**Python Django: Ultimate Beginner’s Course - 2022**

<https://www.udemy.com/course/python-django-ultimate-beginners-course-2022/learn/lecture/34354180#overview>

**Django**

* High-level Python based web framework
* back-end/server-side framework (Eg. Ruby on Rails - Ruby based, Laravel - PHP based, etc.)
* Allows for rapid development (extremely fast and scalable, secure)
* “Batteries-included” framework
  + Built in authentication, functionality, etc.
* IRL : Youtube, Instagram, Spotify
* Default database included in Django projects
  + db.sqlite3

**Python**

* Check if it’s already installed
  + In CMD, type “py --version”
* If not already installed
  + Install and set up python
  + Install python 3.9.13
* Already have 3.10.5 installed on my PC

**PIP**

* “Python install package”
* Used to install and manage Python packages
* To install “package”
  + In CMD, type “pip install packageName”

**CMD commands**

* cd “directoryName”
  + Change directory to different directory/folder
* mkdir “directoryName”
  + Make a directory/folder
* rmdir “directoryName”
  + Remove directory/folder
* cls ()
  + Clear the CMD

To deactivate virtual environment

* virtualEnvName\Scripts\deactivate

**Django Project Setup**

1. Open CMD, change directory
   * cd “desktop”
   * Changed mine to d drive
   * d:
2. Create new folder “development”
   * Changed mine to PythonProject > DjangoProject
3. cd “development”
4. pip install virtualenv
   * Allows you to create virtual environments
5. pip install django
   * If ERROR below happens, open CMD as Administrator
   * “WARNING: Failed to write executable - trying to use .deleteme logic ERROR: Could not install packages due to an OSError: [WinError 2] The system cannot find the file specified: 'C:\\Python310\\Scripts\\sqlformat.exe' -> 'C:\\Python310\\Scripts\\sqlformat.exe.deleteme'”
6. pip list
   * See list of installed python packages
7. Create Django project
   * django-admin startproject Edenthought
     + Edenthought = name of project
8. cd Edenthought
9. Create virtual environment
   * virtualenv venv
     + venv = name of virtual environment
   * If ERROR below happens, type the following: python -m virtualenv venv
   * “'virtualenv' is not recognized as an internal or external command, operable program or batch file.”
10. Activate virtual environment that was created
    * venv\Scripts\activate
11. pip list
    * Check which packages are in the virtual environment
12. pip install django
13. Open VS
14. Run server in CMD (in project folder, venv active)
    * python manage.py runserver
15. Verify server is running on port, open port in browser
    * http://127.0.0.1:8000/

**Configure python interpreter**

1. In VS, press ctrl + shift + p
   * Choose python: select interpreter
2. Go to project folder, click on virtual environment folder
   * Copy folder’s path
3. In VS, choose Enter interpreter path…
   * Paste folder’s path, press enter

ERROR: VS not accepting path to project’s virtual environment folder