Secure Job Application Form System Using Django

1. Problem Statement

The job application process is often cumbersome for job seekers and employers. A centralized **Job Portal** can streamline this process by allowing users to submit applications and employers to review them efficiently. The goal of this project is to create a web-based secure **Job Portal** using Django that enables job seekers to apply for jobs through an intuitive interface.

2. Step-by-Step Process of Creating the Project

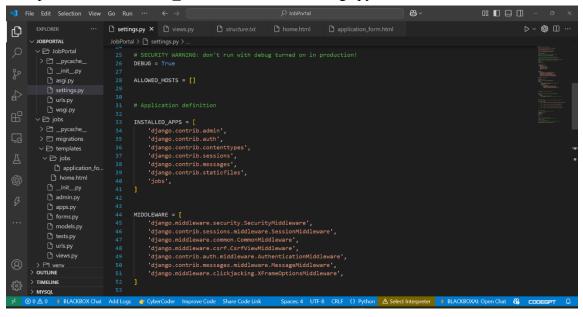
Step 1: Setting Up the Django Project

- 1. Install Django:
 - --- pip install django
- 2. Create a Django project named **JobPortal**:
 - ---django-admin startproject JobPortal
- 3. Navigate into the project directory:
 - ---cd JobPortal
- 4. Run the development server to verify setup:
 - ---python manage.py runserver

Step 2: Creating a Django App

- 1. Create an app named **jobs**:
 - ---python manage.py startapp jobs

Add jobs to INSTALLED APPS in JobPortal/settings.py:



Step 3: Creating Models (jobs/models.py):

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   home.html models.py × application_form.html
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    □ jobs > [¹] models.py > [³] JobApplication

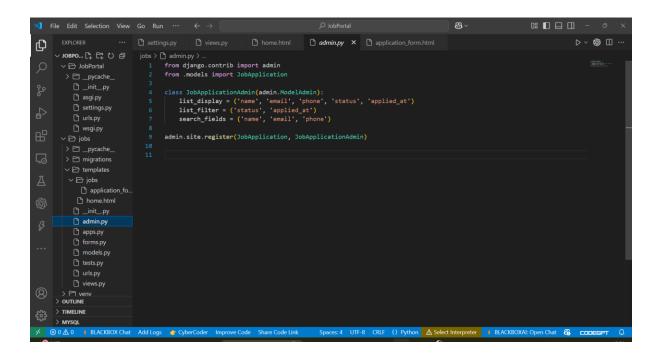
    ∨ [□] JobPortal
    1 from django.db import models

                                            STATUS_CHOICES = [
    ('Pending', 'Pending'),
    ('Shortlisted', 'Shortlisted'),
    ('Rejected', 'Rejected'),
                                    9
10 name = models.CharField(max_length=255)
11 email = models.EmailField()
12 phone = models.CharField(max_length=10)
13 resume = models.FileField(upload_to='resume')
    > 🗀 _pycache_
> 🗀 migrations
> 🖒 templates
                                                pnote = models.trialrizationax_length=10)
resume = models.FileField(upload_to='resumes/', help_text="Upload PDF only")
cover_letter = models.TextField()
status = models.CharField(max_length=20, choices=STATUS_CHOICES, default='Pending')
applied_at = models.DateTimeField(auto_now_add=True)
     application_fo...
                                                  def __str__(self):
    return f"{self.name} - {self.status}"
       apps.py
        models.py
      views.py
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```

Step 4: Applying Migrations

- ---python manage.py makemigrations
- ---python manage.py migrate

Step 5: Creating Forms (jobs/forms.py):



Step 6: Creating Views (jobs/views.py):

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Tile Edit Selection View Go Run …
                                                                          ··· 🖒 settings.py 🖒 views.py 🗙 🖒 structure.txt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ▷ ~ ⑤ Ⅲ …
0
                                                                                                 | views.py > ...
| from django.shortcuts import render, redirect
| from .forms import JobApplicationForm
| from .models import JobApplication
| from django.contrib import messages
| 5
                       V JOBPORTAL
                         > 🛅 _pycache_
                                      settings.py
                            | yether | 
                                                                                                                                              return render(request, 'home.html')
                                                                                                                                             if request.method == "POST":
form = JobApplicationForm(request.POST, request.FILES)
if form is valid/>
  <u>⊡</u>
                                                                                                                                                                   form.save()
messages.success(request, "Your application has been submitted successfully!")
return redirect('job_application')
                                             application_fo...
                                                                                                                                                                                  messages.error(request, "There was an error in your application. Please fix the errors.")
                                     forms.py
models.py
                   > Pl venv
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```

