

# **Resume Builder Web Application**

Version: 1.1.0

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## **Introduction**

### **Purpose**

The purpose of this document is to detail the requirements for a webbased Resume Builder tool. The tool will assist users in creating professional resumes by providing customizable templates, realtime editing, and export options. Additionally, it aims to enhance users' chances of passing initial screenings by ensuring ATS (Applicant Tracking System) compatibility.

### **Scope**

The Resume Builder tool allows job seekers to create, edit, and save multiple versions of resumes and cover letters. Users will have access to various templates and customization options to tailor their resumes according to specific job requirements. The application will support a user dashboard for managing multiple resumes and offer a premium feature for additional template access via a payment gateway

## **Definitions, Acronyms, and Abbreviations**

SRS Software Requirements Specification

ATS Applicant Tracking System

UI User Interface

UX User Experience

PDF Portable Document Format

# Overall Description

## 1 Product Functions

Allows users to create a resume using various templates. Enables realtime editing and previewing of resumes. Supports multiple formats for exporting resumes. Provides ATS optimized resume templates and content suggestions. Offers a cover letter builder with customizable templates.

## 2 User Classes and Characteristics

**Job Seekers:** Primary users who create and manage resumes and cover letters.

**Administrators:** Manage templates, system configurations, and monitor application usage.

**Employers:** May view resumes (in case of additional features enabling job listings).

## 3 Operating Environment

**OS:** Windows 10, macOS, Linux

**Browser:** Latest versions of Chrome, Firefox, Safari

**Hardware Requirements:** Minimum 4GB RAM, 100MB free disk space

## 4 Design and Implementation Constraints

**Frontend:** HTML, CSS, Tailwind for responsive design.

**Backend:** Python with Flask, SQLite for database management.

**Web Server:** Nginx or Apache for serving the application.

**Deployment:** Cloud hosting on Linux based servers.

## 5 Assumptions and Dependencies

Users are assumed to have basic computer literacy and familiarity with resume creation.

Application performance may depend on the speed and stability of the user's internet connection.

# Specific Requirements

## Functional Requirements

### 1. User Authentication

- Users can register using email and password.
- Users can log in with their credentials.
- Users can reset passwords via an email recovery link.

### 2. Resume Builder

- Users can select templates and add, edit, or delete sections.
- Users can customize fonts, colors, and layout.
- Content suggestions are provided for action verbs, phrases, and bullet points.

### 3. Preview and Export

- Users can preview resumes in realtime.
- Export options include PDF and Word formats.
- Users can save and manage multiple resume versions.

### 4. User Dashboard

- Displays all saved resumes for each user.
- Allows users to edit, delete, or duplicate resumes.

### 5. Template Management

- Admins can add, update, or delete resume templates.
- Users can filter templates based on categories.

### 6. User Profile Management

- Users can update their profile information.
- Account settings, including password changes, are available.

### 7. Help and Support

- Accessible help or FAQ section with user guidance.

## **Non-Functional Requirements**

### **1. Performance**

Application load time should be less than 2 seconds.

Realtime updates during resume preview.

### **2. Scalability**

Support for increased users during peak times.

Optimized to handle high traffic.

### **3. Usability**

Intuitive UI design to facilitate easy navigation.

Responsive design for multidevice compatibility.

### **4. Security**

Data encryption for sensitive information.

Protection against common vulnerabilities (e.g., SQL injection).

### **5. Compatibility**

Compatible with all major browsers and operating systems.

### **6. Accessibility**

Compliance with WCAG 2.1 for accessibility.

Keyboard navigation and screen reader support.

### **7. Maintainability**

Modular and documented codebase for easier updates.

Easy integration of new features.

### **8. Availability**

Target uptime of 99.9% with regular backups.

# **DATAFLOW DIAGRAM**

## **1 Level 0 DFD**

Shows highlevel interactions among:

Users: Input personal and professional information to create resumes.

Resume Builder Website: Processes data to create resumes.

Employers (Optional): Access resumes if relevant.

Payment Gateway (Optional): Handles payments for premium features.

## **2 Level 1 DFD**

User Registration and Login: Manages account creation and login.

Resume Creation: Facilitates user input for resume content.

Resume Management: Options to edit, delete, or view resumes.

