

Sprint-1 POC Report

Objective:

The objective of our POC for Sprint 1 was to perform a simple implementation that validates the feasibility of the system's backend, database, and basic authentication flow, along with a simple user interface, before moving into more detailed development.

Scope of Work:

As part of this POC, we implemented small sample modules to test the working of essential components. The intent was not to build complete features, but to confirm that our chosen approach is workable.

Implementation Details:

- **Database Setup and Validation:** A sample database was set up using MongoDB, where schemas were created and validated. Schema rules were enforced through middleware functions using joi library to ensure correct data formats.
- **Backend Controllers and Routing:** Minimal controllers were implemented in Node.js to handle login functionality. Basic API routes for user login and signup were established and connected to the database.
- **Authentication:** The backend was integrated to provide a basic authentication mechanism using passport and test how secure login handling would function.
- **Integration:** The backend and the frontend were integrated with the help of axios library of javascript.
- **Frontend Prototype:** A simple login page was created using React with CSS for styling. This was connected to the backend routes to test end-to-end flow.
- **AI Chatbot Feature:** A basic chatbot panel was initiated in Python, using LLMs through Langchain framework to explore possible AI-assisted support features for the platform.

Outcome:

The POC successfully demonstrated small-scale integration between the frontend and backend, with validation and authentication flows working at a basic level. It also allowed the team to test schema enforcement, middleware use, and initial database connectivity. While these implementations remain minimal and not yet fully refined, our POC confirmed that the planned technical direction is feasible and provided practical experience for the team to build upon in subsequent sprints.