

Django-MVT Session Topics



1	Request-Response Cycle	Discuss Django's Request/Response Cycle
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2	Filtering	Difference between <code>get_object_or_404()</code> , <code>get()</code> , <code>filter()</code> in django
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3	Primary Key	Does Django support multiple-column primary keys?
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4		How can you see raw SQL queries running in Django?
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5	QuerySet	What is a QuerySet in the context of Django?
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6	Mixin	What is mixin?
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7	Field Class	What is Django Field Class?
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8	Combine QuerySets	How to combine multiple QuerySets in a View?
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9	Q objects	Explain Q objects in Django ORM.
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10	select_related and prefetch_related	Difference between select_related and prefetch_related?
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```
from django.db import models
```

```
class Author(models.Model):
    name = models.CharField(max_length=100)
```

```
class Book(models.Model):
    title = models.CharField(max_length=200)
    publication_date = models.DateField()
    author = models.ForeignKey(Author, on_delete=models.CASCADE)
    price = models.DecimalField(max_digits=10, decimal_places=2)
```

11	Scenario Based Q.	Write a query to retrieve all books published in the year 2023
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12	Scenario Based Q.	Write a query to retrieve all authors who have published at least one book in 2023.
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13	Scenario Based Q.	Optimize the query from Task 2 to use Django's select_related or prefetch_related to minimize the number of database queries.
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14	Scenario Based Q.	Write a query to retrieve the total number of books and the average price of books for each author. The result should be a list of dictionaries with author_name, total_books, and average_price as keys.
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