

How To Use:

How to Run:

Ensure you have Node.js installed.

Open the terminal in the “pokemon-battle directory” (you can right-click the folder and select “Open in Terminal” or use the terminal manually).

If it's your first time running, type “npm install”.

To start the program just type “npm start”.

I will provide step by step instructions explaining how to use my web application:

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Generate Pokémon Population:

Generate

Simulation Controls:

Start Fighting Stop Fighting

Select Specific Pokémon To See Data:


--Choose a Pokémon-- v

Choose a Pokémon and Amount to Add

--Choose a Pokémon-- v Enter a number

Add Pokémon

Adjust Chance of Death

100% Reproduction rate  100% Death rate

Generate Pokemon Population

- Fill the Pokemon environment with a random amount of Pokemon with a random population for each

Simulation Controls

- Start Fighting - All the Pokemon in the environment will start fighting each other to increase their population (more details in the summary)
- Stop Fighting - All the Pokemon in the environment will stop fighting each other

Select Specific Pokemon To See Data

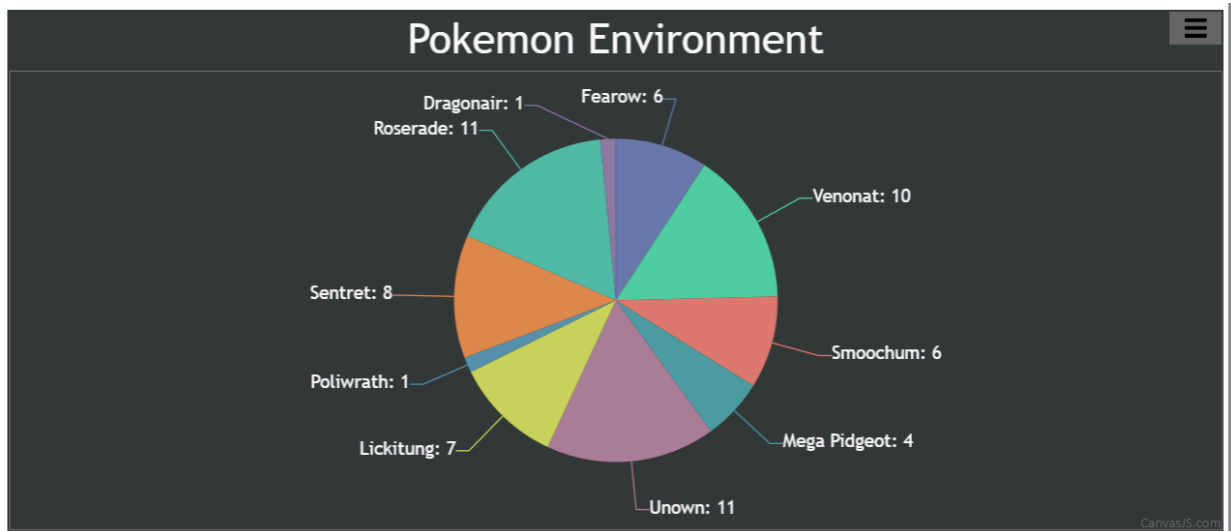
- Select a specific Pokemon from the drop down list to see how much of each Pokemon they defeated and the chance they have to win against each Pokemon

Choose a Pokemon and Amount to Add

- Select a Pokemon from the drop down list and type in a number. When you click "Add Pokemon" that much Pokemon will be added to the environment.

