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departamento de electrónica,
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Informatics Engineering
Technologies and Web Programming

Lesson 05

Django Framework

Use the project and the data model used in the past lesson (Authors, Publishers and Books), to do the following exercises.

➔ Authentication and Authorization

1. Create the login and logout functionalities as shown in the slides.

2. Protect the operations o data, created before, in order to be used only if some users are authorized.
   For testing purpose, create some users, using the Django Admin Site.

➔ Deployment on Python Anywhere

1. Create an account in Python Anywhere.

2. In Python Anywhere:
   • add a new web app;
   • select Django Web Framework and Python 3.8;
   • give it a name – the same of the project you already have to deploy;
   • try to run it.

3. At this moment, Django version is not the right version for us. Let install our version:
   • Go to "Consoles" tab and start a Bash console;
   • Run the command: mkvirtualenv myvirtualenv --python=/usr/bin/python3.8;
   • Run check commands like: "which python" and "which pip";
   • Install new Django version, running command: pip install Django==3.1.2
   • Configure web app to use new virtual environment. Go to the "Web" tab, and in the Virtualenv section, enter the path: /home/myusername/.virtualenvs/myvirtualenv;
   • Reload your web app;
   • See all information on "https://help.pythonanywhere.com/pages/Virtualenvs".

4. Prepare you web project to be uploaded to pythonanywhere:
   • Make a copy of your web project, in your PC;
   • Move "static" folder from "app" folder to its parent folder;
   • Load it in pycharm, and go to "settings.py" file;
   • Copy the following constants from "settings.py" in pythonanywhere to your local

"settings.py" file:
- ALLOWED_HOST;
- MEDIA_ROOT and MEDIA_URL;
- STATIC_ROOT and STATIC_URL.

5. Now you have two options to copy your project to pythonanywhere:
- You can simple upload your project files to the recent created web app in Python Anywhere – using the Files page;
- OR you can use the Console page to use git tool to copy your project from a git repository.

6. Let use the first approach:
- First, we will backup current original web app files; Go to your webproj folder, in pythonanywhere, create a new folder named "original" and move there current "static" and "webproj" folders, as also the file named "manage.py";
- Create a zip file with files and folders of your webproj in your PC and upload it to pythonanywhere, inside webproj folder;
- In a bash console, inside the webproj folder, run the command: unzip webproject.zip;
- Go to "Web" tab and reload the web application;
- It's done. Run your web application, and enjoy it. ☺