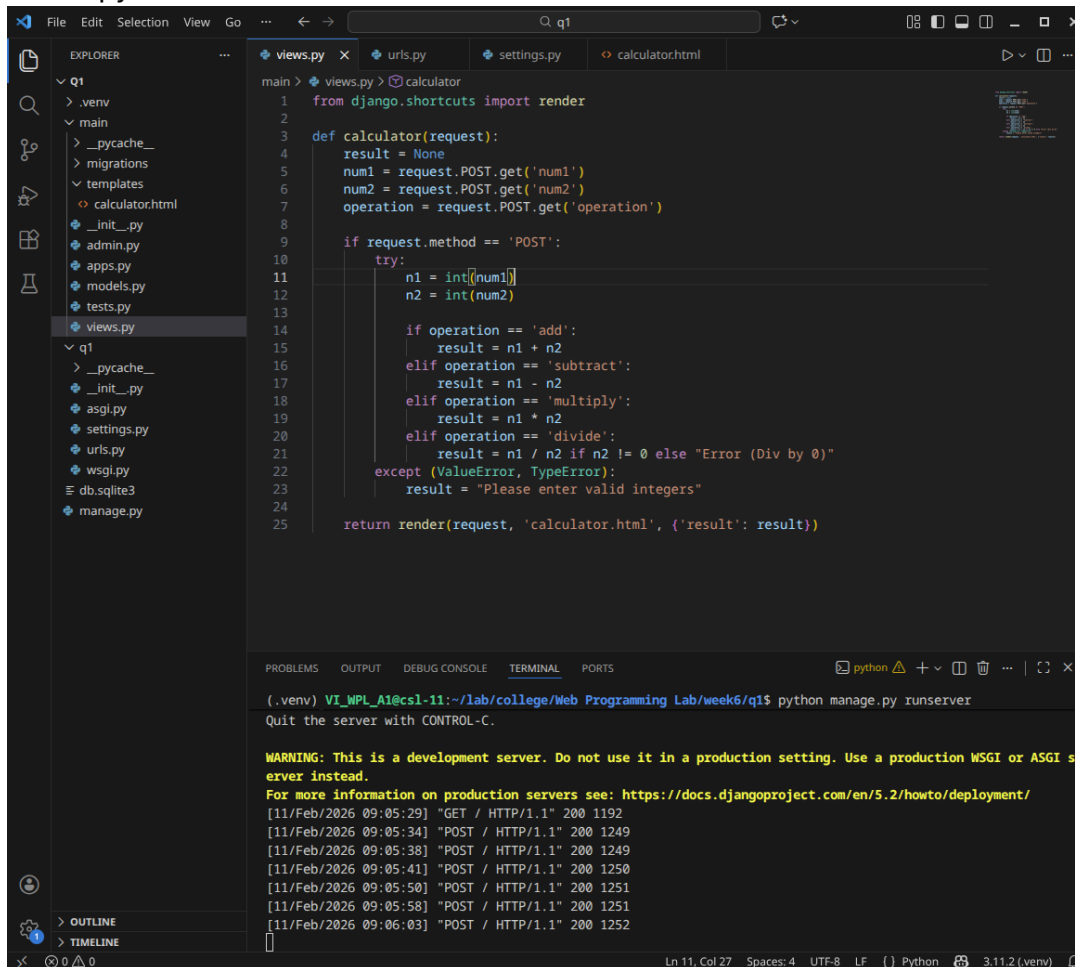# WPL LAB 6

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Roll no: A-029

Reg no: 230905225

Q1. Develop a simple web page to perform basic arithmetic operations. Take two integer inputs from the user, select the operation to be performed using a dropdown. Include a button "Calculate" to perform the selected operation, and then display the result in the same web page.

