

I couldn't find the code but I made a video about my project and here are some screenshots. All the visualization and maps are made by me.

<https://www.youtube.com/watch?v=PBBGuKnKX-w>

Final Presentation

Zhouyi Xue

COVID-19

- Be aware of Danger of COVID-19
- Who is more vulnerable to this disease?
- Which state in the US is relatively more dangerous?
- Does race and ethnicity affect the Spread of COVID-19?
- Do people living in rural areas have a lower chance of getting this disease?
- Learn about the past spread, predict the future, and how can we protect ourselves.

1:01 / 11:24 • Intro >

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Data Collection

- DATA.GOV – Download Dataset & JSON File
- TOPIC
- [www.worldometers.info](http://www.worldometers.info) – Live updating HTML

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# Cleaning

```

def COVID_19_data_clean():
    # cd stands for COVID-19 Data
    cd = pd.read_csv("Provisional_COVID-19_Deaths_by_Place_of_Death_and_Age.csv", delimiter = ",", index_col= "age group")
    cd = cd.rename(columns={"Data as of": "Modifying data date"})
    a = []
    for i,j in zip(cd["Start Date"],cd["End Date"]):
        date1= datetime.datetime.strptime(i, '%m/%d/%Y')
        date2= datetime.datetime.strptime(j, '%m/%d/%Y')
        a.append(str((date2 - date1).days)+ " days")
    cd.insert(3,"Days range",a)

```

- Pandas: Create Dataframe and Clean Data
- Numpy: Select and replace Data
- Replace Nan
- Make the dataframe Understandable and easy to read
- Understand the Table, What is it talking about?

2:50 / 11:24 • Cleaning >

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# Visualization

COVID Proportions Grouped by Age

Age Group	Proportion (%)
85 years and over	27.4%
75-84 years	22.5%
65-74 years	17.0%
50-64 years	7.95%
40-49 years	3.03%
30-39 years	0.545%
0-17 years	0.072%

Age Death distribution

Age Group	Total Deaths Numbers
0-17 years	587,910
18-29 years	1,120,240
30-39 years	2,422,560
40-49 years	3,625,000
50-64 years	11,933,350
65-74 years	14,189,030
75-84 years	16,957,450
85 years and over	169,574,500

United States: Total Covid Deaths distribution by races and Ethnicity

Urban Rural Description

COVID-19 Death Percentage

4:47 / 11:24 • Visualization >

