Potential Data Set: [Global Information System on Alcohol and Health](#)
- Identify who your customer/s would be
 - Teens
 - Adults
- Describe the problem that the proposed project solves and justify its need

Every year millions of lives are lost due to alcohol consumption. Visualizing the number of deaths across different ages and how much alcohol was consumed will bring more awareness to the issue. With more information and knowledge people can make smarter decisions and be more responsible while consuming alcohol.

- State the product vision and how your web-based project would be useful to society

FOR teens and adults WHO want to inform others and be aware of the impacts of alcohol. THE AlcoholEffect website is a tool THAT displays various types of data concerning alcohol consumption and its dangers. UNLIKE other websites, OUR product displays the most impactful information in easy to understand visual representations and directs customers to helpful resources.

- Identify the major features of each of the proposed projects
 - Graph: Number of fatalities per age group
 - Graph: Correlation between amount of alcohol consumed and fatalities
 - Graph: Most common dangers associated with alcohol consumption
 - Resource Page

Linh Hung:

- List the source of and describe at least 1 potential data set
 - Source: [World Bank Open Data](#)
 - Potential Data Set: [Universal Health Coverage Global Monitoring Data - 2021](#)
- Identify who your customers would be: Governments, Healthcare Providers, All citizens
- Describe the problem that the proposed project solves and justify its need:

Health is a fundamental human right, and universal health coverage (UHC) is critical for achieving that right. The COVID-19 pandemic has subsequently led to significant disruptions in the delivery of essential health services. Rising poverty and shrinking incomes resulting from the global economic recession are likely to increase financial barriers to accessing care and financial hardship owing to out of pocket health spending for those seeking care. There is an urgent need to remove remaining barriers in order to

enable access to health care for all. By providing information about UHC, the government, healthcare providers or who may be concerned could open their eyes to understand which healthcare coverage is loss of lives and decrease in money.

- State the product vision and how your web-based project would be useful to society

For everyone WHO wants to understand and research about the Universal Health Care Coverage. The UHCC is a web page that provides reported data about Universal Health Care systems around the world including geographic, estimates of the Service Coverage Index by countries, and the trends in catastrophic health expenditure. Unlike others, UHCC virtualizes all the data providing a new experience for the customer in the process of understanding/researching Universal Health Care.

- Identify the major features of each of the proposed projects:

Graph: Healthcare expenses

Graph: Trends in catastrophic health expenditure.

Graph: Country level estimates of the Service Coverage Index

Quang Ho:

- List the source of and describe at least 1 potential data set

There are various potential data sets my group could use for the projects such as:

- World Bank Open Data: this is considered the large data set that provides access to many other data sets

- WHO's Open Data: this is considered the largest data sets relating to human health and death quantities.

- US Census Bureau: this is the largest statistic data source in the United States that stores and provides reliable facts about the people, places, and economy of America

One data set I would use is up-to-date COVID-19 confirmed and dead cases that happened in Charlotte as a continuous warning for all Charlotte people to stay aware of illnesses regardless of the improvement of technology and health care system.

- Source: [WHO \(World Health Organization\) — Open data repository](#)
- Potential Data Sets: <https://covid19.who.int/data>

- Identify who your customer/s would be

Charlotte people from **little kids** in elementary school to the **students** in the universities/colleges; **experts** who are interested in researching COVID-19 virus and its damage to Charlotte communities; from normal people with ordinary work to **doctors/nurses** who work on the front-end of human protection against fatal infectious illnesses such as SARS or COVID-19 and its variant forms.

- Describe the problem that the proposed project solves and justify its need

As a web-based project, it will use Open Data Set to show the data of COVID 19 confirmed and death cases that happened and updated regularly at Charlotte particularly. Based on the data given from a reputable source, we could build a website that allows users to browse the site to see information relating to COVID-19, search for knowing the Corona data visualization at a specific area within Charlotte, or the entire Charlotte for a larger vision. Also, the site allows the users to view the up-to-date COVID-19 information via multiple representative charts such as bar charts, line charts, heat maps, etc., as well as filtering the content according to users' desires.

- State the product vision and how your web-based project would be useful to society

FOR all residents at Charlotte WHO need to have a more profound and clearer about COVID-19 and its damage to Charlotte residents based on up-to-date data set. COVID19atCharlotte is an internet website THAT provides customers access to available COVID-19 data sets at Charlotte and their representing visualizations depend on the user's needs or desires. UNLIKE other websites or software products, COVID19atCharlotte products are differentiated by providing trustworthy open sources and data sets from reputable organizations, as well as free, easily accessible, and great various visual maps corresponding to the information. OUR PRODUCT is a primary worthy social software tool that addresses people's queries about COVID-19 and its deadly results in Charlotte, North Carolina.

- Identify the major features of each of the proposed projects

- Navigation Menu
- HTML, CSS and JS for a functioning website
- Home page, Visualization Page, Resources Page
- Filter tab correctly functions
- Embedded Data and Visualization using Python and learned skills from ITSC 3155 Class
- Improve the visualization with appropriate package installations
- Accessible for every user as open-source website.