

Technical Installation Manual

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1 Introduction

The following is a Technical Installation Manual for COS301 capstone project, Domain Pulse - A Sentiment Analysis Platform. Domain Pulse is a system designed to fetch, analyse, aggregate, and present results of sentiment analysis on publically available data pertaining to businesses, products, places, and more! Sources of data include (but are not limited to) Google reviews, TripAdvisor and Youtube.

This installation guide details how to setup and install the system locally. The system uses a Django backend (consisting of 5 independently deployable projects), an Angular frontend as well as PostgreSQL and MongoDB databases. The installation of these components and the packages used within in them, shall be explained within this manual.

Please note that the production application is a web application that is deployed to a private virtual machine acting as a web server. For security purposes, this guide will not provide details or keys for connecting to the deployment server - instead this details local installation of the application.

1.1 Some subsection

If we need to add more details or break it up

2 Prerequisites

The following are prerequisites for the complete installation and set-up of Domain Pulse: Python 3.8, Pipenv, Node.js, Angular, MongoDB, PostgreSQL.

2.1 Python 3.8

2.1.1 Linux

The following resources commnds be used for installing Python 3.8 on Linux:

```
sudo apt-get update  
sudo add-apt-repository ppa:deadsnakes/ppa -y  
sudo apt-get update
```

```
sudo apt install python3.8
```

Ensure that the correct version of python is installed by running the following command: `python --version`

2.1.2 Windows

The following resources may be used for installing Python 3.8 on Windows:
<https://www.python.org/downloads/release/python-380/>

2.2 Pipenv

Once python is installed (pip should therefore be working too) enter into the terminal:

```
pip install pipenv
```

2.3 Node.js

Node.js is needed for the installation and use of Angular and can be installed following the instructions on the following resource:
<https://nodejs.dev/en/learn/how-to-install-nodejs/>

2.4 Angular

Once Node.js is installed, Angular can be installed by entering the following command into the terminal:
`npm install -g @angular/cli`

2.5 MongoDB

The following resources may be used for installing MongoDB

- Windows: <https://www.mongodb.com/docs/manual/tutorial/install-mongodb-on-windows/>
- Ubuntu: <https://www.mongodb.com/docs/manual/tutorial/install-mongodb-on-ubuntu/>
- MacOS: <https://www.mongodb.com/docs/manual/tutorial/install-mongodb-on-os-x/>

2.6 PostgreSQL 12

The following resource can be used for installing PostgreSQL 12

- <https://www.postgresql.org/download/>

Ensure that, regardless of what installer is used, PostgreSQL 12 specifically is installed.

3 Installation

Installation - this describes how the installation of your system would work

My understanding is this would be like actually getting the code onto your machine and how to install the prerequisites once you have the code Luckily we've got stuff like pipenv install to just get all the python packages

4 Deployment and Running

Deployment/Running - detail how your system should be executed and provide the link to your user manual on how the system should be used

Ideally we can write a script that just goes and runs the frontend and backend so we don't need to write down the actual details or commands