Employer Access: Employers can browse resumes (if applicable).

Payment Gateway: Manages premium feature purchases.

## **3 Level 2 DFD**

Focused on Resume Creation:

Input Personal Information: Users add name, contact, etc.

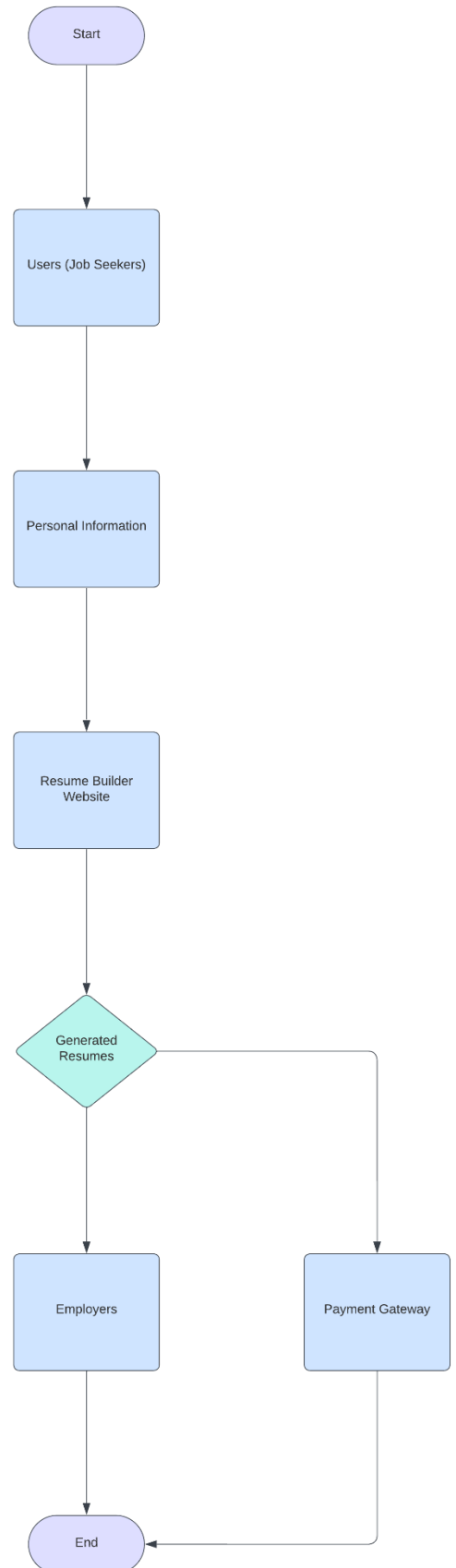
Input Work History, Education, Skills: Users enter job history, qualifications, and skill sets.

Generate Resume: The system compiles the data into a downloadable format.

## Level 0:DFD

### Flow

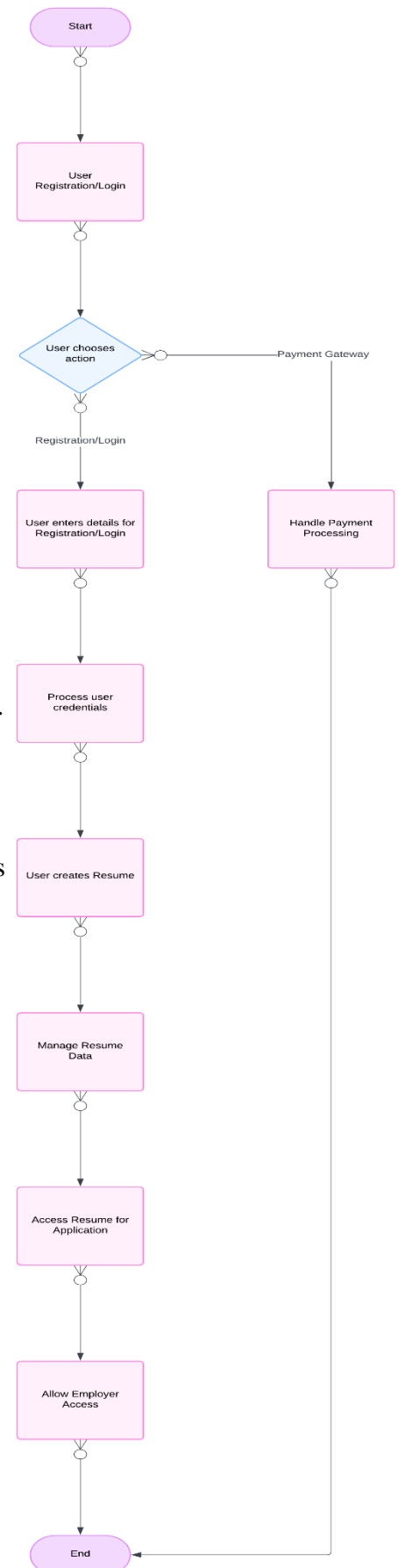
- **Users:** Job seekers interact with the system by providing their personal information to create resumes.
- **Resume Builder Website:** This is the core system that processes the information from users and generates resumes.
- **Employers:** Employers can access resumes generated by users.
- **Payment Gateway(Optional):** If premium features are offered, users can make payments through this entity.



