

## fSI 201 Final Project Plan

a. What is your group's name?

Stan Lee Vasz

b. Who are the people in the group (first name, last name, umich email for all members)?

Blake, Lovasz, lovasz@umich.edu

Stanford, Jusuf, sjusuf@umich.edu

c. What APIs/websites will you be gathering data from? The base URLs for the APIs/websites must be different for them to count as different APIs.

Superhero API: <https://superheroapi.com/try-now.html>

Comic Vine API: <https://comicvine.gamespot.com/api/documentation>

Marvel Rivals API: <https://marvelrivalsapi.com/>

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

- Superhero API: <https://superheroapi.com/try-now.html>
  - "name" (name of the superhero)
  - "appearance" (gender, height, weight, eye-color, hair-color)
  - "place-of-birth" (geographical origin of the superhero)
- Comic Vine API: <https://comicvine.gamespot.com/api/documentation>
  - "name" (name of the superhero)
  - "count\_of\_issue\_appearances" (number of issues character appears in)
  - "movies" (movies character was in)
- Marvel Rivals API: <https://marvelrivalsapi.com/>
  - "hero\_name" (name of the superhero)
  - "play\_time" (length of play for each character, looking for hours)
  - "matches" (amount of matches character is used in)

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

- The number of movies and comic issues featuring heroes by gender.
- The average BMI for male and female superheroes.
- The number of superhero characters by geographical origin.
- Top 10 most played, based on playtime and matches, characters in Marvel Rivals - color coded by gender.

f. What visualization package will you be using (Matplotlib, Plotly, Seaborn, etc)?

Matplotlib & Seaborn

g. What graphs/charts will you be creating?

Bargraphs, piechart, linechart.

h. What functions are you creating and who is responsible for each function? What input and output does each function take? Include a function diagram with this information on it.

- Stanford Jusuf is assigned to all data retrieval-storage functions related to the Superhero and Comic file.
- Blake Lovasz is assigned to all data retrieval-storage functions related to the Game file only because they are more familiar with the Marvel Rivals API, which is a larger API than the Superhero and Comic Vine API.
- *The function diagram below shows the input and output for each function. The functions that have a bolded asterisk (\*) will be completed by Blake Lovasz and the rest without by Stanford Jusuf.*

