MYSORE UNIVERSITY SCHOOL OF ENGINEERING

Manasagangotri campus, Mysuru-570006
(Approved by AICTE, New Delhi)

UNIVERSITY OF MYSORE

An Assignment(21CD71,Full Stack Development) Report

Submitted By

GUNARI NISITHA SRI
21SECD06
7th Semester,
Department of CS&D
MUSE.

Under Faculty Incharge

1) Dr. M. S. Govinde Gowda, Director.
2) Mr. Karthik M N
   Asst. Professor,
   Dept. of CS&D
   MUSE.

FULL STACK DEVELOPMENT - 21CD71

SECURE JOB APPLICATION FORM USING DJANGO

Ques: Implement a Secure Job Application Form using Django

- Applicants can submit their name, email, phone number, resume (PDF only), and a cover letter.
- The application form should be implemented using Django Model Forms and should validate:
- The resume file is in PDF format only.
- The phone number contains exactly 10 digits.
- Store all applications in a database and allow the admin to view, shortlist, or reject applications.
- Implement CSRF protection for the form submission.

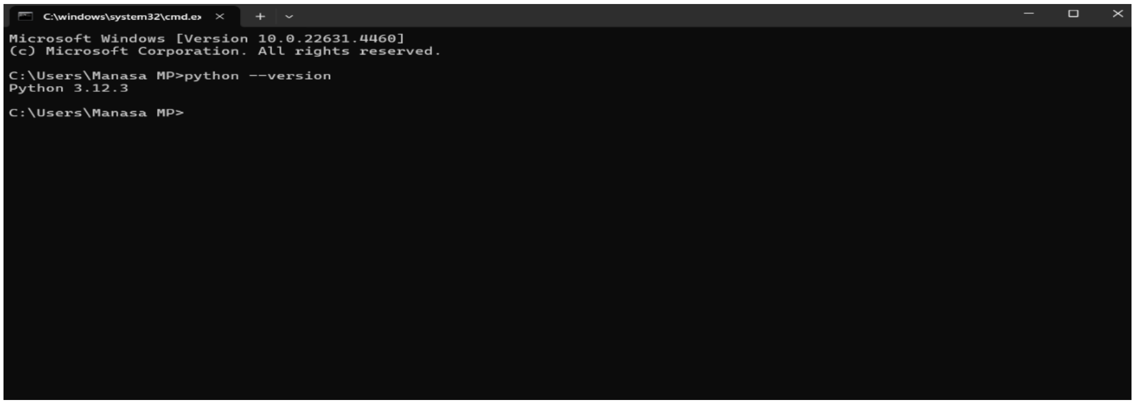
Prerequisites:

- Operating System: Windows/Linux/MacOS.
- Internet connection.

Steps: 1. Install Python:

- Download the latest version of Python from the official website.
- Run the installer and ensure the option "Add Python to PATH" is checked. This makes python accessible from any terminal window.
- Verify installation by opening a terminal and running:

python –version



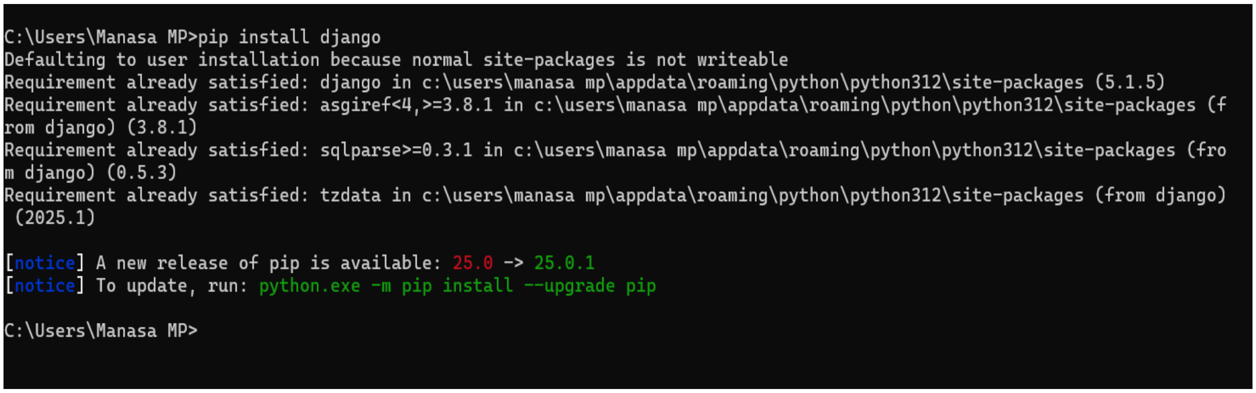
```
Microsoft Windows [Version 10.0.22631.4460]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Manasa MP>python --version
Python 3.12.3

C:\Users\Manasa MP>
```

- We should see the installed Python version.

