**Project Documentation**

**Assesly:**

AI-powered Resume & Cover Letter Generator:

“Craft job-winning resumes and cover letters with ease”

🎯 **Objective:**

* Simplify the process of creating tailored resumes and cover letters.
* Help job seekers align their skills with employer requirements
* Enhance career opportunities with AI-powered personalization.
* Enhance job application success by tailoring applications for specific roles

🛠 **Tools & Technologies:**

* Google AI Studio – for interactive UI
* Gemini API – AI text generation
* PyMuPDF & python-docx – text extraction
* Canva/PowerPoint – presentation design

**Challenges Encountered:**

* Handling multiple file formats (PDF, DOCX, TXT).
* Ensuring clean and structured AI outputs.
* Deploying and managing dependencies.
* Designing a simple yet engaging user experience.

**Workflow:**

1. **Upload Resume** → User uploads their resume in PDF/DOCX/TXT format.
2. **Upload Job Description** → User provides the job description in supported formats.
3. **Enter Custom Requests** → User can type additional instructions, e.g., “Highlight leadership skills” or “Include keywords SaaS and B2B sales.”
4. **Text Extraction** → The app extracts clean text from both files using libraries (PyMuPDF, python-docx).
5. **AI Processing** → Extracted data is sent to the Gemini API, which analyzes the job requirements and resume content.
6. **Resume Tailoring** → AI generates a customized version of the resume highlighting relevant skills and keywords.
7. **Cover Letter Generation** → AI creates a professional cover letter aligned with the job role.
8. **Output & Download** → Final resume and cover letter are displayed in the UI, with options to download them instantly.

**Preview:**

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

**Conclusion:**

The AI-powered Resume and Cover Letter Generator simplifies the job application process by enabling users to create professional, tailored documents effortlessly. With the integration of modern tools and technologies, it enhances efficiency, reduces manual effort, and increases the chances of securing desired job opportunities. Despite the challenges encountered, the project demonstrates the potential of AI in career-building solutions and paves the way for future improvements such as advanced personalization, integration with job portals, and real-time feedback systems.