

LAB-4

NPMI Project - SRS Document

Project Title: GenAI Education Assistant.

1. Introduction

1.1 Purpose

Provide students with an intelligent education assistant powered by GenAI. Develop adaptive learning through Q&A, concept explanations & personalized tests & quizzes.

1.2 Scope

It will track knowledge using student performance history. It will generate personalized recommendations for next topics or quiz.

1.3 Overview

A web application connected to AI backend. Includes login, Q&A chats, quizzes & dashboard.

2. General Description

Standalone web app, integrated with AI API & database. It is dependent on internet, API usage cost.

3. Functional Requirements

3.1 User registration & login

3.2 Personalized quiz generation

3.3 KT for progress tracking

3.4 Recommendation engine for next topic.

4. Interface Requirements

- 4.1 UI: Chatbot interface.
- 4.2 Dashboard with charts & progress bars
- 4.3 Hardware: Runs on PC/mobile with internet

5. Performance Requirements

- 5.1 Q&A Response time < 3 sec.
- 5.2 Support 500 concurrent users at a time
- 5.3 Uptime - 95%.

6. Design Requirements

- 6.1 Frontend: React/Flutter
- 6.2 Backend: Python
- 6.3 Database: SQLite/MongoDB
- 6.4 AI Integration

7. Non-functional Attributes

- 7.1 Usability
- 7.2 Reliability
- 7.3 Scalability
- 7.4 Security

8. Preliminary Budget & Schedule

Phase	Duration	Cost Estimate
Requirement Analysis	1 week	Rs. 500
System Design	2 weeks	Rs. 1000
Implementation	4 weeks	Rs. 1000
Testing	2 weeks	Rs. 1000
Deployment	1 week	Rs. 400
Total	10 weeks	Rs. 3000