

Title: “Data Visualization Webpage”

Group:

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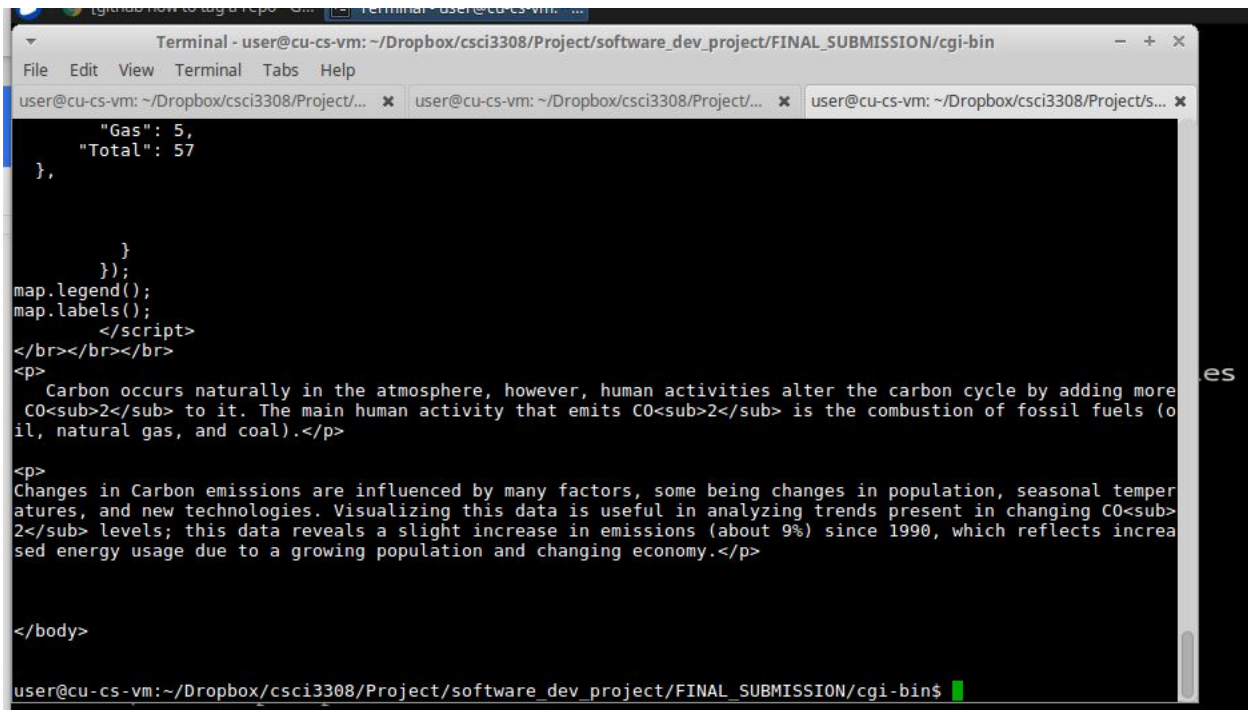
Sarah Barili

Ehsan Karimi

Rasmi Lamichhane

Part A: Testing

All documents on autodoc are in the project repository. The screenshot below is proof that the .py file runs and the automated test is operating correctly.



```
Terminal - user@cu-cs-vm: ~/Dropbox/csci3308/Project/software_dev_project/FINAL_SUBMISSION/cgi-bin
File Edit View Terminal Tabs Help
user@cu-cs-vm: ~/Dropbox/csci3308/Project/... x user@cu-cs-vm: ~/Dropbox/csci3308/Project/... x user@cu-cs-vm: ~/Dropbox/csci3308/Project/s... x

{"Gas": 5,
 "Total": 57
},

    }
  });
map.legend();
map.labels();
</script>
</br></br>
<p>
  Carbon occurs naturally in the atmosphere, however, human activities alter the carbon cycle by adding more
  CO<sub>2</sub> to it. The main human activity that emits CO<sub>2</sub> is the combustion of fossil fuels (o
  il, natural gas, and coal).</p>

<p>
  Changes in Carbon emissions are influenced by many factors, some being changes in population, seasonal temper
  atures, and new technologies. Visualizing this data is useful in analyzing trends present in changing CO<sub>
  2</sub> levels; this data reveals a slight increase in emissions (about 9%) since 1990, which reflects increa
  sed energy usage due to a growing population and changing economy.</p>

</body>

user@cu-cs-vm:~/Dropbox/csci3308/Project/software_dev_project/FINAL_SUBMISSION/cgi-bin$
```

Part B: Auto-Doc

Our group used deoxygen and latex. Links below and in the project repository.

https://github.com/rala8730/software_dev_project/blob/master/FINAL_SUBMISSION/Data-Visualization-Webpage_part4_Autodoc.pdf

https://github.com/rala8730/software_dev_project/tree/master/FINAL_SUBMISSION/cgi-bin/html.2