2. Install Django:

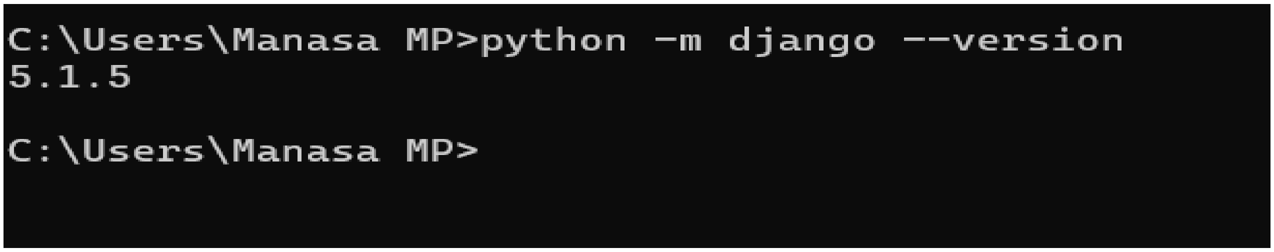
- Open a terminal and install Django using pip (Python's package manager):

>> **pip install Django**



```
C:\Users\Manasa MP>pip install django
Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: django in c:\users\manasa mp\appdata\roaming\python\python312\site-packages (5.1.5)
Requirement already satisfied: asgiref<4,>=3.8.1 in c:\users\manasa mp\appdata\roaming\python\python312\site-packages (f
rom django) (3.8.1)
Requirement already satisfied: sqlparse>=0.3.1 in c:\users\manasa mp\appdata\roaming\python\python312\site-packages (fro
m django) (0.5.3)
Requirement already satisfied: tzdata in c:\users\manasa mp\appdata\roaming\python\python312\site-packages (from django)
 (2025.1)

[notice] A new release of pip is available: 25.0 -> 25.0.1
[notice] To update, run: python.exe -m pip install --upgrade pip

C:\Users\Manasa MP>
```

- Verify installation: **python -m django –version**



```
C:\Users\Manasa MP>python -m django --version
5.1.5

C:\Users\Manasa MP>
```

- This ensures Django has been installed successfully.

3. Install Visual Studio Code (VS Code):

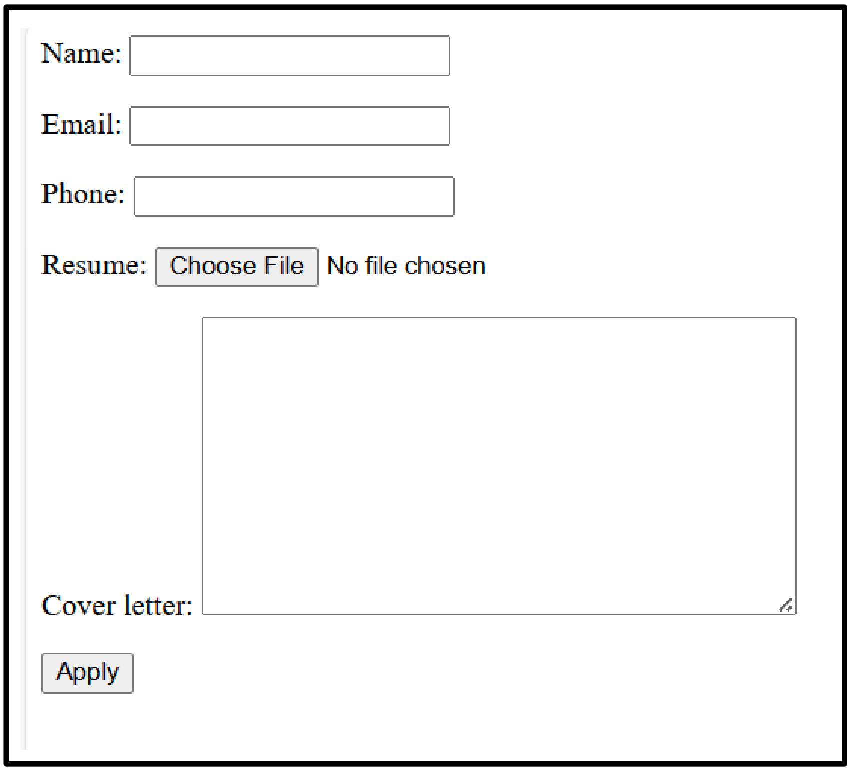
- Download VS Code from the official website.
- Install the software by following the on-screen instructions.
- Once installed, add the Python and Django extensions in VS Code for features like syntax highlighting and debugging support.

