

Daffodil International Professional Training Institute

Web Application Development with python Batch 06

You are working on a Django project where you have three models: Student, Teacher, and Product. Your task is to retrieve data from these models and display the results with specific filtering conditions.

Models and Fields

🔍 Student Table

- id (Primary Key – AutoField)
- name (CharField, max_length=100)
- age (IntegerField)
- department (CharField, max_length=50)
- email (EmailField, unique=True)
- gpa (DecimalField, max_digits=4, decimal_places=2)
- admission_date (DateField)

🔍 Product Table

- id (Primary Key – AutoField)
- name (CharField, max_length=100)
- price (DecimalField, max_digits=10, decimal_places=2)
- category (CharField, max_length=50)
- stock (IntegerField)
- brand (CharField, max_length=100)
- added_date (DateTimeField)

🔍 Teacher Table

- id (Primary Key – AutoField)
- name (CharField, max_length=100)
- subject (CharField, max_length=100)
- district (CharField, max_length=100)
- salary (DecimalField, max_digits=10, decimal_places=2)
- joining_date (DateField)
- email (EmailField, unique=True)

Tasks

1. From the **Student table**:
 - Retrieve and display all students whose **age is greater than 18**.
 - Retrieve and display all students who are studying in the **CSE department**.
2. From the **Teacher table**:
 - Retrieve and display all teachers who are from the **Chittagong district**.
 - Retrieve teachers whose **salary is greater than 50,000**.
 - Retrieve teachers who teach the subject **“Mathematics”**.
3. From the **Product table**:
 - Retrieve and display all products whose **price is greater than \$100**.
 - Retrieve products that belong to the **“Electronics” category**.
 - Retrieve products whose **stock is less than 10** (low stock).