# Character Prediction via Neural Network

The purpose of this project is to create an application that takes a string from a user as input, and then predicts the next characters using a neural network model trained from scraped tweets.

# Getting Started

The following instructions will demonstrate how to obtain the necessary files for the project and how to get it running on your local machine.

### File Location

Clone the repository or download all files to your local machine from this GitHub repo: <https://github.com/Vansantj/FE595-Final>.

### Prerequisites

The following software packages and libraries are required to run the project:

* Python
* Flask
* pandas
* numpy
* tensorflow
* re
* os

### Running the Project

1. Create a virtual environment to use for the application within the repo folder.
2. Install Flask and required libraries.
3. Set application.py as the Flask application.
4. Run the Flask app.
5. Browse to the URL Flask gives you, typically <http://127.0.0.1:5000/>
6. Input a string of your choice less than 20 characters. The size input corresponds to how many characters you want to predict.
7. Click “submit” on the web page to display the predicted string.