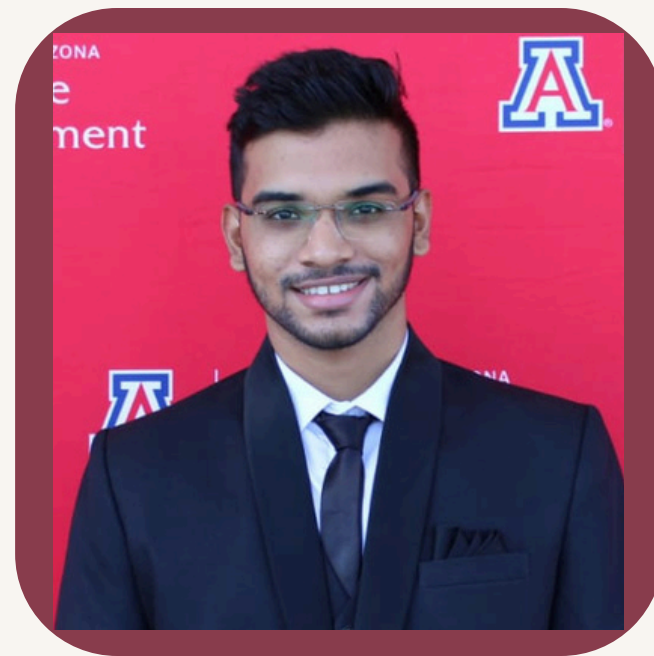# SMART STUDY ASSISTANT

Team 1

OUR TEAM

Aditi Manivannan
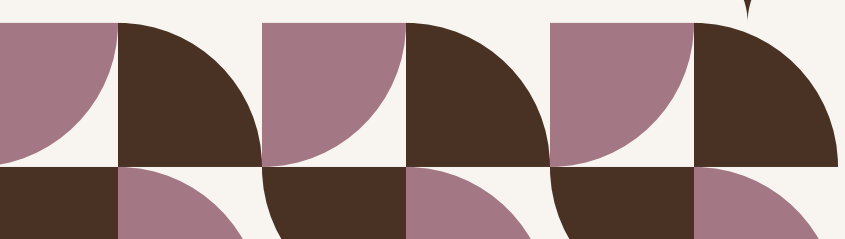
Karan Salot

Nimish Bhasu Vasagiri
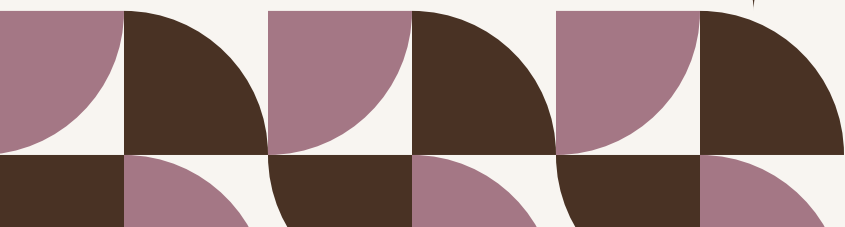
Edward Lin

INTRODUCTION

Our project, AI Chatbot for Personalized Learning Paths, aims to revolutionize the learning experience by providing tailored study plans and real-time assistance. Leveraging AI, the chatbot adapts to individual learning behaviors, empowering students to achieve their goals efficiently.

PROJECT OVERVIEW

We are building a Smart Study Assistant to help students overcome the following challenges:

- Overwhelming Study Material
- Lack of Personalization
- Motivation and Organization Issues
- Limited Feedback and Progress Tracking

KEY FEATURES

- Personalized Learning Plans
- Targeted Study Recommendations
- Engagement Tools
- Progress Tracking and Insights
- Resource Accessibility

MINIMUM VIABLE PRODUCT

The MVP focuses on delivering personalized, efficient, and engaging study experiences to address students' core learning challenges, ensuring measurable academic success.

- Personalized Learning Plans
- Targeted Study Recommendations
- Interactive Engagement Tools
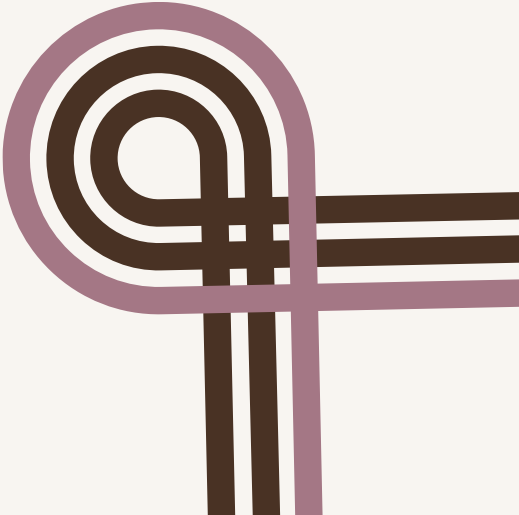- Progress Tracking
- Quick Resource Access

CONTEXT DIAGRAM

External entities

- Personalized Learning AI Chatbot (System)
- Students (Users)
- Learning Resource Providers
- Admins

Logic

- The AI Chatbot serves as the intermediary between students, admins, and resource providers, ensuring seamless communication and data flow.