4. Verify All Installations:

- Open VS Code, create a new terminal, and check the Python and Django versions using the commands shown above.
- Ensure everything is correctly set up before proceeding.

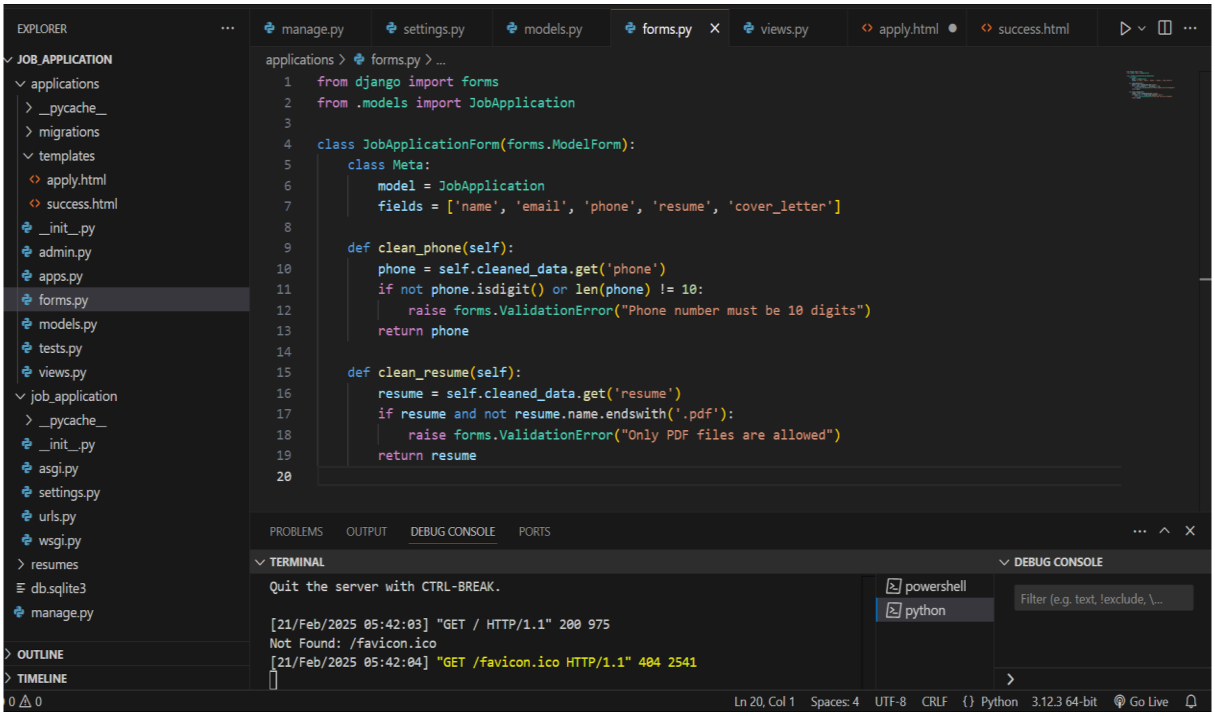
"SECURE JOB APPLICATION FORM USING DJANGO"

Step 01: Applicants can submit their name, email, phone number, resume (PDF only), and a cover letter.



Step 02:

- The application form should be implemented using Django Model Forms and should validate:
- The resume file is in PDF format only.
- The phone number contains exactly 10 digits.