## Level 1:DFD

### Flow:

- ☐ **User Registration and Login:** This process handles user sign-ups and logins, ensuring that users can create an account or access their existing account.
- ☐ **Resume Creation:** After logging in, users can create resumes by inputting personal information, work history, education, and skills.
- ☐ **Resume Management:** Users can manage their resumes, which includes options to edit, delete, or view existing resumes.
- ☐ **Employer Access:** Employers can search for and access the resumes created by users, allowing them to find potential candidates.
- ☐ **Payment Gateway:** If users opt for premium features, this process manages payment transactions.

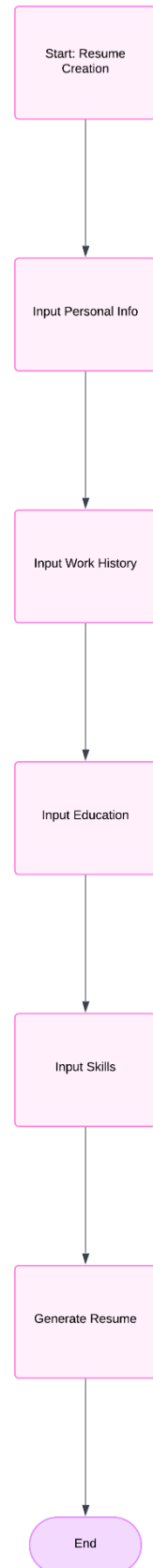




## Level 2:DFD

### Flow:

- ☐ **Input Personal Information:** Users enter their basic information such as name, contact details, and other personal identifiers.
- ☐ **Input Work History:** Users provide details of their past job experiences, including job titles, responsibilities, and employment dates.
- ☐ **Input Education:** Users input their educational background, including degrees, institutions, and graduation dates.
- ☐ **Input Skills:** Users list their skills relevant to their desired job positions.
- ☐ **Generate Resume:** Once all the information is collected, the system compiles the data into a professional resume format, which can then be downloaded or printed.



## Technology Stack

Frontend: HTML, CSS, Tailwind for responsive styling.

Backend: Python, Flask for serverside logic.

Database: SQLite for managing user and template data.

Web Server: Nginx or Apache for hosting.

Environment Variables: Set up for sensitive configurations, like `'DATABASE_URL'` and `'SECRET_KEY'`.

# Source code Directory

Resume Builder flask app/

—	app.py	Main application file
—	database.py	Database initialization and connection logic
—	requirements.txt	Python package dependencies
—	static/	Static files (CSS, JS, images, uploads)
—	uploads/	Uploaded files
—	pdfs/	Generated PDF files
—	templates/	HTML templates
—	index.html	Main index page
—	login.html	Login page
—	register.html	Registration page
—	create_resume.html	Resume creation page
—	view_resumes.html	Resume viewing page
—	template1.html	Default template (if needed)
—	creative.html	Example of a resume template
—	modern.html	Example of a resume template
—	classic.html	Example of a resume template
—	elegant.html	Example of a resume template
—	sleek.html	Example of a resume template
—	.gitignore	Git ignore file
—	README.md	Project documentation

# Web Software Deployment Instructions

**Project Name : Resume Builder** Version: 1.1.0

Last Updated : November 3, 2024

## 1. Environment Setup

- Ensure server prerequisites (e.g., Python 3.6+, Nginx, etc.).
- Clone the project repository and set up a virtual environment.
- Install dependencies using `requirements.txt`.

## 2. Web Server Configuration

- Configure Nginx or Apache to route requests to the application.
- Set up proxy settings and ensure HTTPS where applicable.

## 3. Application Launch

- Use Gunicorn or Supervisor to manage application processes.

## 4. Database Setup

- Apply any necessary database migrations.

## 7. Database Schema

Table	Fields	Description
User	user_id, email, password, name	Stores user credentials and profile information
Resume	resume_id, user_id, template, content	Stores the content and template details of resumes
Template	template_id, name, layout, svg_icon	Stores template data and SVG references

USER		
string	userID	PK
string	name	
string	email	
string	password	



owns



RESUME		
string	resumeID	PK
string	templateID	FK
date	lastModified	



uses



TEMPLATE		
string	templateID	PK
string	name	
string	layout	

## **8. Testing and Rollback**

### **1. Testing**

Access routes to validate core functions, such as login, resume creation, and export options.

### **2. Troubleshooting**

Review logs for errors using ``nginx/error.log`` and Supervisor logs for appspecific issues.

### **3. Rollback Procedures**

Stop current deployment, revert to the previous commit, and redeploy after testing.

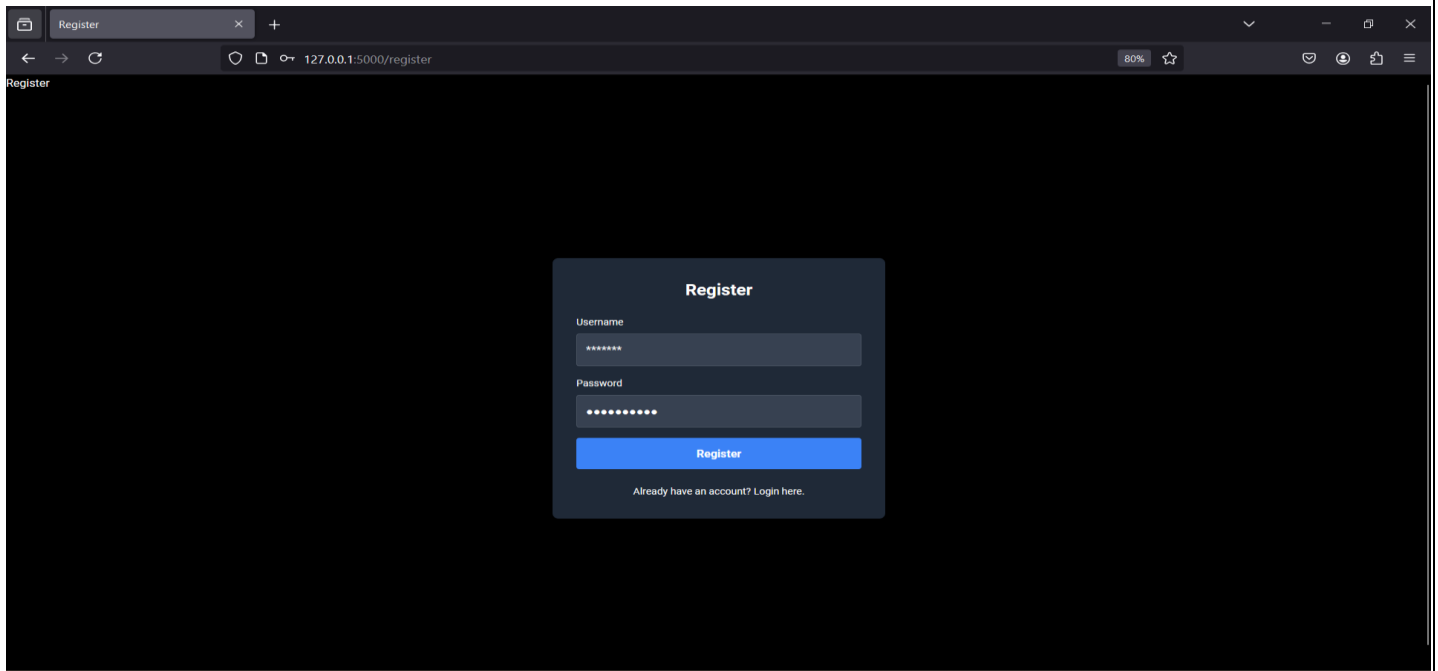
# Screenshots

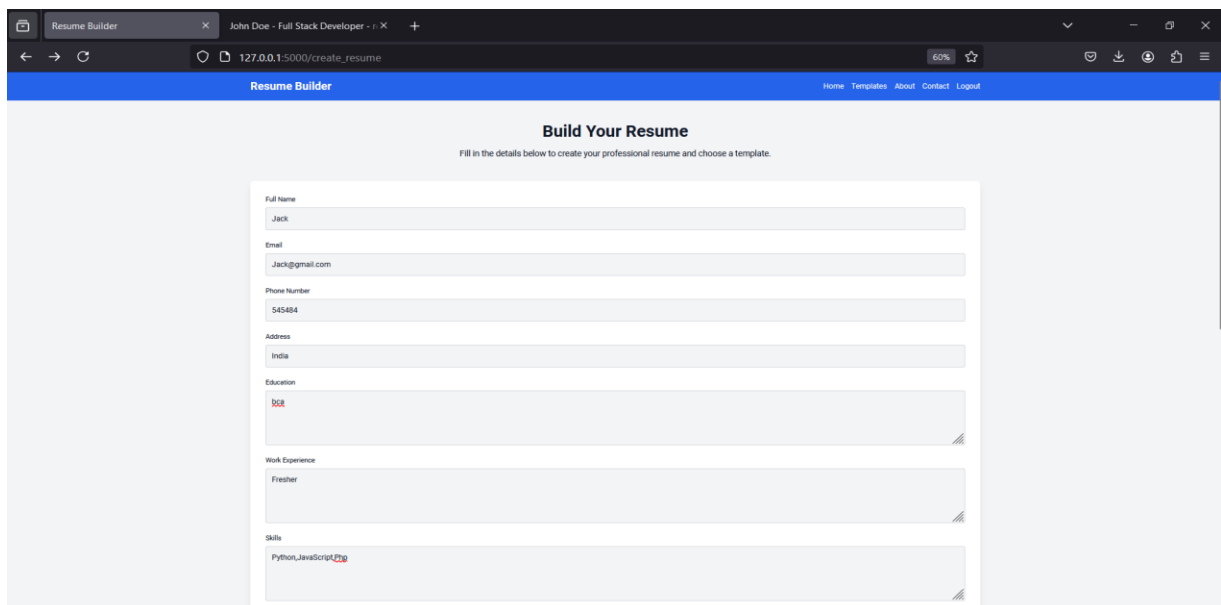
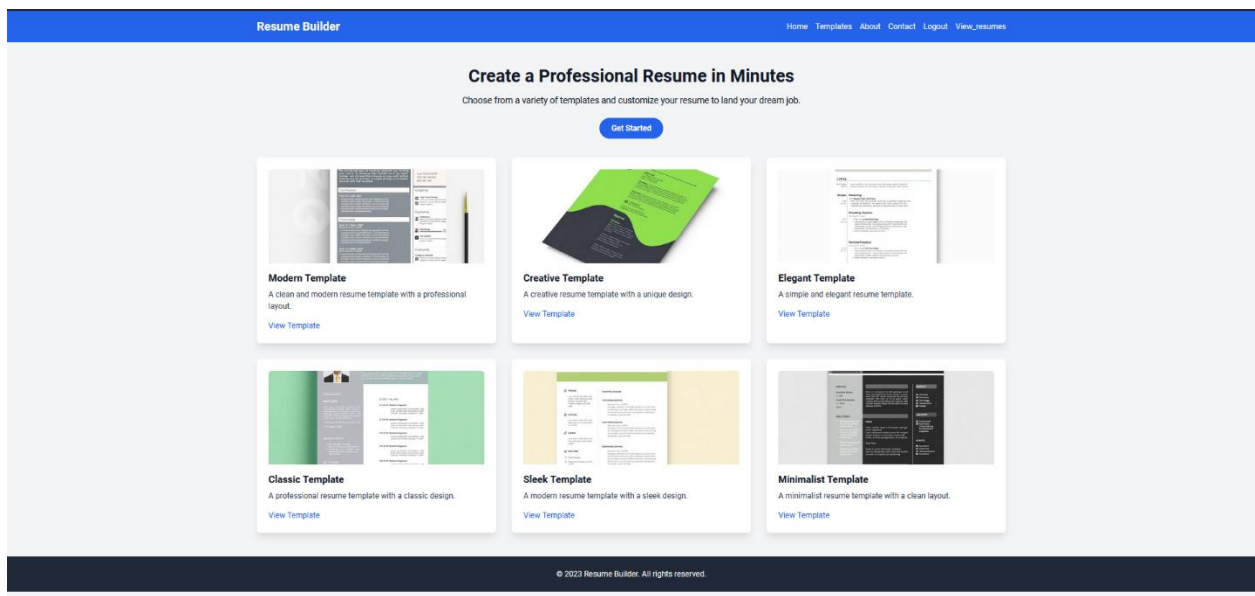
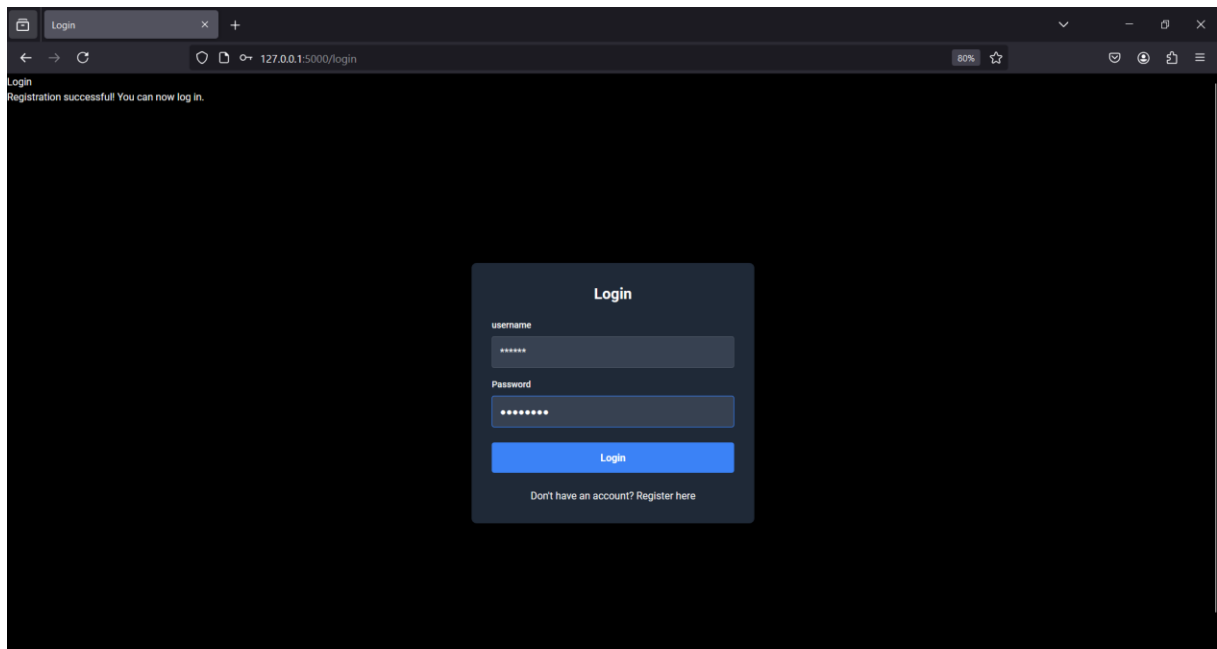
The screenshot shows a VS Code editor window with the following components:

- EXPLORER:** Shows a file tree with folders 'NRB V1.1.0' and 'static', and files 'app.py', 'database.py', 'resumes.db', and 'temptemp.txt'.
- EDITOR:** Displays the code for 'app.py'. The code imports Flask, Flask-Login, Flask-SQLAlchemy, and Werkzeug, and sets up a Flask application with a secret key, upload folder, and database initialization.
- TERMINAL:** Shows the command 'python app.py' being executed. The output indicates that the application is running on http://127.0.0.1:5000 and that the debugger is active.

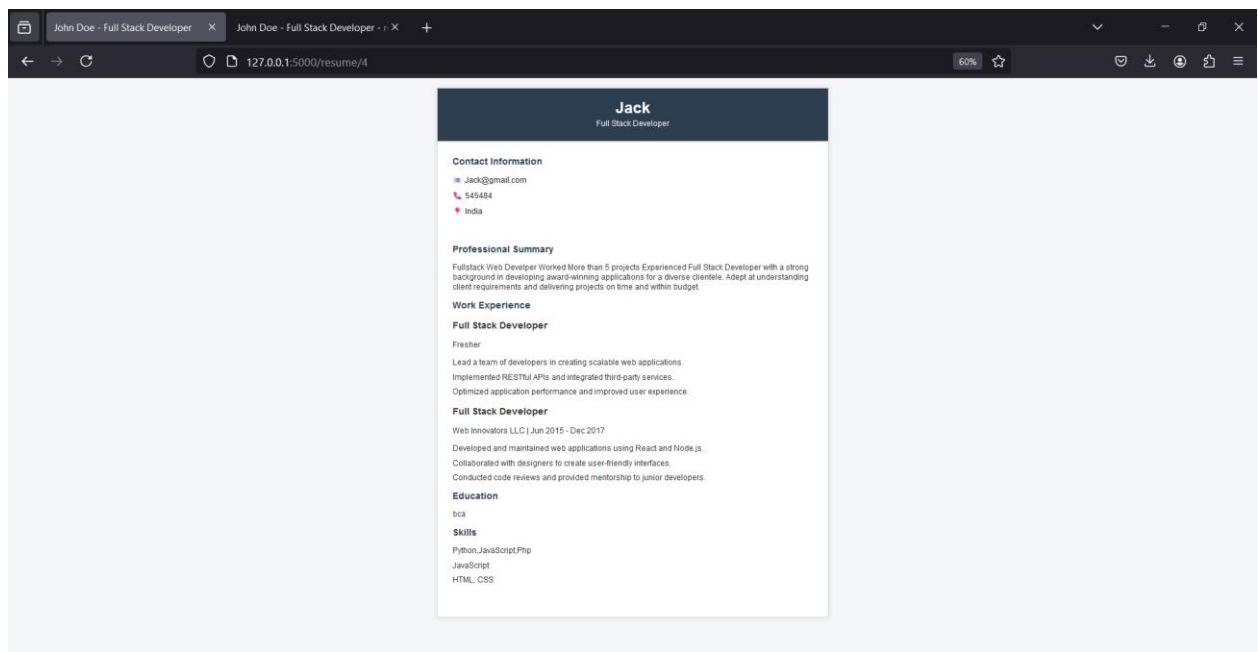
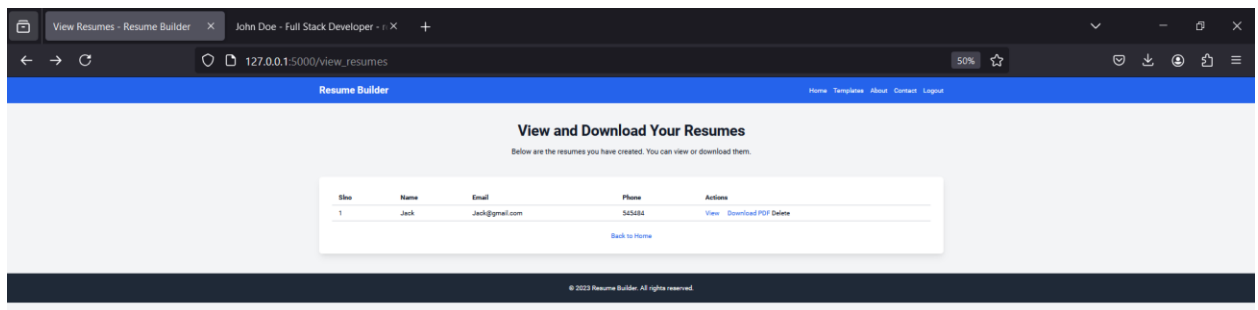
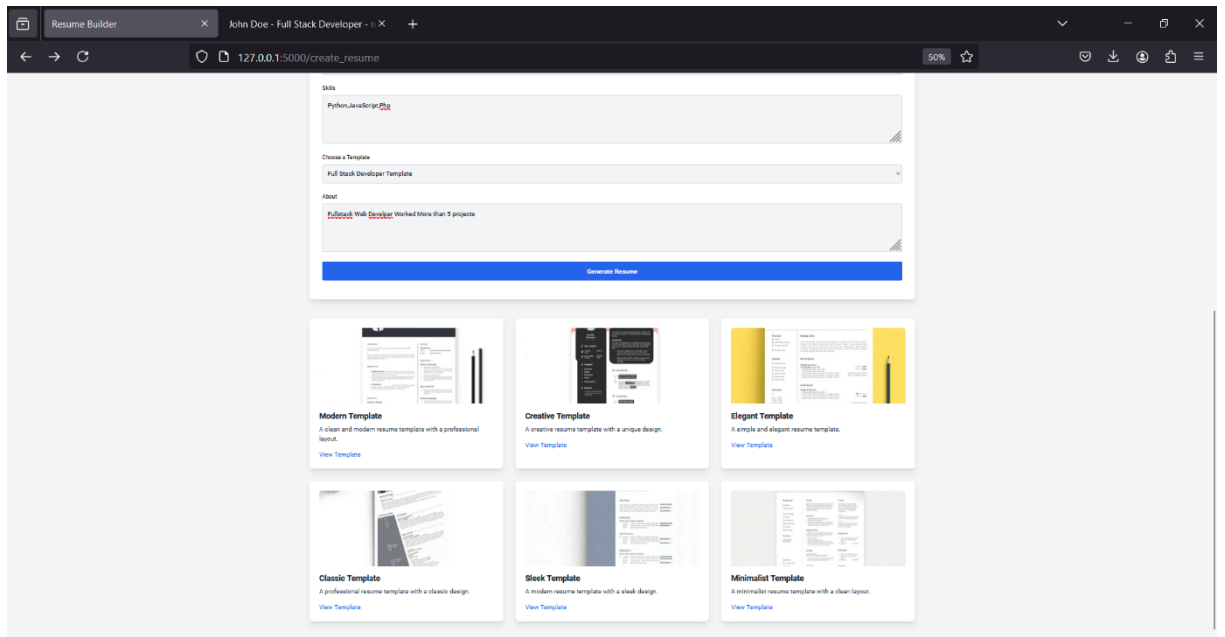
```
1 import os
2 from flask import Flask, render_template, request, redirect, send_file, session, url_for, flash
3 import sqlite3
4 import pdfkit
5 from werkzeug.security import generate_password_hash, check_password_hash
6 from database import init_db
7
8 app = Flask(__name__)
9 app.secret_key = 'your_secret_key' # Change this to a random secret key
10
11 UPLOAD_FOLDER = 'static/uploads'
12 app.config['UPLOAD_FOLDER'] = UPLOAD_FOLDER
13
14 # Ensure the upload directory exists
15 if not os.path.exists(UPLOAD_FOLDER):
16     os.makedirs(UPLOAD_FOLDER)
17
18 # Initialize the database
```

PS D:\Resume Builder Software 2024\nrb v1.1.0> python app.py  
\* Serving Flask app 'app'  
\* Debug mode: on  
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.  
\* Running on http://127.0.0.1:5000  
Press CTRL+C to quit  
\* Restarting with stat  
\* Debugger is active  
\* Debugger PIN: 884-193-680









## **Conclusion**

In conclusion, this documentation has outlined the features, functionalities, and deployment procedures of the Web Resume Builder software. Designed to simplify the resume creation process, our application offers users a user-friendly interface and customizable templates, ensuring they can create professional and personalized resumes effortlessly.

We have provided detailed instructions on how to register, log in, create and manage resumes, and download them in various formats. The application is built with security and user experience in mind, enabling users to store their information safely while providing easy access whenever needed.

As we move forward, we remain committed to enhancing the software based on user feedback and evolving industry standards. We encourage users to share their experiences and suggestions to help us improve our platform continuously.

Thank you for choosing our Web Resume Builder. We hope this tool empowers you to present your skills and experiences effectively in your job applications. Happy building!