- Key inputs and outputs are designed to maintain an efficient and personalized learning experience for users.

CONTEXT DIAGRAM
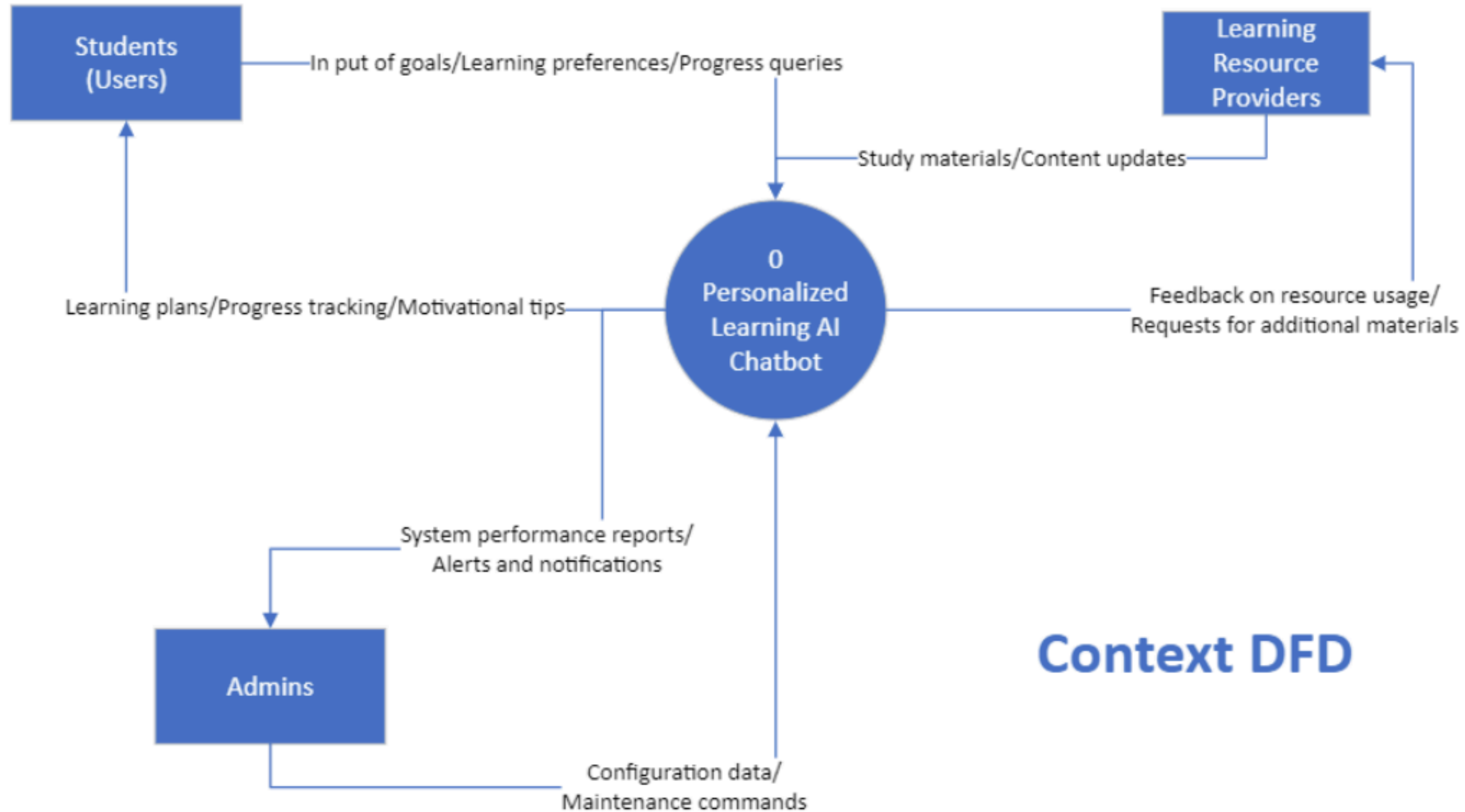
Context DFD
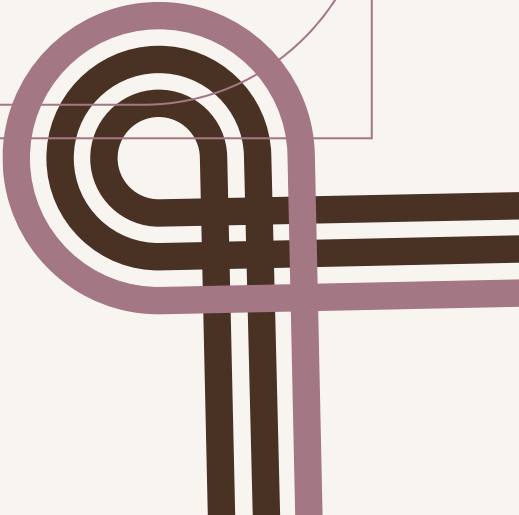
LEVEL-0 DIAGRAM

Processes

- Manage Student data
- Handle Learning Resources
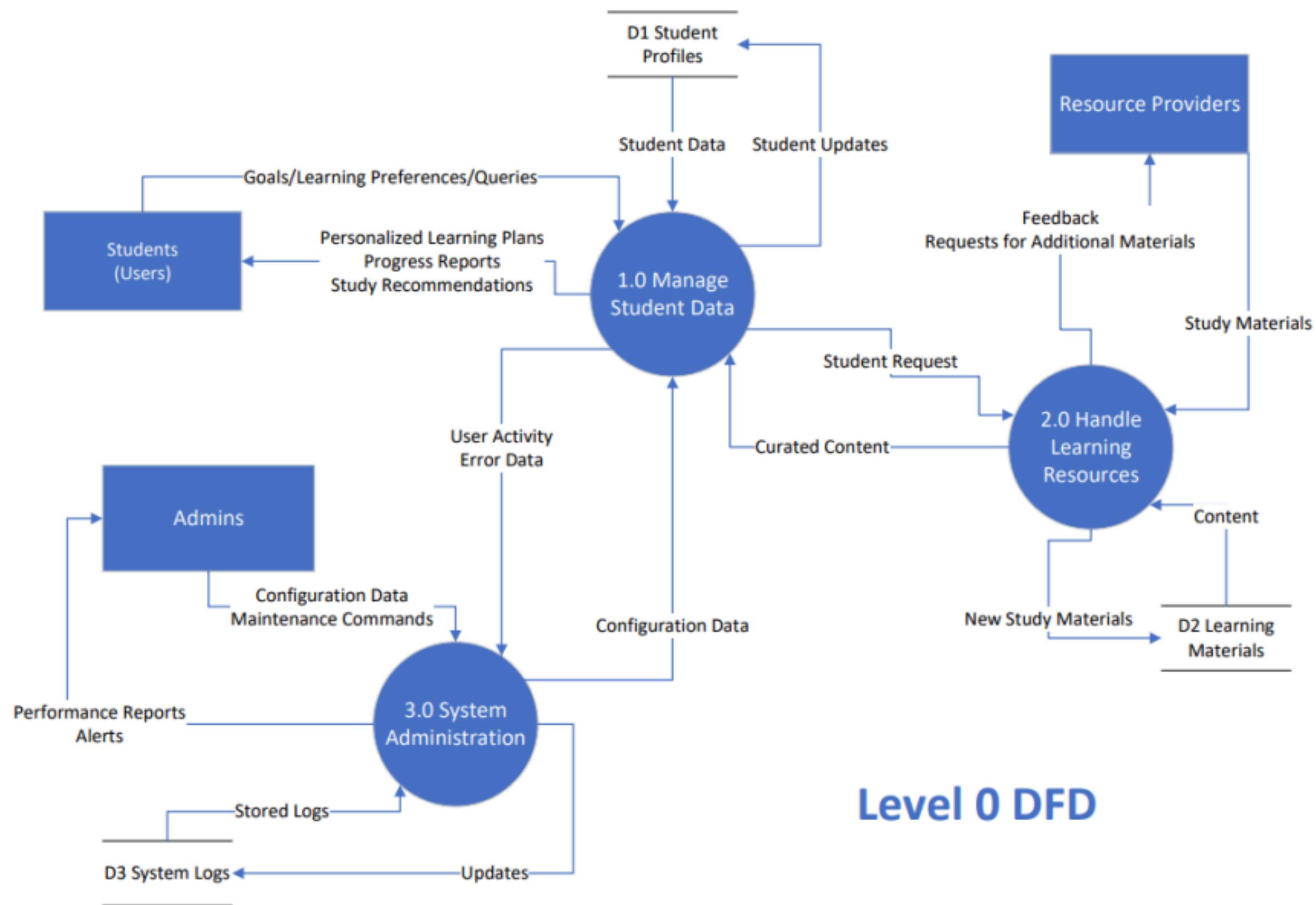- System Administration

External Entities

- Student users
- Admins
- Resource Providers

Logic

The system is structured to centralize student data, handle dynamic resource allocation, and ensure smooth system administration.
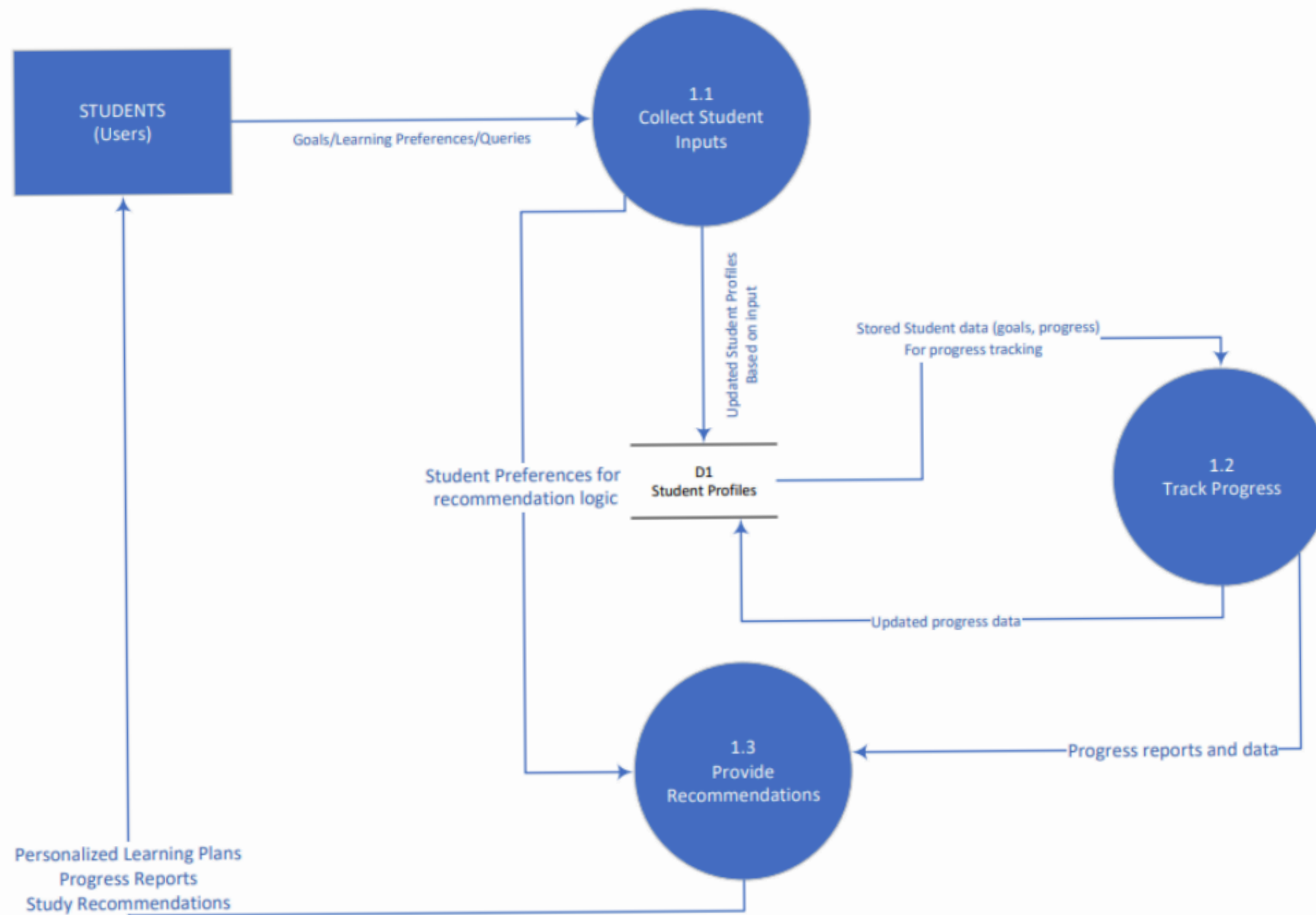
LEVEL-0 DIAGRAM

Level 0 DFD

LEVEL 1 DIAGRAM

Key Components

- Collect Student Inputs
- Track Progress
- Provide Recommendations

Description

- The Level 1 DFD focuses on how the system collects inputs, tracks progress, and provides personalized recommendations to students.
- It ensures seamless interaction between users and the system for a personalized learning experience.
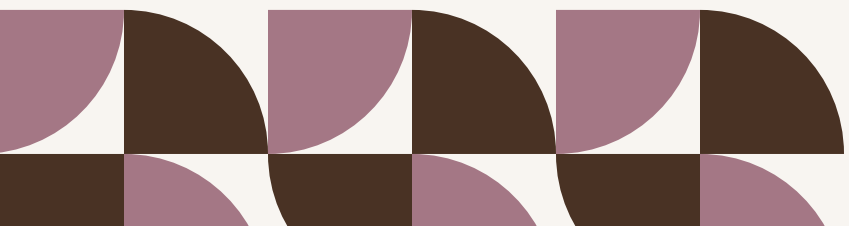
LEVEL 1 DIAGRAM

