Project Scope Statement

AI-Powered LaTeX CV Generator

Project Description

The AI-Powered LaTeX CV Generator project will develop a web application that allows users to create professional CVs using LaTeX templates through a simple user interface. The application will leverage AI to convert user-provided information into properly formatted LaTeX code, which will then be compiled into downloadable PDF documents.

Project Deliverables

In Scope

1. **Web Application**
   - Responsive user interface for data input
   - Step-by-step form interface organized by CV sections
   - Basic error checking and validation
   - Mobile and desktop compatibility
2. **AI Integration**
   - Integration with free-tier AI API (OpenAI GPT-3.5-turbo, Claude, or equivalent)
   - AI prompting system for converting form data to structured LaTeX
   - Error handling for AI service limitations
3. **LaTeX Processing**
   - LaTeX code generation from AI output
   - Server-side LaTeX compilation
   - PDF generation
   - PDF download functionality
4. **Templates**
   - Three basic CV templates
   - Template preview functionality
5. **User Experience**
   - Intuitive navigation between CV sections
   - Clear instructions and examples for each input field
   - Progress indicator
   - Basic input validation
6. **Documentation**
   - User guide
   - Technical documentation
   - API documentation

Out of Scope

1. **User Accounts & Authentication**
   - User registration/login functionality

- Persistent storage of user information
- CV history and version control

2. **Advanced Features**
   - CV customization beyond template selection
   - Cover letter generation
   - Grammar checking or content suggestions
   - ATS optimization analysis
3. **Enterprise Features**
   - Team/organization accounts
   - Branded templates
   - Analytics dashboard
   - Integration with job boards or ATS systems
4. **Extended Support**
   - Languages other than English
   - Region-specific CV formats
   - Custom template creation
5. **Additional Export Formats**
   - DOCX, HTML, or other non-PDF formats
   - Editable LaTeX source download

Project Acceptance Criteria

1. Web application functions on major browsers (Chrome, Firefox, Safari, Edge)
2. Users can successfully input all necessary CV information through the interface
3. AI integration successfully converts user input to structured LaTeX code
4. PDF generation produces professional-quality documents
5. All three templates render correctly
6. Application meets performance criteria (CV generation in under 10 seconds)
7. Application passes security assessment
8. Documentation is complete and accurate

Project Constraints

1. Development timeframe limited to 3 months for MVP
2. Budget constraints requiring use of free-tier AI services
3. Limited to English language for initial release
4. Server-side resources must be optimized for cost efficiency

Project Assumptions

1. Users have basic internet connectivity and web browser access
2. Selected AI API will remain available with consistent functionality
3. LaTeX compilation tools will be compatible with server environment
4. Template designs will be sufficient for most user needs

5. Users will provide accurate information for their CVs

This scope statement defines the boundaries of the AI-Powered LaTeX CV Generator project. Any changes to the scope must be documented and approved through formal change control procedures.