Step 7: Creating Templates

Home Page (templates/home.html):

```
08 □ □ □
                            ... home.html • home.html •
                                                                                                                                                                                                  § □ ···
                                   jobs > templates > [ home.html 1 <! DOCTYPE html>
      ∨ JOBPORTAL
        ∨ 🗁 JobPortal
💾 urls.py
                                            <html lang="en"
           wsgi.py
                                             <meta name="viewport" content="width=device-width, initial-scale=1.0";</pre>
         body {

background: linear-gradient(to bottom, ■ #e6ffe6, beige, skyblue);

font-family: Arial, sans-serif; height: 100vh; display: flex;align-items: center;

justify-content: center; margin: 0;
                                             justiny-tend
}
.container {
max-width: 400px; padding: 15px; text-align: center;
border-radius: 8px; background: ■ af9f9f9;box-shadow: 0 0 8px □rgba(0, 128, 0, 0.2);
}
h2 { color: green; }
a {
display: inline-bl
                                                display: inline-block; text-decoration: none;
background: green; color: white; padding: 8px 15px;border-radius: 5px; font-size: 14px;
           f structure.txt
                                                 > OUTLINE
> TIMELINE
                30 </html>
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Job Application Form (templates/jobs/application form.html):

```
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                               ··· 🗋 home.html • 🗋 application_form.html •
                                                                                                                                                                                                                                                           ® ∏ ··
        V JOBPORTAL
                                                1 <|DOCTYPE html>
2 <html lang="en">
3 <head>
         ∨ 🗁 JobPortal
                                                          <meta charset="UTF-8">
<meta name="viewport"</pre>
                                                          <title>Job Application</title>
                                                          body {

background: linear-gradient(to bottom, ■ #e6ffe6, beige, skyblue);

font-family: Arial, sans-serif; height: 100vh; display: flex;

align-items: center; justify-content: center; margin: 0;
}
         ∨ 🗁 jobs
            > 🖹 _pycache_
.container {
| width: 350px; padding: 15px; text-align: center; border-radius: 8px; background: ■ #f9f9f9; box-shadow: 0 0 8px □rgba(0, 128, 0, 0.2);
                home.html
                                                              msg { padding: 8px; border-radius: 5px; color: white; }
                                                             .success { background: green; }
.error { background: red; }
               apps.py
                                                                  background: green; color: white; padding: 8px;
border: none; border-radius: 5px; cursor: pointer;
```

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                ··· home.html • 🗋 application_form.html •
    ∨ JOBPORTAL

∨ P

→ JobPortal

                              <div class="container">
                               <h2 style="color: green;">Apply Now</h2>
{% if messages %}

∨ 

ightarrow

jobs

jobs

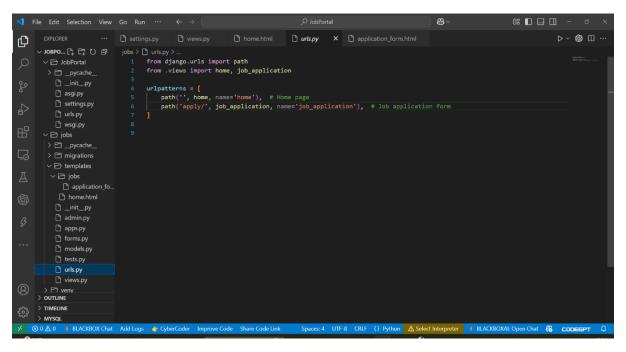
         application_fo... 42 </body>
(application_fo... 43 </bdd>
        apps.py
        forms.py
    > P venv
> Tilmes...
> MYSQL
    > TIMELINE
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Step 8: Configuring URLs

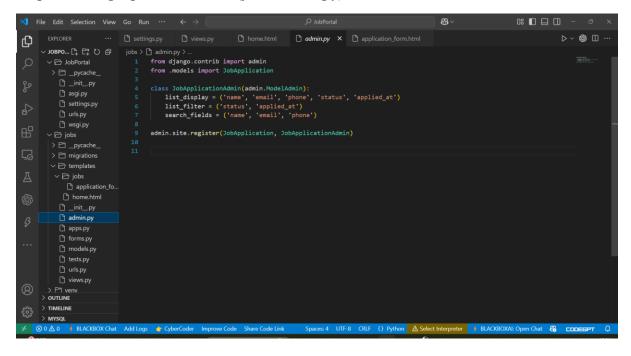
• Project URLs (JobPortal/urls.py):

```
| File | Edit | Selection | View | Go | Run | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ..
```

• App URLs (jobs/urls.py)



Step 9: Setting Up Admin Panel (jobs/admin.py):



Step 10: Creating a Superuser

---python manage.py createsuperuser

Provide details like username, email, and password when prompted.

Step 11: Running the Development Server

---python manage.py runserver

Access the project at http://127.0.0.1:8000/

```
PROBLEMS OUTPUT TERMINAL PORTS DEBUG CONSOLE AZURE

PS C:\Users\Maliha Khan\JobPortal> ./venv/Scripts/activate.ps1

(venv) PS C:\Users\Maliha Khan\JobPortal> python manage.py runserver Watching for file changes with StatReloader Performing system checks...

System check identified no issues (0 silenced).
February 16, 2025 - 09:45:30

Django version 5.1.6, using settings 'JobPortal.settings' Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
```

Step 12: Testing the Application

- 1. Open the **Home Page** at http://127.0.0.1:8000/.
- 2. Click **Apply for a Job** and fill out the application.
- 3. Submit the form and verify the stored data in **Admin Panel** (http://127.0.0.1:8000/admin/).

Output:

