# Technology Stack (Architecture & Stack)

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Team ID: LTVIP2025TMID31232

Project Name: SmartSDLC: AI-Enhanced Software Development Lifecycle

## Components & Technologies

| S.No | Component | Description | Technology |
| --- | --- | --- | --- |
| 1 | User Interface | Web-based interaction | Streamlit |
| 2 | Application Logic | Code generation, bug fixing, testing | Python |
| 3 | AI Service Layer | Prompt handling, AI outputs | IBM Watsonx Granite 3.3 |
| 4 | Session State | In-memory user data | Streamlit Session |
| 5 | File Storage | PDF uploads and static files | Local Filesystem |
| 6 | Security | Key protection | .env, python-dotenv |
| 7 | Deployment | Run locally or on cloud | IBM Cloud Foundry / Localhost |