Views.py

Urls.py

```
1    """
2    URL configuration for q1 project.
3
4    The `urlpatterns` list routes URLs to views. For more information please see:
5        https://docs.djangoproject.com/en/5.2/topics/http/urls/
6    Examples:
7    Function views
8        1. Add an import:  from my_app import views
9        2. Add a URL to urlpatterns:  path('', views.home, name='home')
10   Class-based views
11       1. Add an import:  from other_app.views import Home
12       2. Add a URL to urlpatterns:  path('', Home.as_view(), name='home')
13   Including another URLconf
14       1. Import the include() function: from django.urls import include, path
15       2. Add a URL to urlpatterns:  path('blog/', include('blog.urls'))
16   """
17   from django.contrib import admin
18   from django.urls import path
19   from main.views import calculator
20
21   urlpatterns = [
22       path('admin/', admin.site.urls),
23       path('',calculator,name='calculator')
24   ]
25
```

Settings.py

EXPLORER   ⋯   views.py   urls.py   settings.py ×   <> calculator.html

q1 > settings.py > ...

```python
17
18
19      # Quick-start development settings - unsuitable for production
20      # See https://docs.djangoproject.com/en/5.2/howto/deployment/checklist/
21
22      # SECURITY WARNING: keep the secret key used in production secret!
23      SECRET_KEY = 'django-insecure-@bqy75-7*$as&t(=)%e*arirw6pb@-45*3*e*6(08m0$_0-s$*'
24
25      # SECURITY WARNING: don't run with debug turned on in production!
