Sprint 1

Functional document

Sprint Functional Document for Study Planner

1. Introduction

The Learning Roadmap System project aims to create a personalized educational website for students, helping them organize their tasks through to-do lists and providing study materials based on their courses. The platform also includes a chatbot feature that offers real-time assistance with study topics, identifies areas needing more focus based on previous grades, and highlights content for improvement. This sprint focuses on implementing personalized study plans, chatbot integration, and the to-do list management system.

2. Product Goal

The primary goal of this sprint is to enable students to efficiently plan their studies by creating personalized to-do lists, providing study materials, and integrating a chatbot for real-time help. Additionally, the system will analyze students' past performance and recommend focus areas, enhancing their study effectiveness.

3. Demography (Users, Location)

Users:

Target Users: High school and college students.

User Characteristics: Tech-savvy, goal-oriented students looking for personalized study assistance and time management.

Location:

Target Location: Schools, colleges, and online learning communities globally.

4. Business Processes

The key business processes include:

User Registration and Profile Setup:

Students can create profiles, input their course details, and set study goals.

To-do List Creation:

Students create a to-do list of study tasks, with deadlines and reminders.

Study Material Recommendation:

The system provides personalized study materials and references based on student courses and past grades.

Chatbot Support:

The chatbot offers real-time help with subject queries and provides additional resources when needed.

Progress Monitoring and Focus Areas:

The system evaluates students' previous grades and highlights areas requiring more focus, guiding them towards improvement.

5. Features

The following key features will be implemented:

5.1 Feature #1: Personalized To-Do List Management

Description:

Allow students to create, manage, and organize their study tasks in a to-do list format, with deadlines and reminders.

User Story:

"As a student, I want to create a personalized to-do list for my study tasks so that I can manage my time effectively and meet deadlines."

5.2 Feature #2: Study Materials Recommendation

Description:

Based on the student's course and past grades, the platform recommends relevant study materials and resources.

User Story:

"As a student, I want the system to provide me with study materials tailored to my needs, so I can focus on improving my weak areas."

5.3 Feature #3: Chatbot for Study Assistance

Description:

A chatbot feature that helps students with real-time queries related to their study materials and topics they don't understand.

User Story:

"As a student, I want a chatbot that can provide instant help with difficult topics, so I don't have to wait for external help."

5.4 Feature #4: Focus Area Highlighting

Description:

The system evaluates students' past grades and highlights the topics they need to focus on for improvement.

User Story:

"As a student, I want the system to analyze my past performance and guide me on areas where I need to improve."

6. Authorization Matrix

Roles and their corresponding access levels:

Role	Access Level
Administrator	Full access to user and system management, including student progress.
Guest User	Limited access to view general study materials and public information.
Student	Access to create to-do lists, view study materials, use chatbot, and track progress.
Educator	Access to content creation and management tools

7. Assumptions

· he system infrastructure will remain stable during the development process.

· Students are willing to share their grades and course details for personalized study recommendations.

· The chatbot will be able to handle common subject queries and provide appropriate help.

· The development team has the necessary resources and skills to integrate the required features efficiently.

Test case document

Functional Test Case Template					
Feature	**Test Case**	**Steps to execute test case**	**Expected Output**	**Actual Output**	**More Information**
Study To-Do List	**Creating a timetable**	1. Open Study Buddy App 2. Click on Create Timetable 3. Select class, subject, and time slot 4. Click Add More (optional) 5. Click Submit	A timetable should be created and saved. The selected subjects and times should appear after submission.	The user is successfully able to select class, subject, and time. "Add More" and "Submit" are functional.	Confirm if the data is saved or displayed.
Timetable Module	**Viewing timetable**	1. Open Study Buddy App 2. Click on View Timetable.	The existing timetable for selected class should be displayed.	Functionality available via button, but data display behavior is not shown in screenshots	Needs data to verify full functionality.
Study Modules UI	**Navigation & visibility**	1. Launch app 2. Confirm visibility of Create Timetable, View Timetable, Video Content, Notes, Assignments buttons	All five buttons should be visible and clickable.	All buttons are clearly visible and appear clickable in the UI.	Ensure navigation works for all buttons.

Outcome of sprint

Study Buddy App

Study Modules - 1-12 Class

- Create Timetable
- View Timetable
- Video Content
- Notes
- Assignments

Study Buddy App

Create Timetable - 1-12 Class

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