**PROJECT TESTING**

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| **Date** | 18-06-2025 |
| **Project Name** | Empowering Career Progression with Tailored Cover Letters |
| **Maximum Marks** | 5M |

This document outlines the testing scope, test cases, and procedures for validating the functionality, usability, and performance of the Smart AI Cover Letter Generator Streamlit app.

**Features and Functionalities to be tested:**

The following components are in the testing scope:

* Homepage Navigation (Home, Form-Based, Resume-Based)
* Form-Based Cover Letter Generator (Input fields, Prompt logic, Gemini API call, Output display, Download)
* Resume-Based Cover Letter Generator (PDF upload, Resume text extraction, Prompting, Gemini API response, Download)
* Tone Customization (Formal, Friendly, Persuasive, Confident)
* Error Handling (Empty inputs, API failure, PDF parsing errors)
* UI/UX Responsiveness and Styling

**User stories or Requirements to be tested:**

1. As a user, I want to enter my details in a form to generate a custom cover letter.
2. As a user, I want to upload my resume and get a generated cover letter.
3. As a user, I want to specify the tone of my cover letter.
4. As a user, I want to preview and download the generated content.
5. As a user, I want to navigate between sections easily via sidebar and cards.

**Test cases:**

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| --- | --- | --- | --- | --- | --- | --- |
| Test Case ID | Feature | Test Description | Input | Expected Result | Actual Result | Status |
| TC01 | Homepage Navigation | Click 'Form-Based' button | Button click | Navigates to Form-Based page | As Expected | ✅ |
| TC02 | Homepage Navigation | Click 'Resume-Based' button | Button click | Navigates to Resume-Based page | As Expected | ✅ |
| TC03 | Form Validation | Submit Form-Based form with empty fields | Click 'Generate' | Error or no action | As Expected | ✅ |
| TC04 | Form-Based Cover Letter | Submit all fields with valid data | Name, Job Title, Skills, etc. | Cover letter is generated | As Expected | ✅ |
| TC05 | Resume Upload | Submit Resume-Based without uploading PDF | No PDF uploaded | Show warning | As Expected | ✅ |
| TC06 | Resume-Based Cover Letter | Submit resume and job description | PDF + Job Desc | Cover letter is generated | As Expected | ✅ |
| TC07 | Download Function | Click 'Download Cover Letter' button | Valid generation first | .txt file downloads | As Expected | ✅ |
| TC08 | API Key Missing | Remove GEMINI\_KEY from `.env` | App start | Show error and halt | As Expected | ✅ |
| TC09 | PDF Text Extraction | Upload malformed or image-only PDF | Bad PDF | Show error message | As Expected | ✅ |
| TC10 | Tone Selection | Change tone in dropdown | Select “Friendly”, “Confident” | Generated letter reflects tone | As Expected | ✅ |