26      DEBUG = True
27
28      ALLOWED_HOSTS = []
29
30
31      # Application definition
32
33      INSTALLED_APPS = [
34          'main',
35          'django.contrib.admin',
36          'django.contrib.auth',
37          'django.contrib.contenttypes',
38          'django.contrib.sessions',
39          'django.contrib.messages',
40          'django.contrib.staticfiles',
41      ]
42
43      MIDDLEWARE = [
44          'django.middleware.security.SecurityMiddleware',
45          'django.contrib.sessions.middleware.SessionMiddleware',
46          'django.middleware.common.CommonMiddleware',
47          'django.middleware.csrf.CsrfViewMiddleware',
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
(.venv) VI_WPL_A1@csl-11:~/lab/college/Web Programming Lab/week6/q1$ python manage.py runserver
Quit the server with CONTROL-C.

WARNING: This is a development server. Do not use it in a production setting. Use a production WSGI or ASGI s
erver instead.
For more information on production servers see: https://docs.djangoproject.com/en/5.2/howto/deployment/
[11/Feb/2026 09:05:29] "GET / HTTP/1.1" 200 1192
[11/Feb/2026 09:05:34] "POST / HTTP/1.1" 200 1249
[11/Feb/2026 09:05:38] "POST / HTTP/1.1" 200 1249
[11/Feb/2026 09:05:41] "POST / HTTP/1.1" 200 1250
[11/Feb/2026 09:05:50] "POST / HTTP/1.1" 200 1251
[11/Feb/2026 09:05:58] "POST / HTTP/1.1" 200 1251
[11/Feb/2026 09:06:03] "POST / HTTP/1.1" 200 1252
```
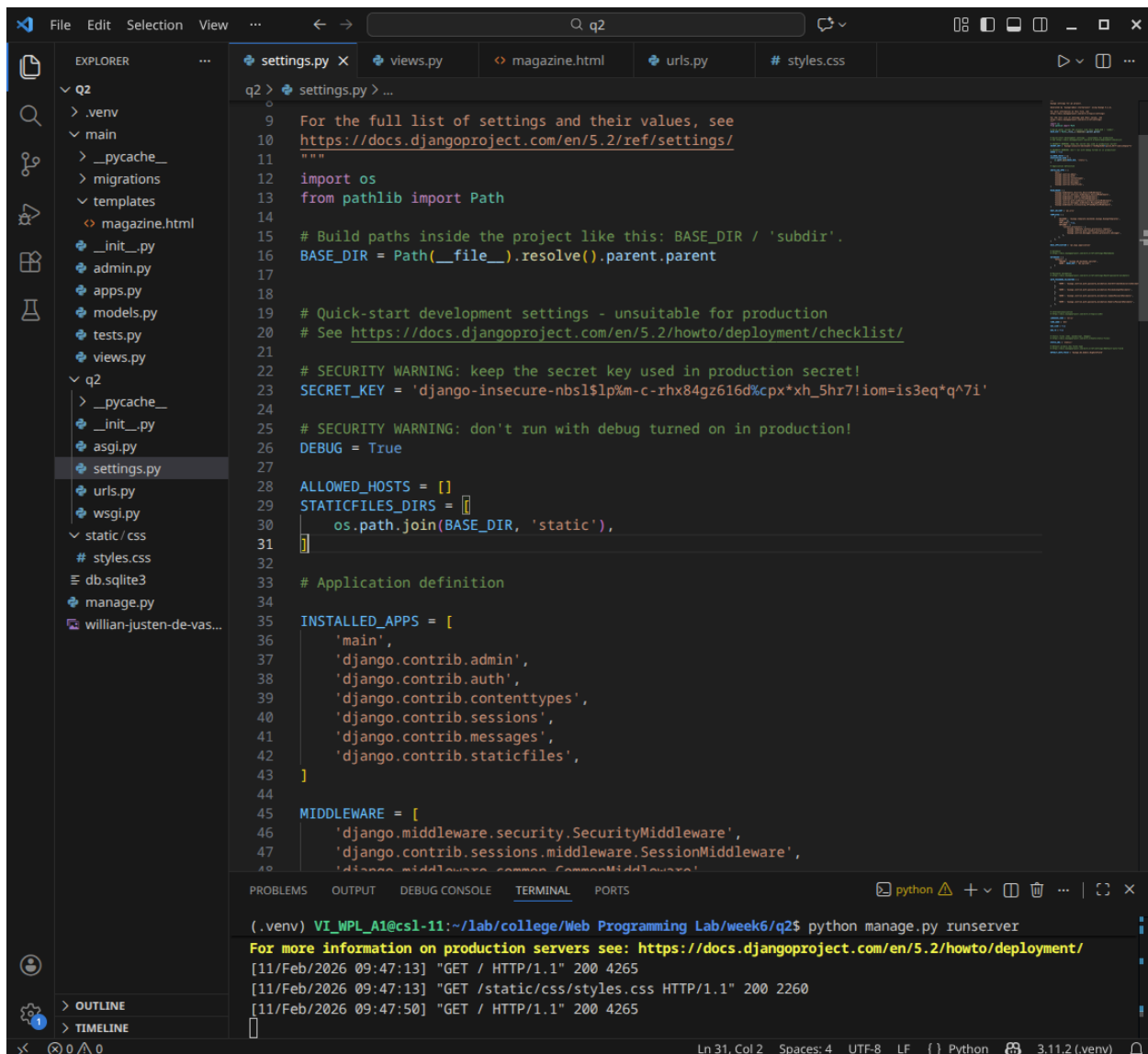
Calculator.html

