# CSE583 Group12
# COVID-WA

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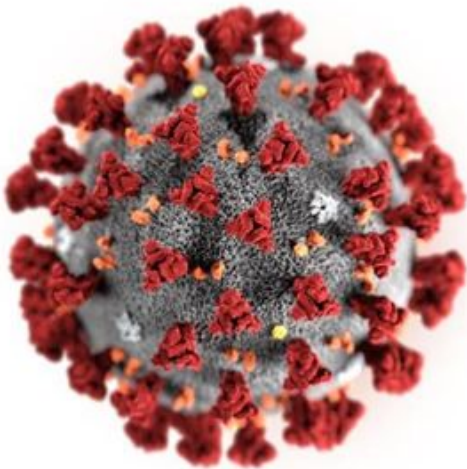
# BACKGROUND

COVID19 cases overview:

- 15M+ cases United State
- 195K+ cases Washington State

U.S. unemployment rate:

- Highest record of 14.7% in April
- Still 3.2% points higher than it was in February

Goal:

- Web-based visualization tool

# DATA

Washington State Department of Health:

- COVID19 Confirmed cases and deaths by county
- From March to November
- https://www.doh.wa.gov/Emergencies/COVID19/DataDashboard

U.S. Bureau of Labor Statistics:

- Labor force data by county
- From January to September
- https://www.bls.gov/lau/#data
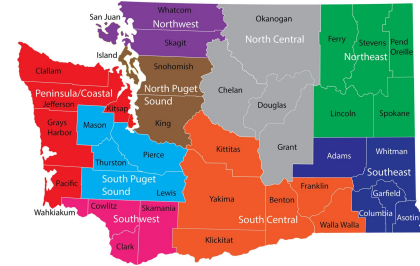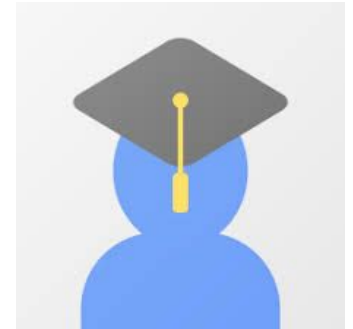
# USE CASES

Community numbers:

- See how the infection ratio impacted the unemployment rate on the King county.
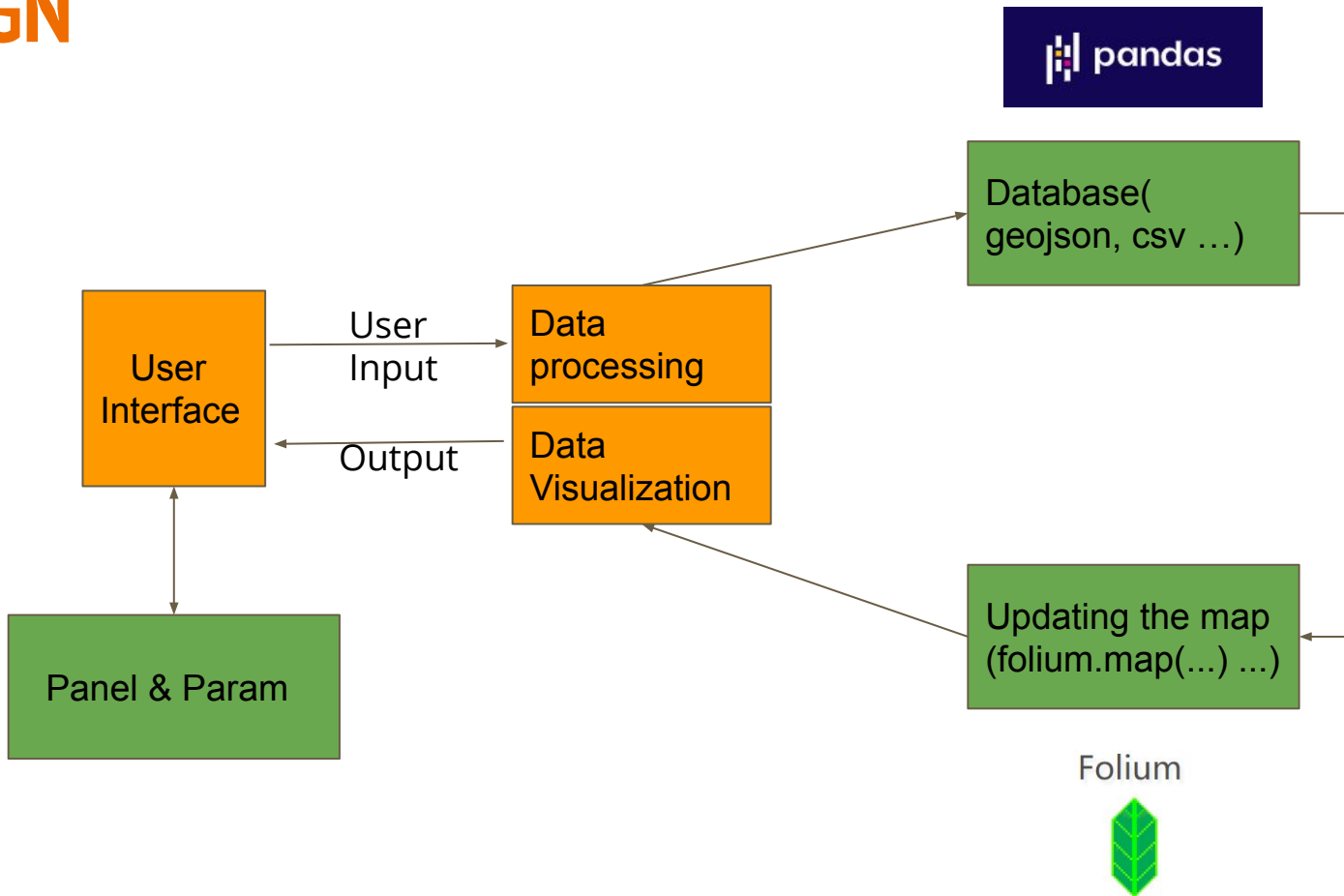- Be able to select month and county on the web interface
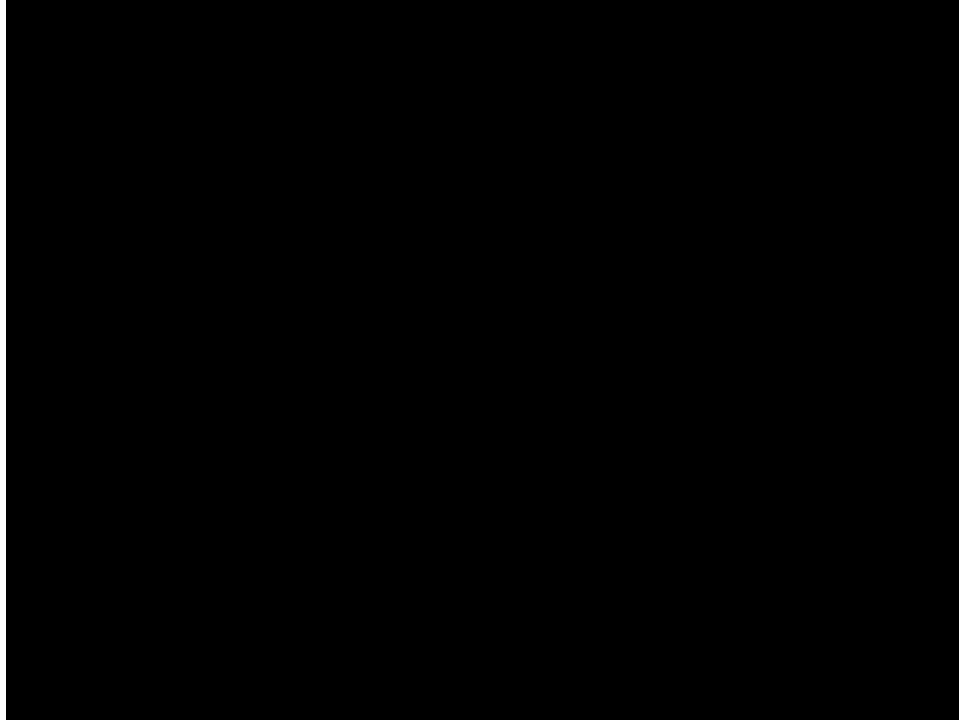
Professional Users:

- See how the infection ratio impacted different counties by months and output as a graph.
- Comparison between different counties by choropleth map.

# DESIGN

# DEMO

# PROJECT STRUCTURE

```
CSE583_Group12/
    |- covid_wa/
        |- tool_box.py
        |- covid_web.py
        |- __init__.py
    |- data/
        |- COVID19/
            |- COVID19-Rate.csv
            |- COVID19-Month with geo data.csv
            |- ...
        |- Unemployed/
            |- Unemployment.csv
            |- laucntycur14.xlsx
        |- WA_County_json/
            |- Adams.json
            |- Asotin.json
            |- ...
        |- WA_County_Boundaries.geojson
    |- doc/
        |- component_spec.md
        |- functional_spec.md
    |- example/
        |- Unemployment_popup.ipynb
        |- Untitled.ipynb
        |- ...
    |- tests/
        |- __init__.py
        |- test_covid.py
    |- .coveragerc
    |- .travis.yml
    |- LICENSE
    |- README.md
    |- environment.yml
    |- setup.py
```

# Lessons learned and future work

- Read the documentation of python!!!
- Cooperation of the group work is very important in software engineering


➢ Expand our database
➢ Deploy to public server

# Thanks for watching!