STUDENTS
(Users)

Goals/Learning Preferences/Queries

1.1
Collect Student
Inputs

Updated Student Profiles
Based on input

Stored Student data (goals, progress)
For progress tracking

Student Preferences for
recommendation logic

D1
Student Profiles

1.2
Track Progress

Updated progress data

1.3
Provide
Recommendations

Progress reports and data

Personalized Learning Plans
Progress Reports
Study Recommendations

ER DIAGRAM

Key Components

- Student: Stores personal details and goals.

- Progress Report: Tracks learning progress.

- Learning Resource: Stores educational materials.

- Admin: Manages resources and logs.

- Recommendation: Provides tailored suggestions
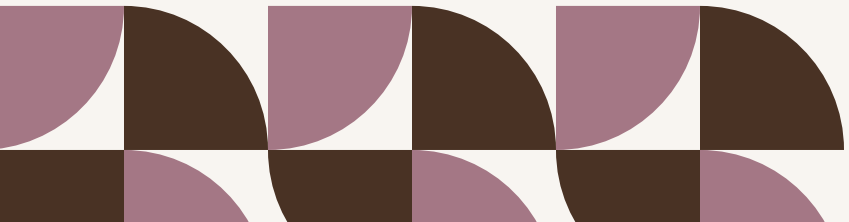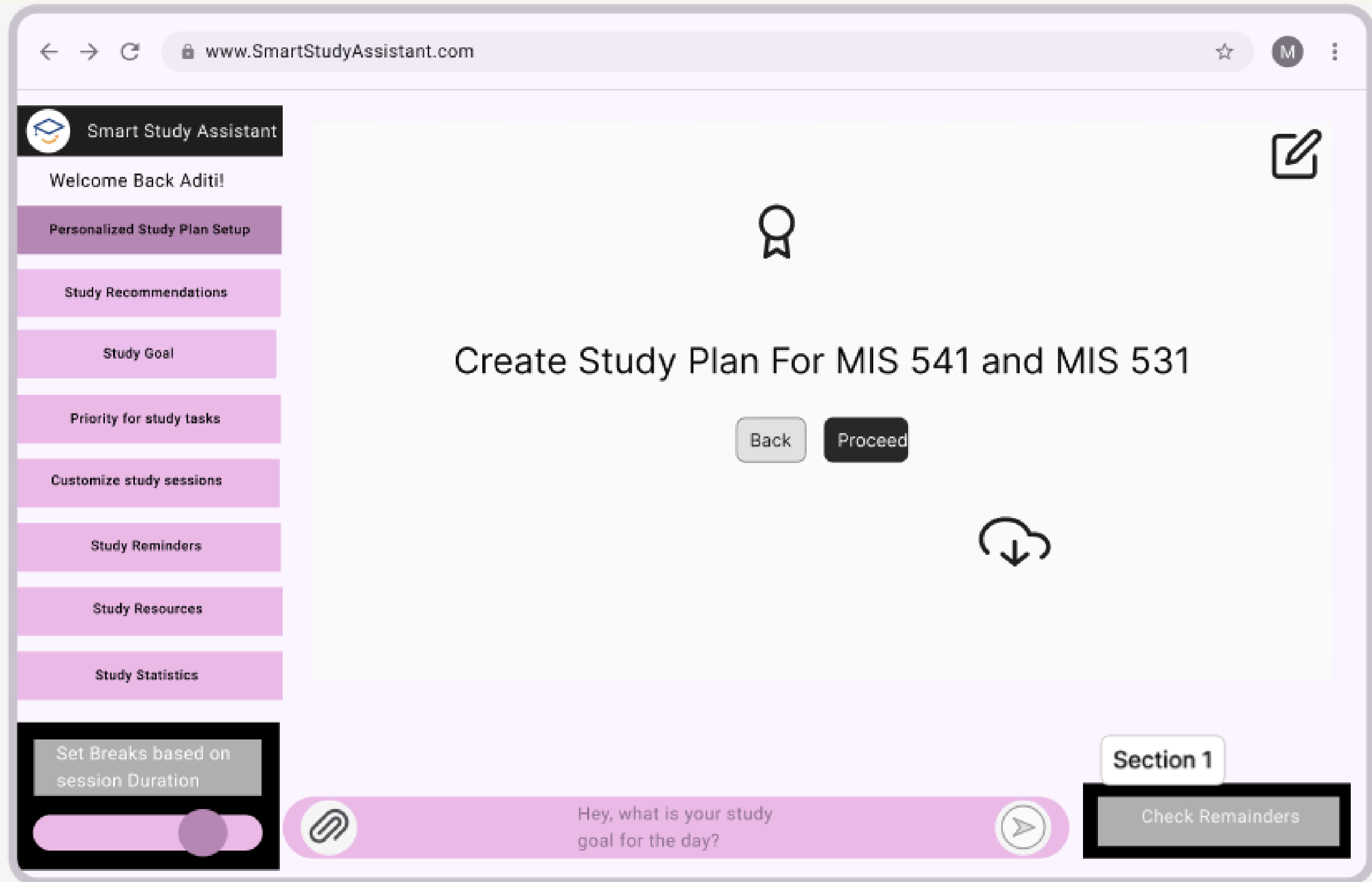
ER Diagram:
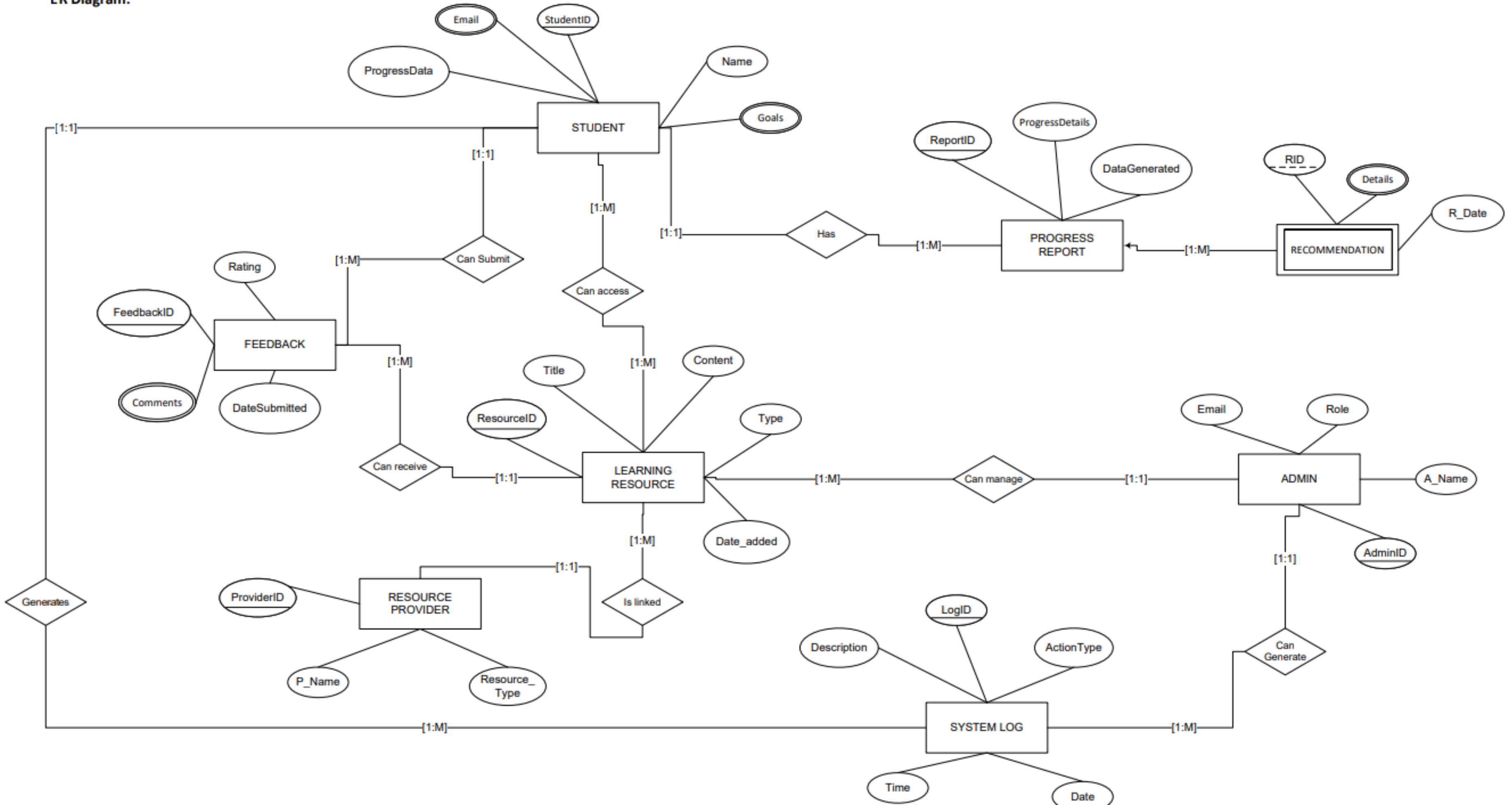
FIGMA MAINFRAMES

OVERVIEW

- Our Figma designs focus on creating a user-friendly chatbot interface.

