**Project Design Phase**

**Solution Architecture**

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| Date | 15 February 2025 |
| Team ID | LTVIP2025TMID35138 |
| Project Name | Citizen AI – Intelligent Citizen Engagement Platform |
| Maximum Marks | 4 Marks |

**Solution Architecture:**

**CitizenAI –** is an AI-powered platform designed to help users—especially students and citizens—easily access information about government schemes and services. The solution architecture connects user queries to intelligent, real-time responses using a simple and scalable tech stack.

**Key Objectives:**

* Use AI to simplify access to public service information
* Ensure quick, reliable, and multilingual responses
* Support future expansion and integration with public data APIs

**Core Components:**

* **Frontend:** Simple chatbot interface for users to ask questions
* **Backend:** Flask/Python app that processes queries and manages API calls
* **AI Layer:** IBM Granite or Watson for generating relevant responses
* **Database:** Stores user queries, responses, and logs (e.g., MongoDB)
* **APIs:** Connects to government scheme databases for up-to-date info
* **Multilingual Support:** Enables regional language interaction
* **Authentication (Optional):** For tracking user preferences or history

**Basic Workflow:**

1. User asks a question through the chatbot
2. Backend sends it to the AI model
3. AI returns a relevant answer
4. Backend formats and delivers it to the user
5. System logs the interaction for improvement

**Scalability:**

* Can expand across states, languages, and sectors
* Cloud-ready for IBM Cloud, AWS, etc.
* Future-ready for voice input, mobile apps, and analytics dashboards

**Architecture and Workflow:**