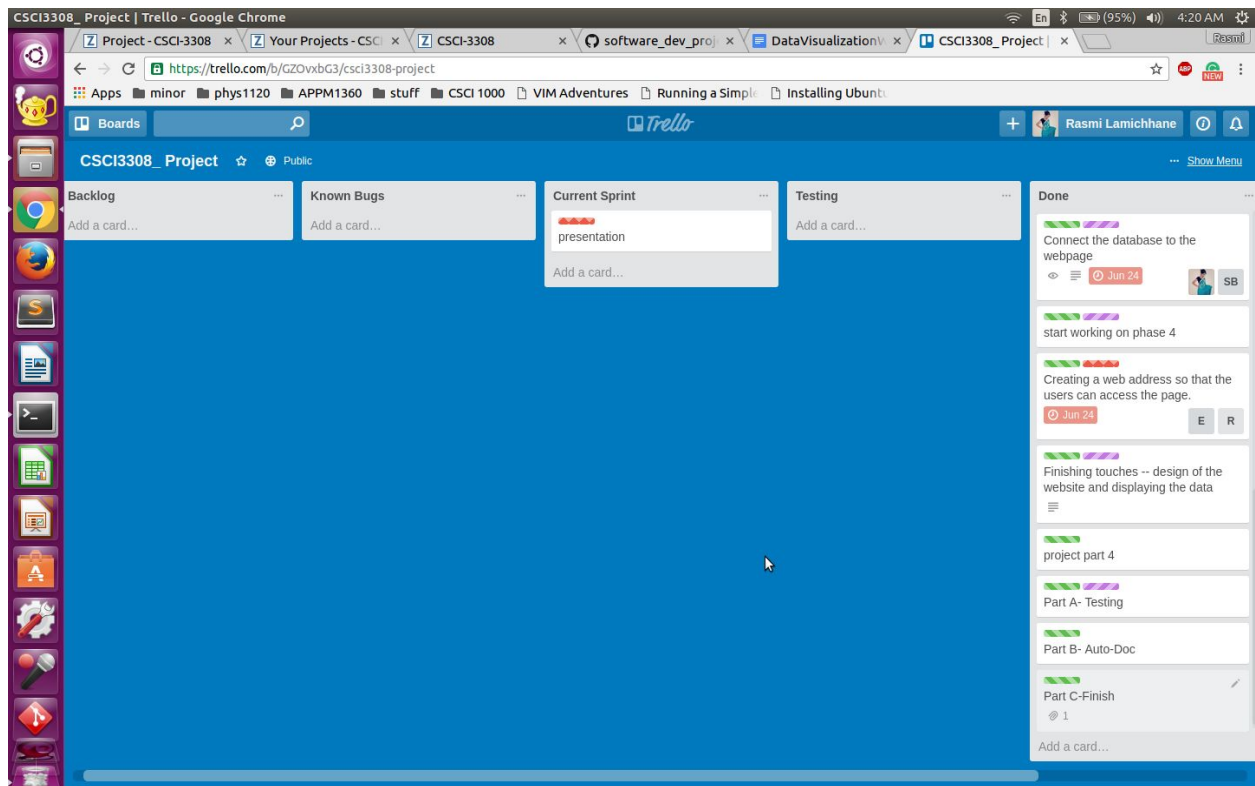
https://github.com/rala8730/software_dev_project/tree/master/FINAL_SUBMISSION/cgi-bin/latex

Part C:

Project Tracker:

Link to the projector tracker :<https://trello.com/b/GZOvxbG3/csci3308-project>

Screenshot current tracking:

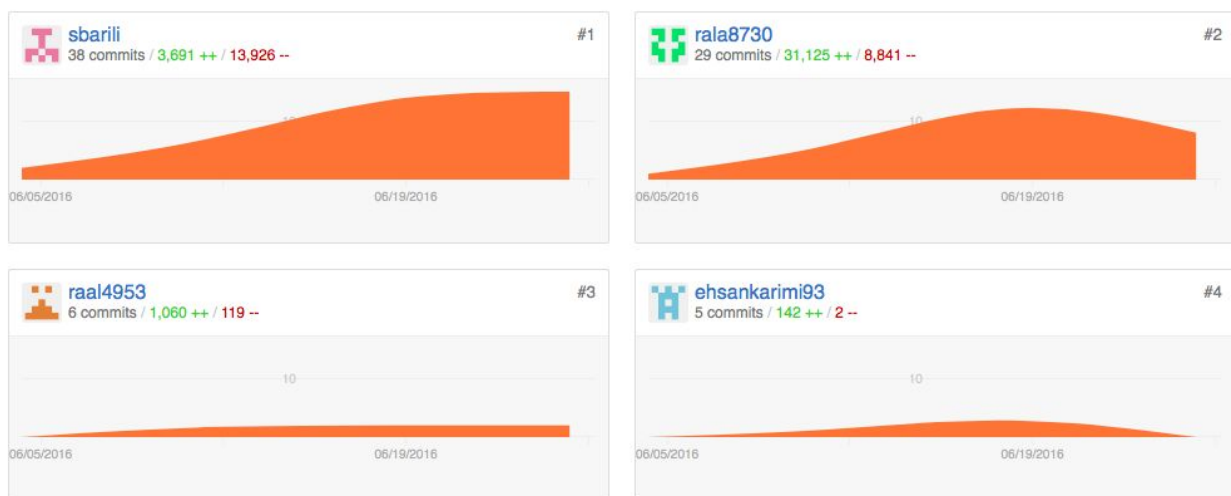


Video Link:

<https://www.youtube.com/watch?v=K5FWMMMd8d4>

VCS: https://github.com/rala8730/software_dev_project.git

Screenshots:



Deployment:

1. Download the source code from the GitHub link above: pollutiondata.sql and cgi-bin, which includes the .py files to run the website. This should happen automatically when accessing the Final Submission Tab.
2. Start a local CGI server from the directory where the .sql was downloaded.
3. Initialize a database using the pollutiondata.sql file. Edit all four main.py files to your mysql user, password, and database name. It is inconvenient but we didn't have time to find another solution to this
4. Open a browser and navigate to main.py