- The interface will organize study sessions based on learning preferences.

FIGMA MAINFRAMES

Study plan setup

www.SmartStudyAssistant.com

Smart Study Assistant

Welcome Back Aditi!

Personalized Study Plan Setup

Study Recommendations

Study Goal

Priority for study tasks

Customize study sessions

Study Reminders

Study Resources

Study Statistics

Set Breaks based on session Duration

Details   Goals   Community   Pace   Forum   Contact   Assistant +

MIS 541

Wireframing

User-Centered System Design

Agile and Lean Methodologies
 in Systems Design

MIS 531

SQL

Data Warehouse

Development features

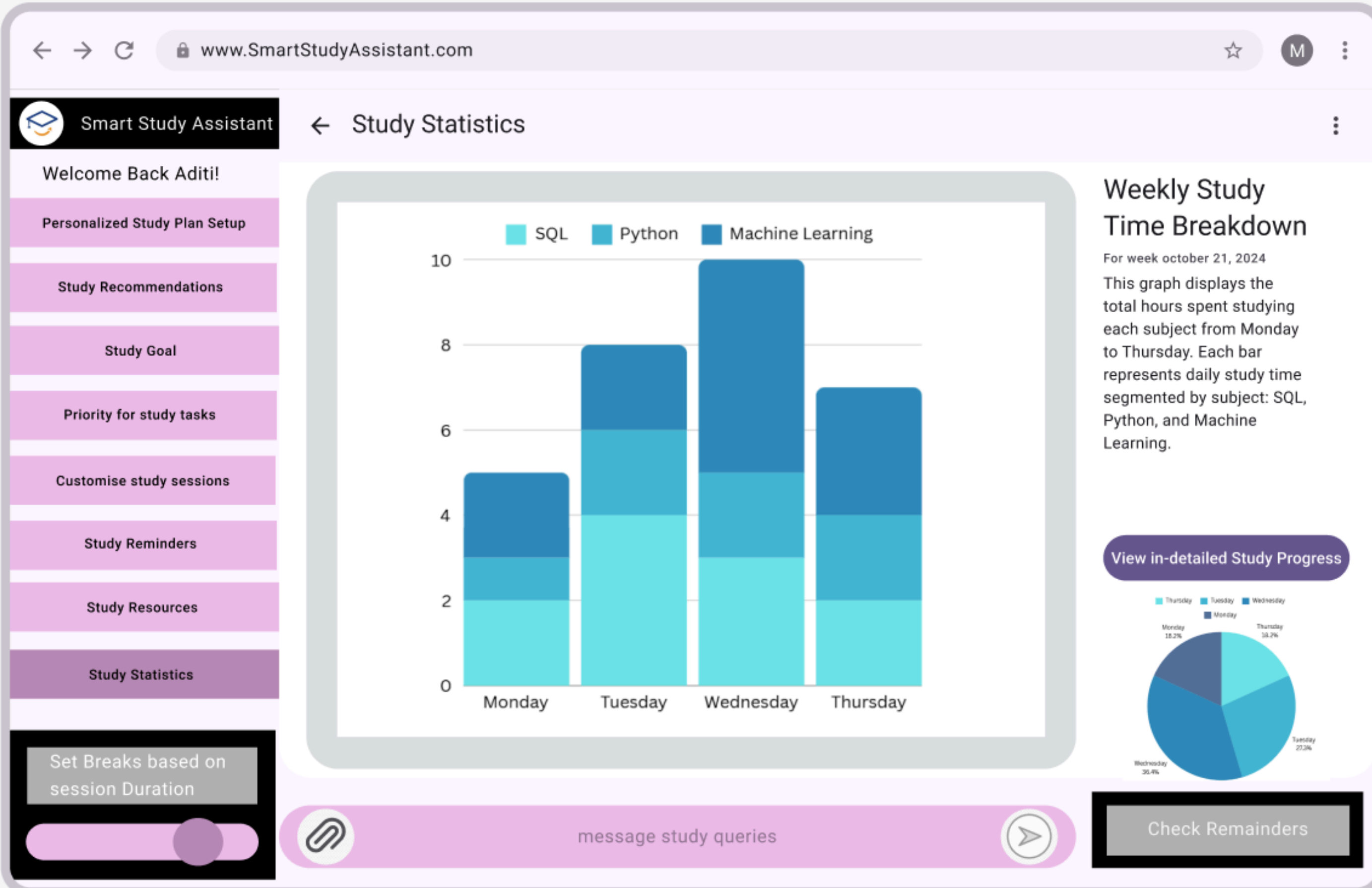### Resources

Blog

Best practices

Support

Developers

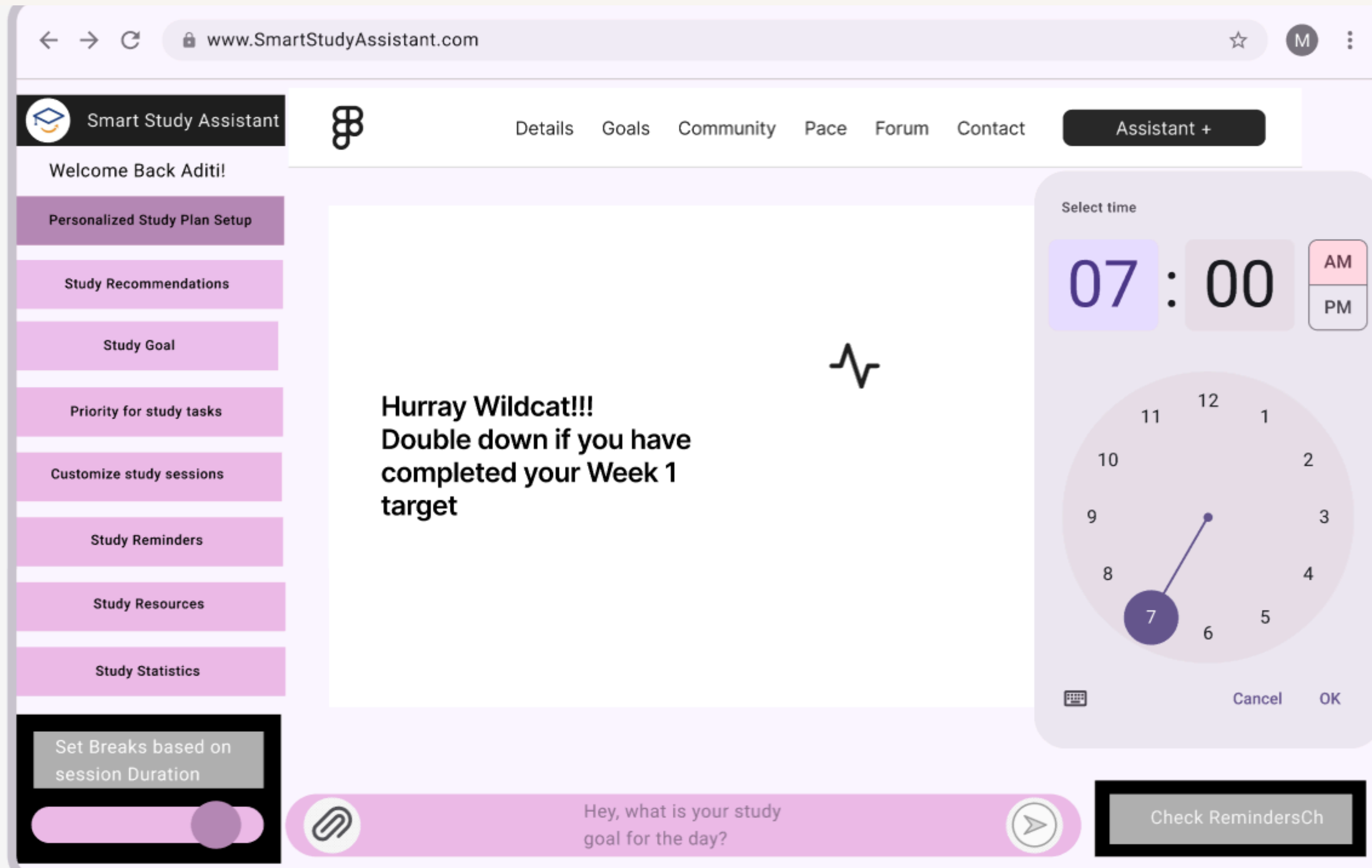Resource library

→

Hey, what is your study goal for the day?

Check RemindersCh

FIGMA MAINFRAMES

FIGMA MAINFRAMES

RESULTS

1. Enhanced Personalization : Students will receive tailored learning plans and recommendations based on their goals and progress, leading to improved engagement and outcomes.

2. Streamlined Operations : The use of centralized data stores and automated processes ensures efficient data management and reduces system redundancy.

RESULTS

3. Improved User Experience: The intuitive chatbot interface and personalized interaction make learning enjoyable and accessible.

4. Feedback Loop for Continuous Improvement: Real-time feedback from users helps refine recommendations and maintain high-quality resources.

5. Scalable and Sustainable System: The integration of analytics and user-driven data models ensures scalability and adaptability for future needs.

THANK YOU!