Otto: Automatic SDG Classifier - Setup

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1 Background

Otto is a webapp built with the Flask Python framework that automatically classifies donations with the correct Sustainable Development Goal code. Otto uses a Support Vector Machine machine learning algorithm to train from the hand coded dataset provided by AidData to code based up the text for each donation.

1.1 Server Specs

2 Project Installation

2.1 Github

The source code for Otto can be found at [insert ITPIR link here]

2.2 Dependencies

Log into the server as root. Install the latest version of python.
`sudo apt-get install python3`

Python comes with the latest version of SQLite so no further installation is required. Install the python packaging tool Pip. We will be using it to install necessary Python packages.
`sudo apt-get install python3-pip`

We will now set up our python virtual environment, which will sequester our dependencies in this directory. It comes with Python3. The first command will set up the virtual environment in your current directory, and the second will activate the virtual enviroment.

```
python3 -m venv
source venv/bin/activate
```

Now we will install all python dependencies.

```
sudo pip3 install pandas, Nltk, Scipy, sklearn, Flask, Flask-SQLAlchemy
```

You need to download the set of stopwords that NLTK uses to determine when a sentence ends. Run the following commands:
`(venv)\$ python3` $importnltk\ \ nltk.download()$