**User Acceptance Testing (UAT) Template**

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID29404 |
| Project Name | SmartSDLC – AI-Enhanced Software Development Lifecycle |
| Maximum Marks |  |

### Project Overview :

* **Project Name**: SmartSDLC
* **Project Description**: A Generative AI-based platform for automating key SDLC tasks such as requirement classification, code generation, test case generation, bug fixing, code summarization, and AI assistant support, integrated with IBM Watsonx.
* **Project Version**: v1.0
* **Testing Period**: 27 June 2025 to 28 June 2025

### ✅ Testing Scope :

**Features and Functionalities to be Tested**:

* PDF Upload and Classification
* AI Code Generator (multi-language)
* AI-based Test Case Generator
* Bug Fixer (auto-correction of code)
* Code Summarizer
* Chat Assistant (Prompt-based query resolver)
* User Login and Authentication

**User Stories / Requirements to be Tested**:

* US-01: As a user, I can upload SDLC documents and get classified output
* US-02: As a user, I can generate code based on a functional requirement
* US-03: As a user, I can get test cases for a given code snippet
* US-04: As a user, I can fix buggy code using the AI bug fixer
* US-05: As a user, I can summarize code blocks to understand logic quickly
* US-06: As a user, I can interact with the chatbot for development queries
* US-07: As a user, I can log in and securely access SmartSDLC features

### Testing Environment :

* **URL/Location**: [http://localhost:8501](http://localhost:8501" \t "_new)
* **Credentials**

Username: Sri Pavani

Password: \*\*\*\*\*\*\*\*

### Test Cases :

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Test Scenario** | **Test Steps** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| TC-001 | Upload PDF and classify content | Step 1: Login Step 2: Upload valid PDF Step 3: Click classify | Output should show classification by SDLC phase | Classification displayed correctly | Pass |
| TC-002 | Generate code from functional input | Step 1: Open Code Generator Step 2: Input task Step 3: Click generate | Code should be generated in correct language | Python/Java code generated correctly | Pass |
| TC-003 | Generate test cases | Step 1: Open Test Generator Step 2: Paste code Step 3: Click generate | Test cases should be relevant and valid | Unit tests generated as expected | Pass |
| TC-004 | Fix buggy code | Step 1: Open Bug Fixer Step 2: Paste buggy code Step 3: Click fix | Errors should be removed and logic retained | Bug fixed successfully | Pass |
| TC-005 | Summarize code | Step 1: Open Code Summarizer Step 2: Paste code Step 3: Click summarize | Summary should reflect logic clearly | Accurate summary provided | Pass |
| TC-006 | AI Chat Assistant support | Step 1: Open Chat Assistant Step 2: Ask prompt | Response should be relevant and intelligent | Answers generated properly | Pass |
| TC-007 | User Login and Security | Step 1: Enter valid credentials Step 2: Submit | User should be redirected to dashboard | Logged in and redirected correctly | Pass |

### Bug Tracking :

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Bug ID** | **Bug Description** | **Steps to Reproduce** | **Severity** | **Status** | **Additional Feedback** |
| BG-001 | UI alignment issue on mobile devices | Step 1: Open on small screen Step 2: View PDF upload | Medium | In Progress | Needs responsive CSS fixes |
| BG-002 | PDF classification fails for scanned PDF | Step 1: Upload scanned PDF Step 2: Click classify | High | Open | Consider OCR for image-based PDFs |
| BG-003 | Forgot password button styling broken | Step 1: Go to login Step 2: Click “Forgot Password” | Low | Closed | Minor UI fix already applied |

### Sign-off :

* **Tester Name**: kona sri pavani
* **Date of Test Completion**: 28 June 2025
* **Signature**:sri pavani

### ✅ Notes:

* All features tested with both valid and invalid inputs
* Responsive layout checked on desktop and mobile
* Bugs logged and will be addressed before final deployment