

Django Task 2:

Develop a Django web application with models for authors and books. Follow the steps outlined below:

1. Setting up the Virtual Environment:

- Create a virtual environment for your Django project to maintain a clean and isolated development environment.

2. Django File Structure:

- Organize your Django project with a structured file system, including apps, settings, URLs, and templates.

3. Create Author and Book Models:

- Define models for authors and books in the **myapp/models.py** file.
 - Author model should include fields: **name** (CharField) and **bio** (TextField).
 - Book model should include fields: **title** (CharField), **author** (ForeignKey to Author with **on_delete=models.CASCADE**), and **published_date** (DateField).
- Run migrations to apply the models to the database.

4. Context and Templating Engine:

- Create a view function in **myapp/views.py** that retrieves all authors and books from the database.
- Use Django's templating engine to generate an HTML template (**myapp/templates/myapp/home.html**) that displays a list of authors and their associated books.
- Utilize template inheritance to structure the HTML content.

5. Function-Based Views and URL Configuration:

- Construct a function-based view in **myapp/views.py** to handle HTTP requests and render the template.
- Configure URL patterns in **myapp/urls.py** to map the view to the home page URL.

6. Django Shortcut: **render()** Function:

- Implement Django's **render()** function as a shortcut to efficiently render templates with context data in views.