Website

Q2. Develop a simple web form that generates the front cover for a magazine. The

form should provide the options for selecting the image, background color, changing font size, color etc. Input messages must be taken from the user so as to display it on the front cover with legible font family and font size. The front cover developed should be proportionate to the web page size. Place the css files inside static folder.

Settings.py

Views.py

Magazine.html

```html
{% load static %}
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Magazine Cover Generator</title>
<link
href="https://fonts.googleapis.com/css2?family=Playfair+Display:wght@700;900&family=Roboto:wght@300;400;700&display=swap" rel="stylesheet">
<link rel="stylesheet" href="{% static 'css/styles.css' %}">
</head>
<body>
```

```html
<div class="main-container">
<div class="controls-panel">
<h2>Cover Editor</h2>
<form id="magazineForm">
<div class="control-group">
<h3>Background</h3>
<label>Upload Image</label>
<input type="file" id="imgInput" accept="image/*">
<label>Background Color</label>
<input type="color" id="bgColor" value="#ffffff">
</div>

<div class="control-group">
<h3>Masthead (Title)</h3>
<label>Title Text</label>
<input type="text" id="titleText" value="VOGUE">
<label>Font Color</label>
<input type="color" id="titleColor" value="#ff0000">
<label>Font Size</label>
<input type="range" id="titleSize" min="40" max="150" value="100">
</div>

<div class="control-group">
<h3>Headlines</h3>
<label>Main Headline</label>
<input type="text" id="headlineText" value="SUMMER VIBES">
<label>Sub-Headline</label>
<input type="text" id="subHeadlineText" value="The ultimate guide to style">
<label>Text Color</label>
<input type="color" id="featureColor" value="#ffffff">
</div>
</form>
</div>

<div class="preview-panel">
<div id="magazineCover" class="magazine-cover">
<div class="overlay" id="coverOverlay"></div>
<h1 id="displayTitle">VOGUE</h1>
<div class="feature-content">
<h2 id="displayHeadline">SUMMER VIBES</h2>
<p id="displaySubHeadline">The ultimate guide to style</p>
</div>
```

```html
<div class="issue-info">
<p>SEPT 2026 • $10.00</p>
<div class="barcode">||| || ||||| | ||</div>
</div>
</div>
</div>
</div>

<script>
// Live Preview Logic
const imgInput = document.getElementById('imgInput');
const magazineCover = document.getElementById('magazineCover');
// Title Controls
document.getElementById('titleText').addEventListener('input', e =>
document.getElementById('displayTitle').innerText = e.target.value);
document.getElementById('titleColor').addEventListener('input', e =>
document.getElementById('displayTitle').style.color = e.target.value);
document.getElementById('titleSize').addEventListener('input', e =>
document.getElementById('displayTitle').style.fontSize = e.target.value + 'px');

// Headline Controls
document.getElementById('headlineText').addEventListener('input', e =>
document.getElementById('displayHeadline').innerText = e.target.value);
document.getElementById('subHeadlineText').addEventListener('input', e =>
document.getElementById('displaySubHeadline').innerText = e.target.value);
document.getElementById('featureColor').addEventListener('input', e => {
document.getElementById('displayHeadline').style.color = e.target.value;
document.getElementById('displaySubHeadline').style.color = e.target.value;
});

// Background Controls
document.getElementById('bgColor').addEventListener('input', e =>
magazineCover.style.backgroundColor = e.target.value);

// Image Upload Logic
imgInput.addEventListener('change', function(event) {
const file = event.target.files[0];
if (file) {
const reader = new FileReader();
reader.onload = function(e) {
magazineCover.style.backgroundImage = `url(${e.target.result})`;
};
```

```
reader.readAsDataURL(file);
}
});
</script>


</body>
</html>
```

