SIMPLE PYTHON DJANGO NOTES:

<u>Django</u>- This is a high level web framework that uses python as the programming language. It allows one to develop secure and maintainable websites.

Django installation:

- ❖ To install Django in your system, download python then in your terminal "*pip install django*".
- If you have a python IDE(Integrated development environment), then have python installed in your system and add integrate the python into your IDE as an interpreter and lastly in your IDE's terminal "pip install django".

KEY DJANGO COMPONENTS:

MODELS

• This defines the database schema to be used for your app

VIEWS

• This handles the logic of your application (more like contains your python functions or your python code).

TEMPLATES

- Renders HTML to be served to the user.
- If you are using HTML as your front-end then you use this to save your HTML code.

Creating a Django project:

Create an app in your IDE.

URL's and Views:

- Define your URL patterns in the url.py file within your app.
- This is where create the URL's that your front-end will access the backend using.
- View handles HTTP requests and returns HTTP responses
- URLS are mapped using the urls.py file.

Models and database:

- Models define the structure of your database. In our case we are using a mongo DB. If are to use Djongo you define it in the settings.py file. But instead we are using a connection string
- Models are defined in the model.py in the app.

•To create database tables based on your models run these in your timetable: "python manage.py makemigrations" and "python manage.py migrate".

Django Admin:

- This manages site content.
- Create super user"python manage.py createsuperuser"
- You can access the admin panel at : http://localhost:8000/admin

Django Admin:

 Use Django's template language to render dynamic content in your HTML

Static Files:

 Store static files like JS, CSS and images in the static directory.

Creating a Django project using PyCharm:

Download and install PyCharm as your IDE from JetBrains.

Download and install python.

Open PyCharm, create a new Django project and add python as your interpreter.

Open PyCharm, then follow these steps to add python as your interpreter.
 File>settings>Project:your_project_name>python interpreter

In your terminal install Django.

Access the terminal in your project then run "pip install Django"

Now build on your app.