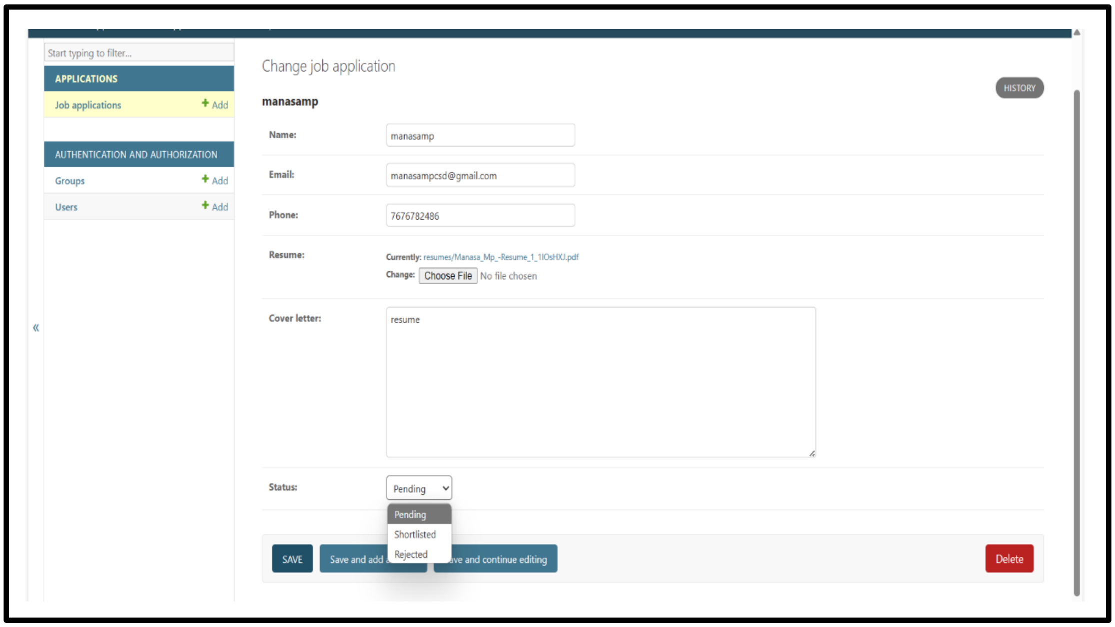


```python
from django import forms
from .models import JobApplication

class JobApplicationForm(forms.ModelForm):
    class Meta:
        model = JobApplication
        fields = ['name', 'email', 'phone', 'resume', 'cover_letter']

    def clean_phone(self):
        phone = self.cleaned_data.get('phone')
        if not phone.isdigit() or len(phone) != 10:
            raise forms.ValidationError("Phone number must be 10 digits")
        return phone

    def clean_resume(self):
        resume = self.cleaned_data.get('resume')
        if resume and not resume.name.endswith('.pdf'):
            raise forms.ValidationError("Only PDF files are allowed")
        return resume
```

```
Quit the server with CTRL-BREAK.

[21/Feb/2025 05:42:03] "GET / HTTP/1.1" 200 975
Not Found: /favicon.ico
[21/Feb/2025 05:42:04] "GET /favicon.ico HTTP/1.1" 404 2541
```

Step 03:

- Store all applications in a database and allow the admin to view, shortlist, or reject applications.