Urls.py


```
"""
URL configuration for q2 project.

The `urlpatterns` list routes URLs to views. For more information please see:
    https://docs.djangoproject.com/en/5.2/topics/http/urls/
Examples:
Function views
    1. Add an import:  from my_app import views
    2. Add a URL to urlpatterns:  path('', views.home, name='home')
Class-based views
    1. Add an import:  from other_app.views import Home
    2. Add a URL to urlpatterns:  path('', Home.as_view(), name='home')
Including another URLconf
    1. Import the include() function: from django.urls import include, path
    2. Add a URL to urlpatterns:  path('blog/', include('blog.urls'))
"""
from django.contrib import admin
from django.urls import path
from main.views import magazine_view

urlpatterns = [
    path('admin/', admin.site.urls),
    path('', magazine_view, name='home'),
]
```

Styles.css

```
body {
margin: 0;
font-family: 'Roboto', sans-serif;
background-color: #222;
```

```css
  height: 100vh;
  display: flex;
  align-items: center;
  justify-content: center;
}

.main-container {
  display: flex;
  width: 95%;
  max-width: 1200px;
  height: 90vh;
  background: white;
  border-radius: 10px;
  overflow: hidden;
}

/* Controls Panel (Left) */
.controls-panel {
  flex: 1;
  padding: 20px;
  background: #f4f4f4;
  overflow-y: auto;
}

.control-group {
  background: white;
  padding: 15px;
  margin-bottom: 15px;
  border-radius: 5px;
  box-shadow: 0 2px 5px rgba(0,0,0,0.05);
}

label {
  display: block;
  font-size: 0.85rem;
  margin: 10px 0 5px;
  font-weight: bold;
  color: #555;
}

input[type="text"], input[type="file"] {
  width: 100%;
  padding: 8px;
```

```css
  border: 1px solid #ddd;
  box-sizing: border-box;
}

/* Preview Panel (Right) */
.preview-panel {
  flex: 1.5;
  background: #333;
  display: flex;
  justify-content: center;
  align-items: center;
  padding: 20px;
}

.magazine-cover {
  width: 100%;
  aspect-ratio: 1 / 1.4; /* Magazine Ratio */
  max-height: 100%;
  background-color: white;
  background-size: cover;
  background-position: center;
  position: relative;
  display: flex;
  flex-direction: column;
  justify-content: space-between;
  box-shadow: 0 0 20px rgba(0,0,0,0.5);
}

/* Typography on Cover */
#displayTitle {
  font-family: 'Playfair Display', serif;
  font-size: 100px;
  text-align: center;
  margin: 0;
  line-height: 0.9;
  z-index: 2;
  text-shadow: 2px 2px 10px rgba(0,0,0,0.3);
}

.feature-content {
  padding: 20px;
  margin-top: auto;
  z-index: 2;
```

```css
}

#displayHeadline {
font-size: 3rem;
text-transform: uppercase;
margin: 0;
line-height: 1;
text-shadow: 2px 2px 5px rgba(0,0,0,0.5);
}

#displaySubHeadline {
background: rgba(0,0,0,0.6);
color: white;
display: inline-block;
padding: 5px 10px;
margin-top: 10px;
}

.issue-info {
display: flex;
justify-content: space-between;
padding: 10px 20px;
background: white;
font-size: 0.8rem;
font-weight: bold;
}

.barcode {
font-family: monospace;
letter-spacing: -2px;
}
```
Website
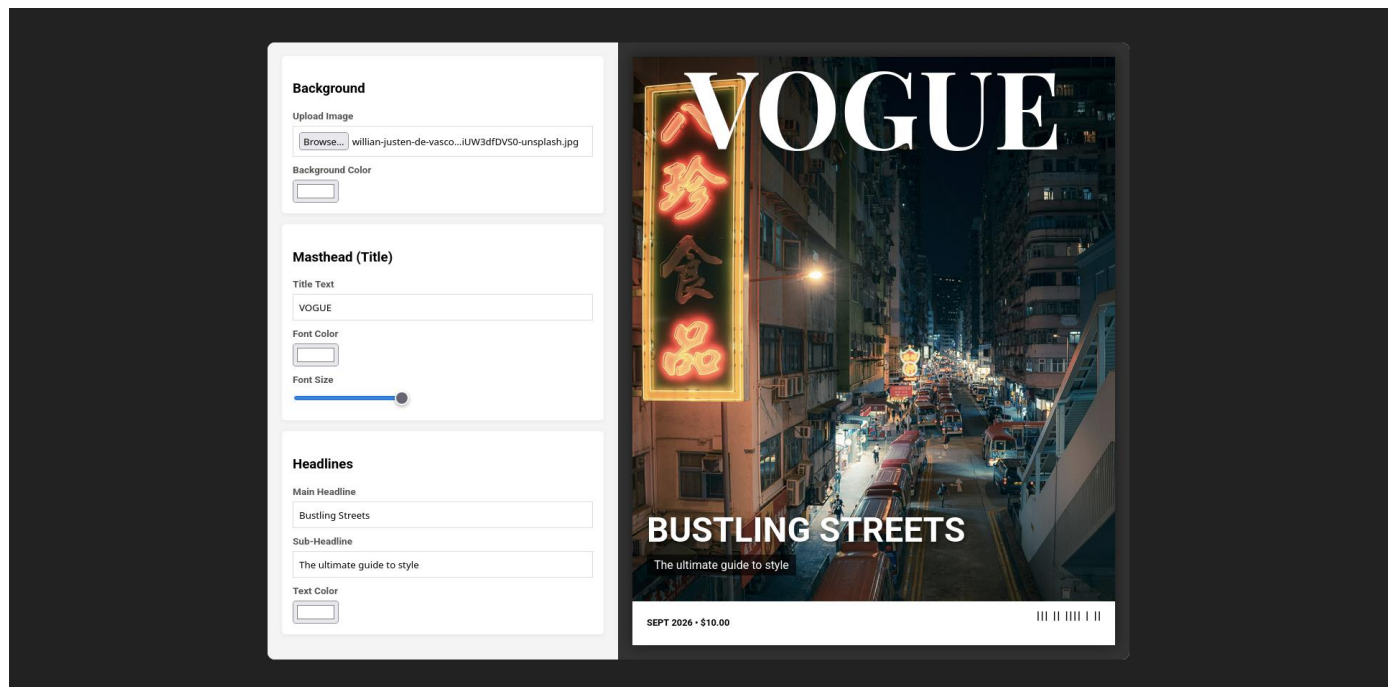
Q3. Design a simple web application to provide information about a book. The home page of the application should display the cover page of the book along with three hyperlinks: Metadata, Reviews, Publisher info. Give provision to revert to home page from any other page.