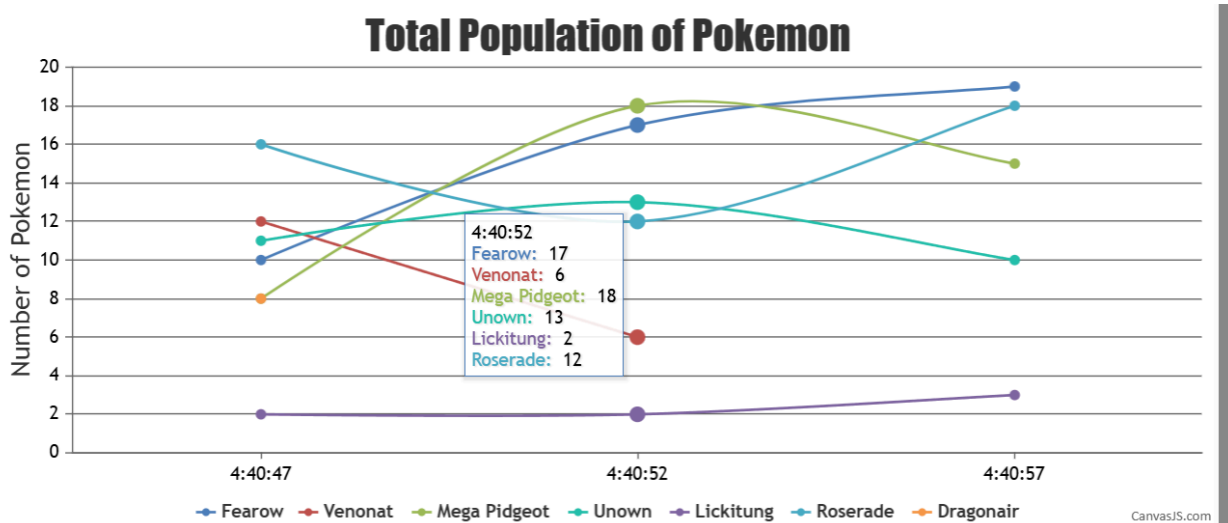
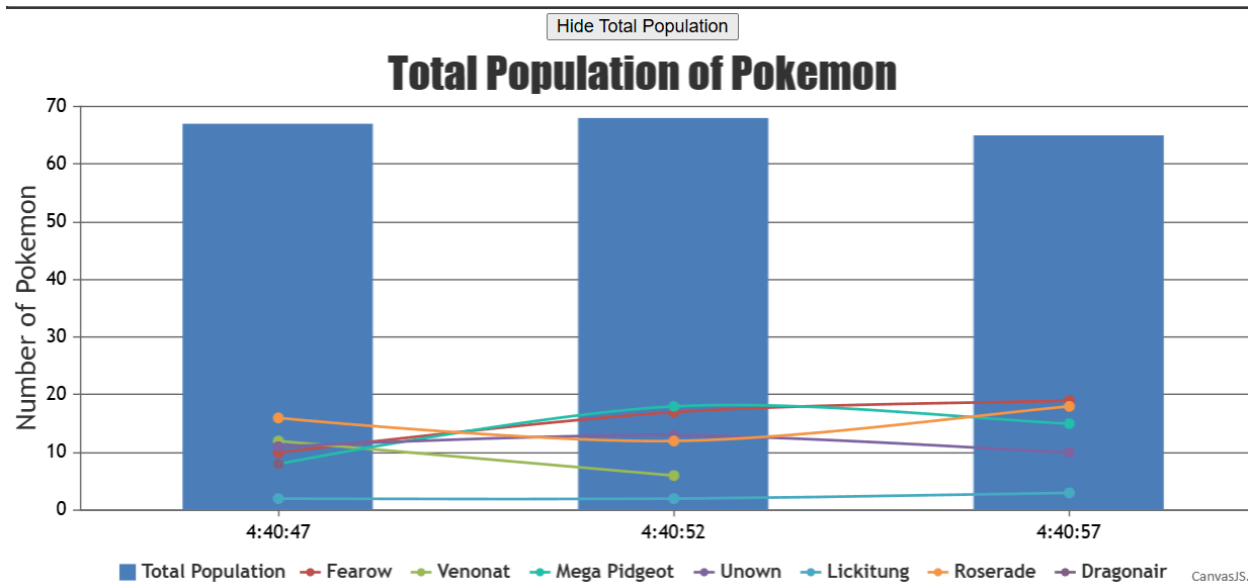
Adjust Chance of Death

- Each Pokémon also has a chance to reproduce or pass away at random. You can adjust the slider to control the likelihood of either event occurring.

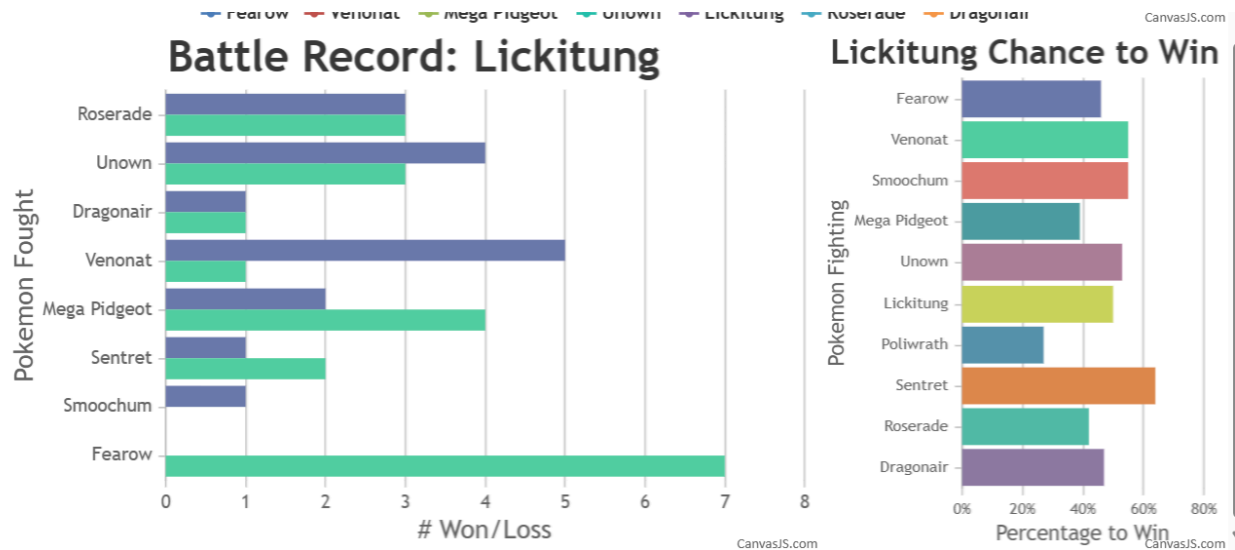


This graph represents what Pokemon exist in the current Environment. From this example, you can see in the Pokemon environment, there exists:

- 1 Dragonair
- 6 Fearow
- 10 Venonat
- 6 Smoochum
- 4 Mega Pidgeot
- 11 Unown
- 7 Lickitung
- 1 Poliwrath
- 8 Sentret
- 11 Roserade



These graphs show how much of each Pokemon were alive at specific time frames. The blue bar in the first graph represents the total number of Pokemon that existed in that time frame. You can press "Hide Total Population" to hide this blue bar.



These two graphs only appear when you select a Pokemon from "Select Specific Pokemon to See Data". The one on the left shows you how much of each Pokemon the selected Pokemon won/loss against. (green is lost and blue is won). The graph on the right shows you the likelihood the selected Pokemon is able to defeat the other Pokemon. For example, the chance for Lickitung to beat Sentret is a little above 60%.