Software Requirements Specification

for

< Study Material Organizer >

Table of Contents

Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

StudyMate is a web-based platform designed to help students organize and access study materials efficiently. The software provides features for uploading, downloading, and managing study resources. The system aims to facilitate seamless collaboration among students and enhance their learning experience.

1.2 Document Conventions

This document follows standard conventions for software requirement specifications, including:

- **Bold** for important terms
- *Italic* for emphasis
- `Monospace` for code-related elements

1.3 Intended Audience and Reading Suggestions

This document is intended for:

- **Developers**: To understand the functional and non-functional requirements
- **Project Managers**: To track the scope and progress
- **Testers**: To design test cases
- **End Users**: To get an overview of the system's capabilities

1.4 Project Scope

StudyMate provides an intuitive web interface for students to upload, organize, and download study materials. The key features include:

- **Secure authentication (Sign In/Sign Up)**
- **Upload and Download functionality**

- **Feedback mechanism**
- **About section for system information**

1.5 References

- IEEE Standard 830-1998 for Software Requirements Specifications
- Web design best practices

2. Overall Description

2.1 Product Perspective

StudyMate is a standalone web application, with a structured navigation bar facilitating access to core features such as Home, Upload, Download, About, and Feedback.

2.2 Product Features

- **Home**: Main landing page with an overview of the system
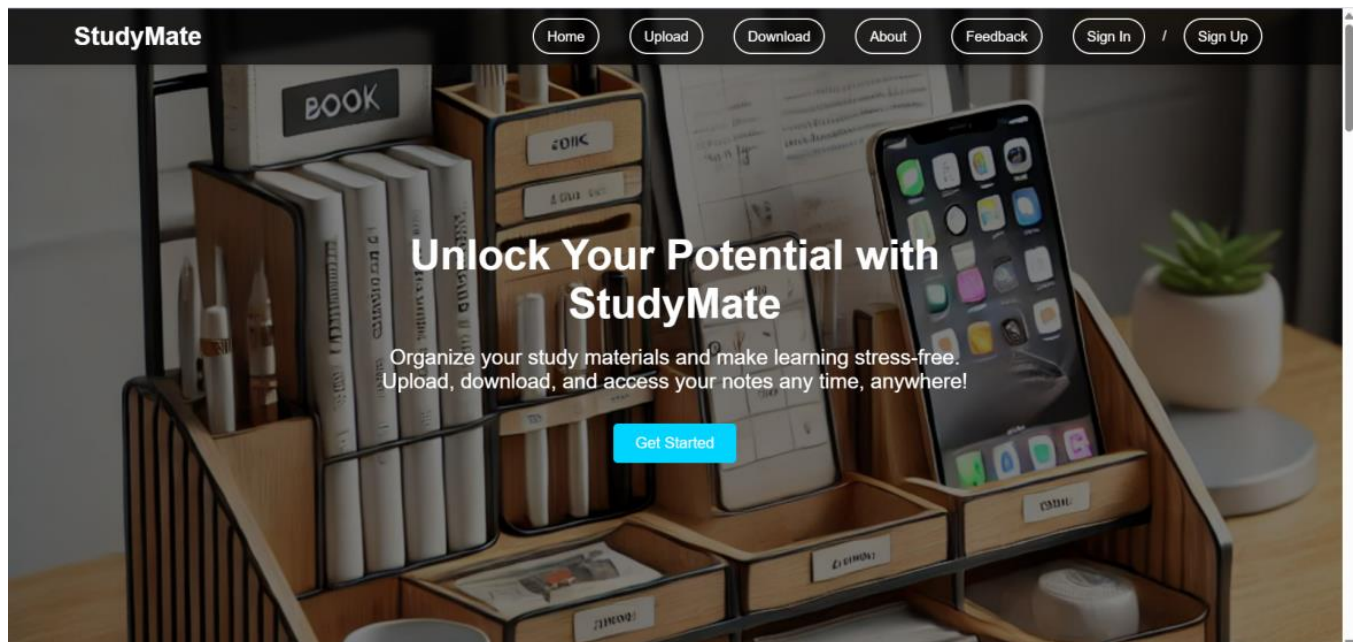
- **Upload**: Allows users to upload study materials
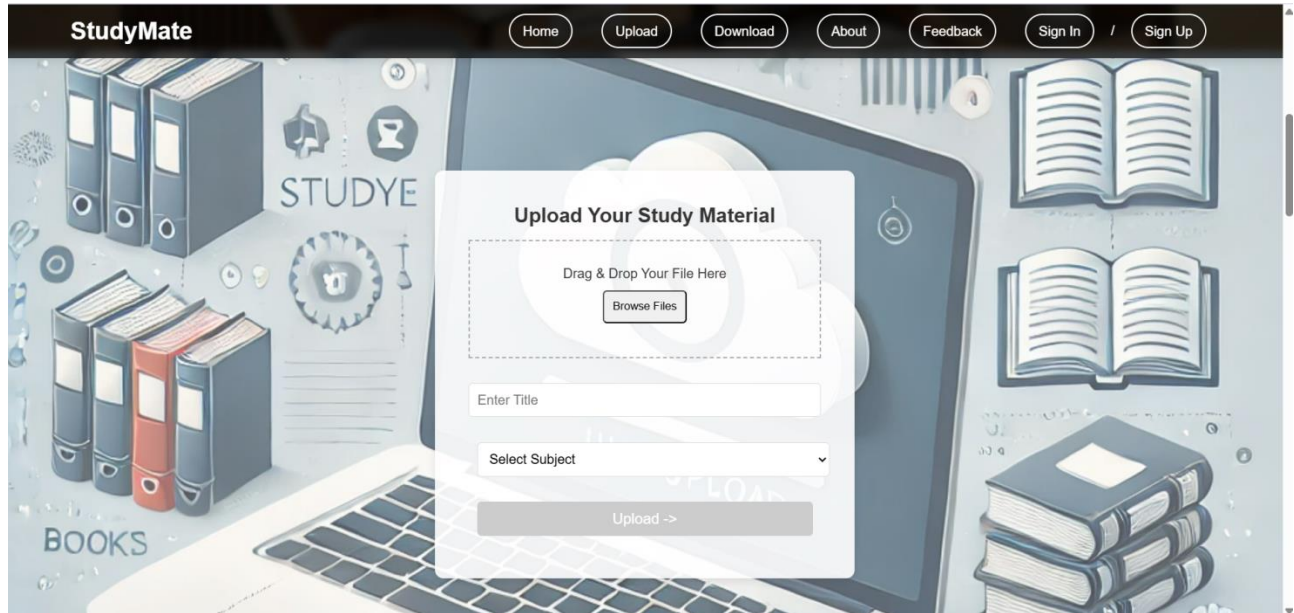
- **Download**: Enables users to download shared resources
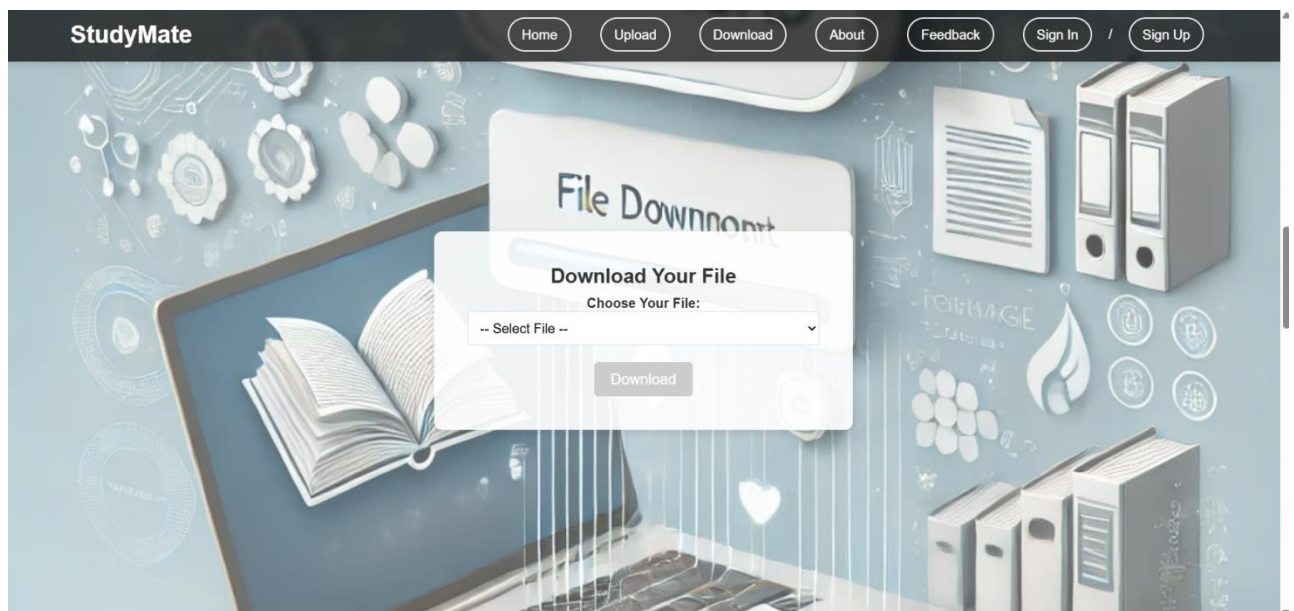
- **About**: Provides details about StudyMate
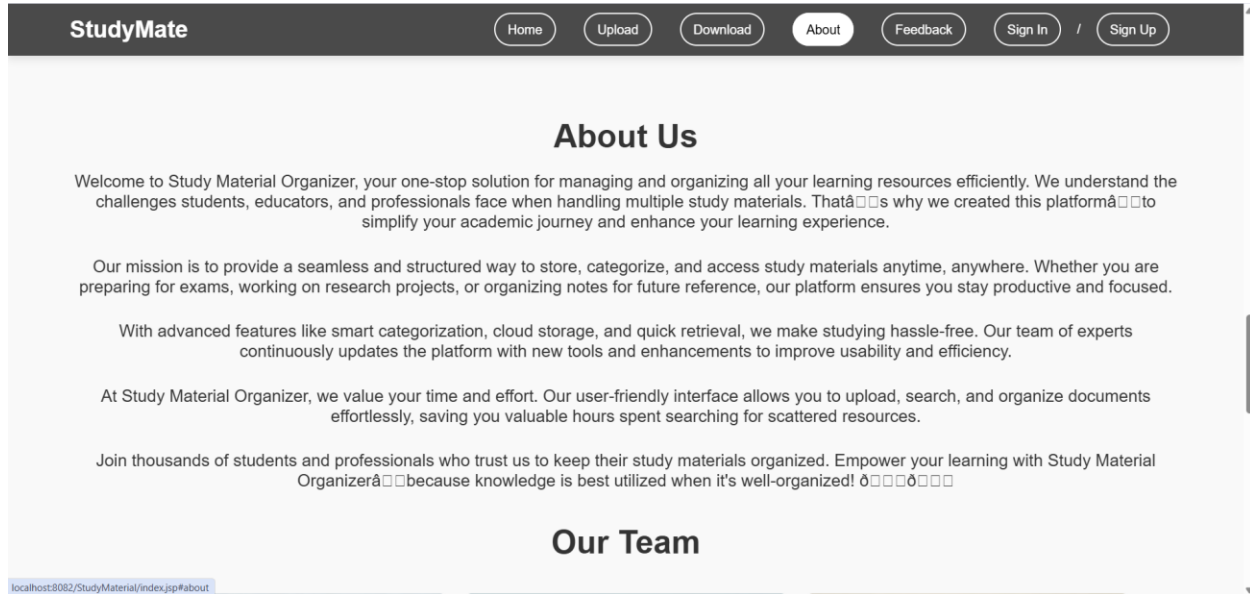
- **Feedback**: Collects user input for improvements
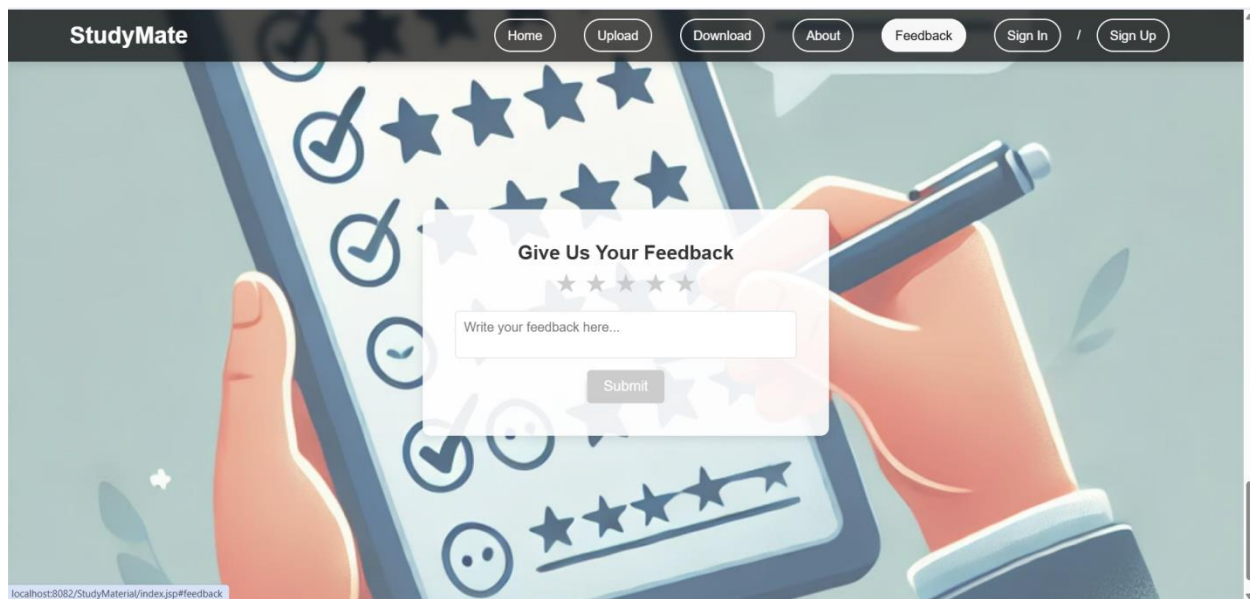
- **Authentication**: Secure Sign In and Sign Up options
- **Sign Up**