Urls.py

```python
from django.urls import path
from . import views

urlpatterns = [
    path('', views.home, name='home'),
    path('metadata/', views.metadata, name='metadata'),
    path('reviews/', views.reviews, name='reviews'),
    path('publisher/', views.publisher, name='publisher'),
]
```

Terminal:

```
^C(.venv) VI_WPL_A1@csl-11:~/lab/college/Web Programming Lab/week6/q3$ python manage.py runserver
February 11, 2026 - 10:11:55
Django version 5.2.11, using settings 'q3.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.

WARNING: This is a development server. Do not use it in a production setting. Use a production WSGI or ASG
I server instead.
For more information on production servers see: https://docs.djangoproject.com/en/5.2/howto/deployment/
[11/Feb/2026 10:11:58] "GET / HTTP/1.1" 200 613
[11/Feb/2026 10:11:58] "GET /static/main/cover.jpg HTTP/1.1" 200 258401
```

Base.html

```html
<!DOCTYPE html>
<html>
<head>
    <title>Book Info</title>
</head>
<body>
    <div style="padding: 10px; background-color: #f0f0f0;">
        {% if request.resolver_match.url_name != 'home' %}
            <a href="{% url 'home' %}">← Back to Home</a>
        {% else %}
            <span>Welcome to the Book App</span>
        {% endif %}
    </div>
    <hr>

    <div style="padding: 20px;">
        {% block content %}
        {% endblock %}
    </div>
</body>
</html>
```

Home.html

EXPLORER   urls.py main   base.html   home.html ×   metadata.html   reviews.html   publisher.html

∨ Q3   main > templates > main > home.html > ...
  > .venv   1   {% extends 'main/base.html' %}
  ∨ main   2   {% load static %}
    > __pycache__   3   {% block content %}
    > migrations   4   <h1>The Great Gatsby</h1>
    ∨ static / main   5
      cover.jpg   6   <img src="{% static 'main/cover.jpg' %}" alt="Book Cover" width="200">
    ∨ templates / main   7
      base.html   8   <h3>Navigate:</h3>
      home.html   9
      metadata.html   10   View Metadata
      publisher.html   11   Read Reviews
      reviews.html   12   Publisher Info
    __init__.py   13
    admin.py   14   {% endblock %}
    apps.py
    models.py
    tests.py
    urls.py
    views.py
  ∨ q3
    > __pycache__
    __init__.py
    asgi.py
    settings.py
    urls.py
    wsgi.py
  db.sqlite3
  manage.py

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
^C(.venv) VI_WPL_A1@csl-11:~/lab/college/Web Programming Lab/week6/q3$ python manage.py runserver
February 11, 2026 - 10:11:55
Django version 5.2.11, using settings 'q3.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.

WARNING: This is a development server. Do not use it in a production setting. Use a production WSGI or ASG
I server instead.
For more information on production servers see: https://docs.djangoproject.com/en/5.2/howto/deployment/
[11/Feb/2026 10:11:58] "GET / HTTP/1.1" 200 613
[11/Feb/2026 10:11:58] "GET /static/main/cover.jpg HTTP/1.1" 200 258401
```

Metadata.html

EXPLORER

urls.py main   base.html   home.html   metadata.html ×   reviews.html   publisher.html

∨ Q3
 > .venv
 ∨ main
  > __pycache__
  > migrations
  ∨ static / main
   cover.jpg
  ∨ templates / main
   base.html
   home.html
   metadata.html
   publisher.html
   reviews.html
  __init__.py
  admin.py
  apps.py
  models.py
  tests.py
  urls.py
  views.py
 ∨ q3
  > __pycache__
  __init__.py
  asgi.py
  settings.py
  urls.py
  wsgi.py
 db.sqlite3
 manage.py

main > templates > main > metadata.html > ...

```
1   {% extends 'main/base.html' %}
2
3   {% block content %}
4       <h2>Book Metadata</h2>
5       <p><strong>Author:</strong> F. Scott Fitzgerald</p>
6       <p><strong>Genre:</strong> Tragedy, Realism</p>
7       <p><strong>Pages:</strong> 218</p>
8   {% endblock %}
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
^C(.venv) VI_WPL_A1@csl-11:~/lab/college/Web Programming Lab/week6/q3$ python manage.py runserver
February 11, 2026 - 10:11:55
Django version 5.2.11, using settings 'q3.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.

