

Materials necessary:

Raspberry Pi 3

Flexible Adafruit DotStar Matrix 8x32 - 256 RGB LED Pixels

Wood or acrylic (optional)

Libraries Needed:

Apa102 driver:

This will allow you to easily download the subsequent library. To instal Python 3, go to this [link](#) and follow the instructions through step #3 or just copy and paste the following commands into your device's terminal:

```
sudo apt-get update
```

```
sudo apt-get upgrade
```

```
sudo apt-get install python3 python3-dev python3-pip
```

```
sudo pip3 install apa102-pi
```

Beautiful Soup 4:

This is a Python library for pulling data from HTML and XML files. To download this library, follow the instructions on this [link](#) or enter the following commands into your device's terminal:

```
apt-get install python-bs4
```

```
easy_install beautifulsoup4
```

```
pip install beautifulsoup4
```

Project Roles:

Jorge:

Wiring & soldering

Writing a macros to launch python code

Trevor:

Translating strings to the LED matrix

Connor:

Pulling tweets and converting them into a text file

Elias:

Designing, cutting, and building the containment frame

Jadyn:

Documenting the project