

Due: Thursday, Nov 17

Only one person in a group needs to submit the following on canvas:

1. What is your group's name?

The Coding Group!

2. Who are all the people in the group? List the first name, last name, and umich email for each.

Cristina Costin costinc@umich.edu

Rachel Abellera rabeller@umich.edu

Cassandra McDaniel - cassmcda@umich.edu

3. List the API(s) and/or website (using BeautifulSoup) that you will be gathering data from. If you have two people in a group you must use 2 APIs or 1 API and a website. If there are three people in a group you can use 3 APIs or 2 APIs and a website. The API(s) and website must be all different (not the same base URL)

API for Denver Transportation:

<https://www.rtd-denver.com/business-center/open-data/gtfs-developer-guide>

API for Philadelphia Transportation: <http://www3.septa.org/hackathon/>

Website for Michigan Transportation: <https://www.michigan.gov/mdot>

4. What data will you collect from each API/website and store in a database? Be specific.

For the API for Denver Transportation, we will be collecting the departure time, arrival time, and total travel time for each type of transportation in Denver.

For the API for Philadelphia Transportation, we will be collecting data about how many trains are offered per day or week and the different destinations that they go to and leave from in Philadelphia.

For the Michigan Department of Transportation website, we will be collected data about what kind of transportation is used in Michigan, the destinations, the departure and arrival times, and the total travel time for each type of transportation in Michigan.

5. What data will you be calculating from the data in the database? Be specific.

We are going to collect the amount of transportation available per week/per month and compare it with how filled it is/ how many tickets are sold and compare it with population in these areas and see if it is filled / overbooked / underbooked and view this to deduct whether each location is spending its funds properly or not, under the premise that if transportation is constantly underbooked, it is wasting money.

6. What visualization package will you be using (matplotlib, plotly, seaborn, etc)?

See

<https://www.fusioncharts.com/blog/best-python-data-visualization-libraries/>  
[Links to an external site.](#)

Matplotlib

7. What graphs/charts will you be creating?

Bar charts and scatter plots

8. Who will be responsible for what? Please note that all team members should do an equal amount of programming and total work.

Cristina - Responsible for accessing the Denver API and collecting data about transportation

Cassie - Responsible for scraping data from the Michigan website and collecting data about the transportation

Rachel - Responsible for accessing the Philadelphia API and collecting data about the transportation

All together - analyzing the data we collected and each creating 1 visualization and the write up