WARNING: This is a development server. Do not use it in a production setting. Use a production WSGI or ASG
I server instead.
For more information on production servers see: https://docs.djangoproject.com/en/5.2/howto/deployment/
[11/Feb/2026 10:11:58] "GET / HTTP/1.1" 200 613
[11/Feb/2026 10:11:58] "GET /static/main/cover.jpg HTTP/1.1" 200 258401
```

> OUTLINE
> TIMELINE

Ln 8, Col 15   Spaces: 4   UTF-8   LF   {} HTML

Reviews.html

EXPLORER   urls.py main   base.html   home.html   metadata.html   reviews.html ✕   publisher.html

∨ Q3   main > templates > main > reviews.html > ...
  > .venv   1   {% extends 'main/base.html' %}
  ∨ main   2
    > __pycache__   3   {% block content %}
    > migrations   4   <h2>User Reviews</h2>
    ∨ static / main   5   <p>★★★★★ - "A classic for a reason!"</p>
      🖼 cover.jpg   6   <p>★★★★ - "Great symbolism, slightly slow start."</p>
    ∨ templates / main   7   {% endblock %}
      <> base.html
      <> home.html
      <> metadata.html
      <> publisher.html
      <> reviews.html
    🐍 __init__.py
    🐍 admin.py
    🐍 apps.py
    🐍 models.py
    🐍 tests.py
    🐍 urls.py
    🐍 views.py
  ∨ q3
    > __pycache__
    🐍 __init__.py
    🐍 asgi.py
    🐍 settings.py
    🐍 urls.py
    🐍 wsgi.py
  ≡ db.sqlite3
  🐍 manage.py

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
^C(.venv) VI_WPL_A1@csl-11:~/lab/college/Web Programming Lab/week6/q3$ python manage.py runserver
February 11, 2026 - 10:11:55
Django version 5.2.11, using settings 'q3.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.

WARNING: This is a development server. Do not use it in a production setting. Use a production WSGI or ASG
I server instead.
For more information on production servers see: https://docs.djangoproject.com/en/5.2/howto/deployment/
[11/Feb/2026 10:11:58] "GET / HTTP/1.1" 200 613
[11/Feb/2026 10:11:58] "GET /static/main/cover.jpg HTTP/1.1" 200 258401
```

> OUTLINE
> TIMELINE

Ln 7, Col 15   Spaces: 4   UTF-8   LF   {} HTML

Publisher.html

EXPLORER ···

metadata.html   reviews.html   ⟨⟩ publisher.html ✕   settings.py   urls.py q3   views.py

∨ Q3
> .venv
∨ main
  > __pycache__
  > migrations
  ∨ static / main
    cover.jpg
  ∨ templates / main
    ⟨⟩ base.html
    ⟨⟩ home.html
    ⟨⟩ metadata.html
    ⟨⟩ publisher.html
    ⟨⟩ reviews.html
  __init__.py
  admin.py
  apps.py
  models.py
  tests.py
  urls.py
  views.py
∨ q3
  > __pycache__
  __init__.py
  asgi.py
  settings.py
  urls.py
  wsgi.py
db.sqlite3
manage.py

main > templates > main > ⟨⟩ publisher.html > ...

```
1    {% extends 'main/base.html' %}
2
3    {% block content %}
4        <h2>Publisher Information</h2>
5        <p><strong>Publisher:</strong> Charles Scribner's Sons</p>
6        <p><strong>Year:</strong> 1925</p>
7        <p><strong>Location:</strong> New York City</p>
8    {% endblock %}
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
^C(.venv) VI_WPL_A1@csl-11:~/lab/college/Web Programming Lab/week6/q3$ python manage.py runserver
February 11, 2026 - 10:11:55
Django version 5.2.11, using settings 'q3.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.

WARNING: This is a development server. Do not use it in a production setting. Use a production WSGI or ASG
I server instead.
For more information on production servers see: https://docs.djangoproject.com/en/5.2/howto/deployment/
[11/Feb/2026 10:11:58] "GET / HTTP/1.1" 200 613
[11/Feb/2026 10:11:58] "GET /static/main/cover.jpg HTTP/1.1" 200 258401
```

> OUTLINE
> TIMELINE

Ln 8, Col 15   Spaces: 4   UTF-8   LF   {} HTML

Settings.py

```
10    nTTps://docs.djangoproject.com/en/5.2/ref/settings/
11    """
12
13    from pathlib import Path
14
15    # Build paths inside the project like this: BASE_DIR / 'subdir'.
16    BASE_DIR = Path(__file__).resolve().parent.parent
17
18
19    # Quick-start development settings - unsuitable for production
20    # See https://docs.djangoproject.com/en/5.2/howto/deployment/checklist/
21
22    # SECURITY WARNING: keep the secret key used in production secret!
23    SECRET_KEY = 'django-insecure-4m+97yu!zht7vwi1=0sj*)#_$)h%)*@uzascrk2o0)fxv9il^t'
24
25    # SECURITY WARNING: don't run with debug turned on in production!
26    DEBUG = True
27
28    ALLOWED_HOSTS = []
29
30
31    # Application definition
32
33    INSTALLED_APPS = [
34        'main',
35        'django.contrib.admin',
36        'django.contrib.auth',
37        'django.contrib.contenttypes',
38        'django.contrib.sessions',
39        'django.contrib.messages',
40        'django.contrib.staticfiles',
41    ]
42
43    MIDDLEWARE = [
```

