

# Installation and setup instructions

## Prerequisites

### Python 3.8

Python 3 or higher is required to run this project. In order to avoid any compatibility issues it is recommended getting the most up to date version.

**Check if already installed** First, to check if Python is already installed open up command prompt or terminal and type:

```
python -V
```

This will print something like **Python 3.8.2** if python is installed. If this shows a version below 3.0.0 then please type the following command to check if both are installed at the same time:

```
python3 -V
```

If this shows a version of 3.0 or higher, then the correct version of python is installed, skip to 'Checking if pip is installed'. Otherwise, follow the next steps.

**Install Python** To install python on Windows or MacOS, download the most up to date version [here](#). The current version is 3.8.2.

During the installation there will be an option to 'add Python <version> to PATH'. Please ensure this is checked. Once complete please attempt to get check it is installed using the previous chapter

**Windows 10** Alternatively if on windows 10 you can navigate to the windows store and search for python 3.8. This will automatically install and setup python as needed for this project.

### Checking if pip is installed

By installing python 3.8 or above Pip should be automatically installed along side it. To check it is installed go to command prompt or terminal type:

```
pip -V
```

With some installations this command does not work without referencing python first. If this did not work, please try one of the below commands. Usually the `python` or `python3` command that worked when checking the version earlier will be the correct one. If both provided the same value, either should work.

```
python -m pip -V
```

```
python3 -m pip -V
```

Please remember the working command as it will be needed throughout the rest of the installation. Now Python and Pip are running we need to set up the virtual environment and install dependencies.

## Setting up the Virtual Environment

Open command prompt or terminal and set the directory to the root of the project files. If the project files are on your desktop it would look like this:

```
cd Desktop/ems-python
```

Once in this location, by using the command that worked for python version 3.0.0 or above type one of these:

```
python -m venv venv
```

```
python3 -m venv venv
```

Now the dependencies for the project need installed. By using the command that made pip work earlier, type one of the following:

```
pip install -r requirements.txt
```

```
python -m pip install -r requirements.txt
```

```
python3 -m pip install -r requirements.txt
```

Now the environment needs activated. Please follow the steps for your operating system

## Windows

In command prompt, navigate to the folder 'venv/Scripts' within the root directory. If already in the root directory, type this:

```
cd venv/Scripts
```

Now type the following command:

```
activate
```

To confirm it is working you should see (venv) before the current directory within command prompt.

## MacOS

In terminal within the root directory of the project type the following command

```
source venv/bin/activate
```

To confirm it is working you should see (venv) before the current directory within the terminal.

## Running the server

To run the server \*\* open a new command prompt or terminal window \*\* making sure to leave the virtual environment running in the one that has just been set up.

Navigate to the root directory of the project following the same command as earlier. If this is in desktop then it would look like:

```
cd Desktop/ems-python
```

Finally type the following command to run the server using the python command used earlier:

```
python manage.py runserver
```

```
python3 manage.py runserver
```

Once this is complete the server should be running and accessible at this link [localhost:8000](http://localhost:8000)

## **Clean up**

Once done with the server and environment simply follow these steps

### **Stop Server**

To stop the server running simply press the following buttons on the command prompt or terminal running the server:

`Control + C`

### **Deactivate**

To deactivate the environment simple type the following command on the command prompt or terminal running the environment:

`deactivate`