Change job application

manasamp

Name: manasamp

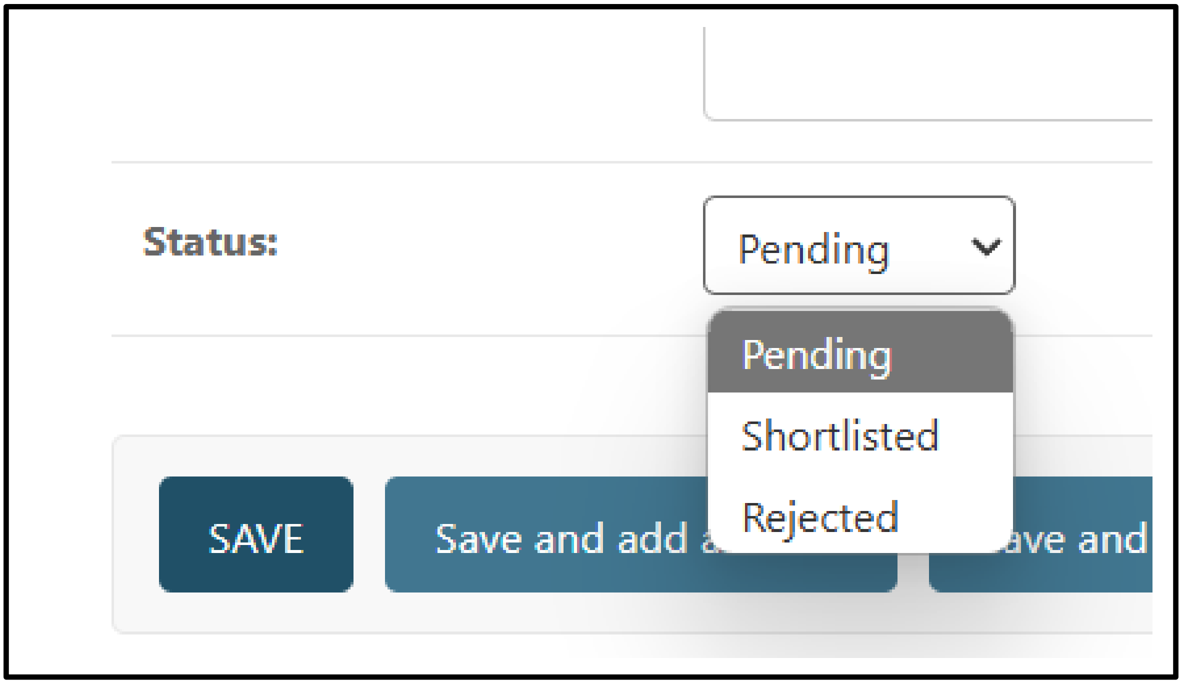
Email: manasampcsd@gmail.com

Phone: 7676782486

Resume: Currently: resumes/Manasa_Mp_-Resume_1_1lOsHXJ.pdf
Change: Choose File No file chosen

Cover letter: resume

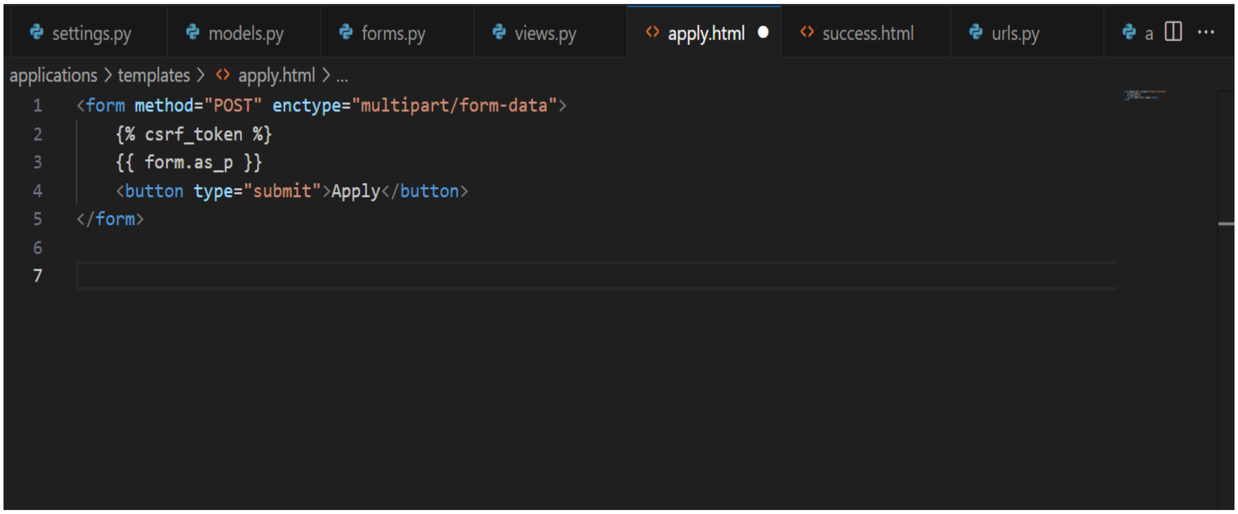
Status: Pending



Status: Pending

Step 04:

Implement CSRF protection for the form submission.



```
<form method="POST" enctype="multipart/form-data">
    {% csrf_token %}
    {{ form.as_p }}
    <button type="submit">Apply</button>
</form>
```

****