

Project Ideas

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1. **Andrew:** Global Warming (Global Temperature increase 1750-2015)

<https://data.world/data-society/global-climate-change-data/workspace/file?filename=GlobalLandTemperatures%2FGlobalTemperatures.csv>

- a. **Description:** Contains the temperature of the first day of each month in each year between 1750-2015 in addition to max, min, and average temperatures.
- b. **Customers:** Government and industrial organizations who have a big impact on the increase in global warming.
- c. **Problem:** Today, people hear about global warming as a growing issue yet it's hard to notice its gradual increase on a day-to-day basis. This lack of understanding of its seriousness can lead to companies, specifically the worst offenders like automotive and oil, not making changes to reduce, if not decrease, global warming.
- d. **Product Vision:** Our project will help visualize this increase in global warming and therefore give companies an understanding on how dire the situation really is.
- e. **Major Features:** Zoom in on graph, view projected future temperatures, view average, maximum, and minimum temperature for each year and month.

2. **Gabriel:** Gentrification by Zip Code (from 2000 to 2014)

<https://data.world/amccartney/gentrification-by-zip/workspace/file?filename=Gentrification+measures.xlsx>

- a. **Description:** Contains the gentrification statistics of Brooklyn, Austin, San Francisco, Oakland, and Portland from 2000 to 2014 sorted by zip code.
- b. **Customers:** U.S. Citizens living in cities across the United States, as well as politicians who have the ability to affect gentrification.
- c. **Problem:** Gentrification has had a number of negative effects on the communities it impacts, but gentrification itself is not a bad thing so long as original residents are not pushed out. However, the lack of understanding of how certain changes affect the communities makes it difficult to understand what changes can positively affect different communities and which ones will harm it.
- d. **Product Vision:** Our product will help both citizens and politicians understand how different businesses and “gentrification” process will possibly affect communities, and how they should respond or handle these changes.
- e. **Major Features:** Various city zip codes and how their median income changed over time, and the various businesses that moved in causing gentrification. View all businesses, view the business specifications, view overall median of cities, and filter out various factors.

3. **Dave:** COVID-19 in the US (from Mar 2020 to Mar 2021/current)

<https://github.com/nytimes/covid-19-data>

- a. **Description:** Repository contains all COVID data of the US mostly, includes divisions by states and counties. Frequently updated.
 - b. **Customers:** People overall, especially US residents, government, and other associations that want to take a look at the Covid issue within the US.
 - c. **Problem:** Coronavirus is the newest disease found and probably the most dangerous killer of the new decade up to this point. Within a short period, the virus has spread all over the world, kills millions of lives and infects millions of others, not including the damages caused for many countries on aspects like economy, health, or education. Up to this moment, the US is the most impacted with the highest numbers of deaths and affected, as well as a disrupting economy. Although vaccines are being supplied and on the way, the speed of on-going spread of the virus is yet still a problem.
 - d. **Product Vision:** Our project analyzes and visualizes all the on-going status of the Coronavirus in the US. With the necessary attachments, we hope to help users in whatever way they need upon the Covid problem.
 - e. **Major Features:** Users can view the analyzed data in different options either in charts for overviewing or heatmap to avoid such areas, with filters for easy adjust in needs. Related articles are attached and updated regularly. Symptoms and self-prevention are attached. Testing and vaccinating centers are also connected for emergency care. Help assistance is lived 24/7 from urgent centers.
4. **Kyaw:** Free/Reduced Lunch for Schools K-12 in the US (School Year 2019-20)
<https://nces.ed.gov/ccd/files.asp#FileNameId:11,VersionId:13,FileSchoolYearId:34,Page:1>
- a. **Description:** Has schools from the whole US (including territories). It contains the name, state, status of lunch, student count, and other miscellaneous stats.
 - b. **Customers:** Low-income families, or non-profit organizations providing them aid.
 - c. **Problem:** Lower income households struggle to pack or pay for school lunches, especially during the pandemic.
 - d. **Product Vision:** This website can show which districts provide free/reduced lunches, so that parents can pick which school to send their kids to. For organizations, they can see which districts do not have a free lunch program and help out the families in that district.
 - e. **Major Features:** An interactive map that shows each district, and when you hover over it, it will show their status. A look-up for the locations to specifically search for schools in a specified area. After selecting the district, it will show a list of schools with their websites/contact info.