**Documentation**

**Terms**

Django is a high level python web framework to rapidly create maintainable web applications.

Web framework is a collection of tools used to build websites

Django come with tools like:

1. Object-relational Mapping (ORM) – helps in making database queries.
2. URL Routing – helps determine which logic to follow depending on the URL of the web request.
3. HTML Templating – presentation logic to insert data into HTML.
4. Form Handling
5. Unit Testing

Django come with pytz library which offers time zone supports.

Django apps supplies apps that fits a specific purpose. Possible apps are: Blog, Forum, Wiki, etc.

**Installation Instructions**

Python Version: 3.6.3

1. Go to <https://www.python.org/>
2. Download the correct python version

Django Version: 1.11.7

1. Open command prompt and run *pip install django==1.11.7* (install pip first if it’s not already installed).

Install any text editor or IDE

**Run Environment**

\*\* Note: If using Mac, remember to use python3 or pip3 in command prompt.

1. Create Django project
   1. Navigate to the working folder using command prompt.
   2. Run: *django-admin.py startproject project-name*
   3. Project has been created with initial set of files:
      1. manage.py – Run commands
      2. shelter/\_\_init\_\_.py – Contains python files
      3. shelter/wsgi.py – Provides a hook for web servers such as Apache or Engine x
      4. shelter/setting.py – Configures Django
      5. shelter/urls.py – Routes requests based on URL
2. Run Project
   1. Navigate to the working directory
   2. Run: *python manage.py runserver*
   3. In browser, type *localhost:8000* and the default webpage will be displayed
   4. When server runs, it created db.sqlite so that the project has database to work with.
3. Create Django App
   1. Navigate to the working directory
   2. Run: *python manage.py startapp app-name*

**Simple Steps in creating a Django Project:**

1. Navigate to the folder and run django-admin.py startproject facialrecognition

2. Navigate inner facialrecognition folder and run python manage.py runserver

3. Navigate to parent folder and build app using python manage.py startapp fra

4. Navigate to the inner facialrecognition folder and modify setting.py file to include new app under installed apps

5. First modify model.py if working with database to store information and run migration commands - pyhton manage.py makemigrations, python manage.py showmigrations, python manage.py migrate. Download db browser tool to view sqllite databases then work with management folder (not in this case)

6. Second modify admin.py file.

7. Create superuser using python manage.py createsuperuser

8. Third modify urls.py

9. Fourth modify views.py

10. Runserver and check localhost:8000/facialrecognitionwebapp/1/

**Resources:**

<https://www.lynda.com/>

<https://www.djangoproject.com/>