TERMINAL

```
^C(.venv) VI_WPL_A1@csl-11:~/lab/college/Web Programming Lab/week6/q3$ python manage.py runserver
February 11, 2026 - 10:11:55
Django version 5.2.11, using settings 'q3.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.

WARNING: This is a development server. Do not use it in a production setting. Use a production WSGI or ASG
I server instead.
For more information on production servers see: https://docs.djangoproject.com/en/5.2/howto/deployment/
[11/Feb/2026 10:11:58] "GET / HTTP/1.1" 200 613
[11/Feb/2026 10:11:58] "GET /static/main/cover.jpg HTTP/1.1" 200 258401
```

Q3/urls.py

EXPLORER

metadata.html   reviews.html   publisher.html   settings.py   urls.py q3 ✕   views.py

∨ Q3

q3 > urls.py > ...

> .venv

∨ main

> __pycache__

> migrations

∨ static / main

🖼 cover.jpg

∨ templates / main

<> base.html

<> home.html

<> metadata.html

<> publisher.html

<> reviews.html

🐍 __init__.py

🐍 admin.py

🐍 apps.py

🐍 models.py

🐍 tests.py

🐍 urls.py

🐍 views.py

∨ q3

> __pycache__

🐍 __init__.py

🐍 asgi.py

🐍 settings.py

🐍 urls.py

🐍 wsgi.py

≡ db.sqlite3

🐍 manage.py

```
1    """
2    URL configuration for q3 project.
3
4    The `urlpatterns` list routes URLs to views. For more information please see:
5        https://docs.djangoproject.com/en/5.2/topics/http/urls/
6    Examples:
7    Function views
8        1. Add an import:  from my_app import views
9        2. Add a URL to urlpatterns:  path('', views.home, name='home')
10   Class-based views
11       1. Add an import:  from other_app.views import Home
12       2. Add a URL to urlpatterns:  path('', Home.as_view(), name='home')
13   Including another URLconf
14       1. Import the include() function: from django.urls import include, path
15       2. Add a URL to urlpatterns:  path('blog/', include('blog.urls'))
16   """
17   from django.contrib import admin
18   from django.urls import path,include
19
20   urlpatterns = [
21       path('admin/', admin.site.urls),
22       path('',include('main.urls'))
23   ]
24
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS   python

```
^C(.venv) VI_WPL_A1@csl-11:~/lab/college/Web Programming Lab/week6/q3$ python manage.py runserver
February 11, 2026 - 10:11:55
Django version 5.2.11, using settings 'q3.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.

WARNING: This is a development server. Do not use it in a production setting. Use a production WSGI or ASG
I server instead.
For more information on production servers see: https://docs.djangoproject.com/en/5.2/howto/deployment/
[11/Feb/2026 10:11:58] "GET / HTTP/1.1" 200 613
[11/Feb/2026 10:11:58] "GET /static/main/cover.jpg HTTP/1.1" 200 258401
```
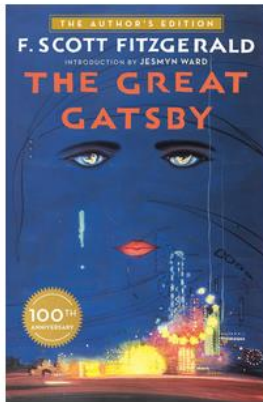
> OUTLINE

> TIMELINE

Ln 22, Col 27   Spaces: 4   UTF-8   LF   {} Python   3.11.2 (.venv)

View.py

Website

The Great Gatsby

Navigate:

- View Metadata
- Read Reviews
- Publisher Info

Book Metadata

Author: F. Scott Fitzgerald

Genre: Tragedy, Realism

Pages: 218

User Reviews

⭐⭐⭐⭐⭐ - "A classic for a reason!"

⭐⭐⭐⭐ - "Great symbolism, slightly slow start."

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