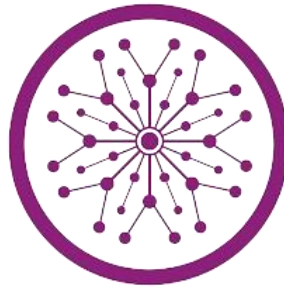


**Programming for AI  
Lab  
Project Documentation**



**The Superior University  
Faculty of Computer Science & Information Technology  
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## **Project Documentation: AI-Powered CV Generator**

### **Overview:**

The AI-Powered CV Generator is a web application built using Flask and integrated with OpenAI's GPT model. It enables users to input personal and professional information and instantly receive a professionally formatted CV tailored to their provided details.

### **Key Features:**

- User-friendly interface with guided input fields
- Integration with OpenAI's chat-based language model for smart CV generation
- Follows a clean and modern CV structure
- Automatically generates profile summary, experience sections, and project descriptions
- Supports downloadable, readable formats
- Styled with a dark theme using custom CSS

### **Technologies Used:**

- Python
- Flask
- OpenAI GPT API
- HTML/CSS (Custom styled)
- dotenv (for environment variable management)

### **Project Structure:**

```
PS D:\ML Models\cvGenerator> dir

Directory: D:\ML Models\cvGenerator

Mode                LastWriteTime         Length Name
----                -
d-----          4/27/2025   5:21 PM             static
d-----          4/26/2025  12:12 AM             templates
d-----          2/8/2025   10:15 AM              venv
d-----          4/29/2025  11:43 PM             __pycache__
-a-----          2/26/2025  11:11 AM             180 .env
-a-----          4/28/2025   9:27 AM            2023 app.py
-a-----          4/29/2025  11:43 PM            2563 prompt.py
-a-----          4/25/2025  11:05 PM             29 requirements.txt
```

## **How It Works:**

1. User visits the homepage and fills in their CV details via the form.
2. Upon submission, the data is structured into a JSON object.
3. The backend sends this data to OpenAI's API using a carefully crafted prompt.
4. A formatted CV is returned and displayed instantly on the right side of the page.

## **Future Improvements:**

- Add PDF download option
- Support multiple CV formats (design templates)
- Add user authentication for saved CV history
- Language translation support for CV generation

## **GitHub Repository:**

Repository Name: CV-Generator

🔗 <https://github.com/Qaswa-Chaudhary/CV-Generator>

## **Live Demo:**

Check out the deployed version here:

🔗 <https://qaswachaudhary07.pythonanywhere.com/>