Project Charter

AI-Powered LaTeX CV Generator

Project Overview

This project aims to develop a web application that enables students and job seekers to create professional LaTeX-formatted CVs without requiring knowledge of LaTeX. The system will use AI to convert user input into properly formatted LaTeX code, which will then be compiled into downloadable PDF documents.

Business Case

Many employers and academic institutions prefer LaTeX-formatted CVs for their professional appearance and standardized formatting. However, most students and job seekers lack the technical skills to create LaTeX documents. This application bridges this gap by providing an intuitive interface that leverages AI to generate LaTeX CVs, making professional document creation accessible to everyone.

Project Objectives

1. Develop a user-friendly web interface for CV data input
2. Integrate with AI APIs to structure and format CV content
3. Implement LaTeX template generation and PDF conversion
4. Create a minimum of three professional CV templates
5. Deploy a functional MVP within 3 months
6. Achieve user satisfaction rating of 4+ out of 5 stars

Project Scope

The project will deliver a web application with: - User interface for CV information input - AI-powered LaTeX code generation - PDF generation and download functionality - Basic template selection - Responsive design for desktop and mobile

Stakeholders

- **Project Sponsor**: [Project Owner]
- **Project Manager**: [To be assigned]
- **Development Team**: Frontend Developer, Backend Developer, AI Integration Specialist
- **End Users**: Students, recent graduates, job seekers
- **Advisors**: Career counselors, academic advisors

Success Criteria

1. System successfully generates correctly formatted LaTeX CVs
2. Users can complete the CV creation process in under 15 minutes
3. Generated PDFs meet professional standards
4. Application can handle at least 100 concurrent users
5. Minimum 80% user satisfaction in initial testing
6. System operates within the constraints of free-tier API services

Assumptions

- Users have basic computer literacy
- Users have access to a web browser
- Free-tier AI API services will provide sufficient quality for MVP
- LaTeX compilation can be performed efficiently in a web environment

Constraints

- Budget limitations require use of free-tier services initially
- Timeline target of 3 months for MVP
- Limited initial template options
- Initial version to support English language only

Risks

- AI service limits may restrict scaling
- LaTeX compilation may face performance issues
- User adoption may require additional educational content
- Integration complexity between components may exceed estimates

Timeline (High-Level)

- **Phase 1 (Weeks 1-3)**: Research, design, and planning
- **Phase 2 (Weeks 4-8)**: Core development (UI, AI integration, LaTeX generation)
- **Phase 3 (Weeks 9-10)**: Testing and refinement
- **Phase 4 (Weeks 11-12)**: Deployment and initial user feedback

Resource Requirements

- Development team with web and AI integration experience
- Web hosting environment
- Access to AI API service
- LaTeX compilation environment
- Testing infrastructure

Approval

This charter is approved by:

[Project Sponsor] _____ Date: _____