Sign In

2.3 User Classes and Characteristics

- **Students**: Primary users, uploading and downloading study materials
- **Faculty**: Secondary users, potentially reviewing content

- **Administrators**: Managing user access and moderating content

2.4 Operating Environment

- Web-based application
- Supports modern browsers (Chrome, Firefox, Edge, Safari)
- Responsive design for mobile and desktop

2.5 Design and Implementation Constraints

- The application should be lightweight and fast-loading
- Follows modern UI/UX principles
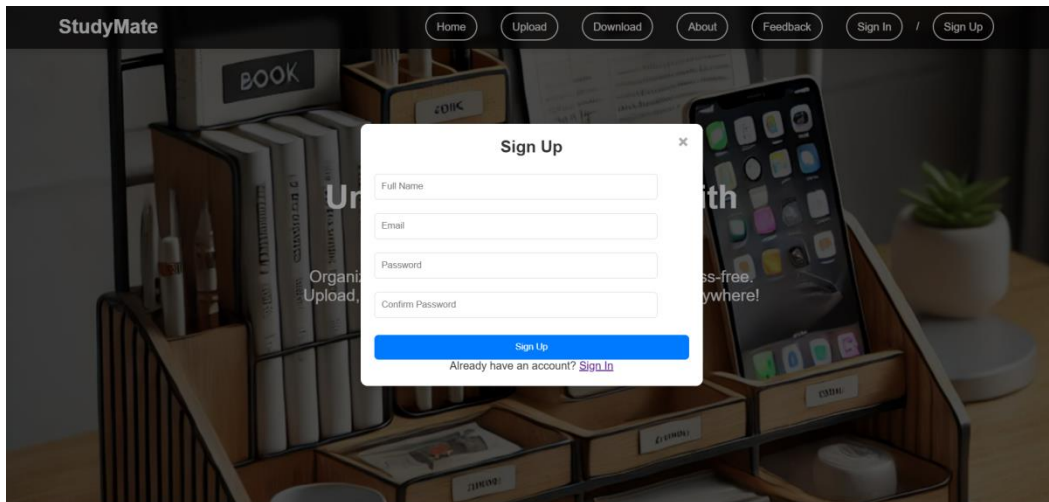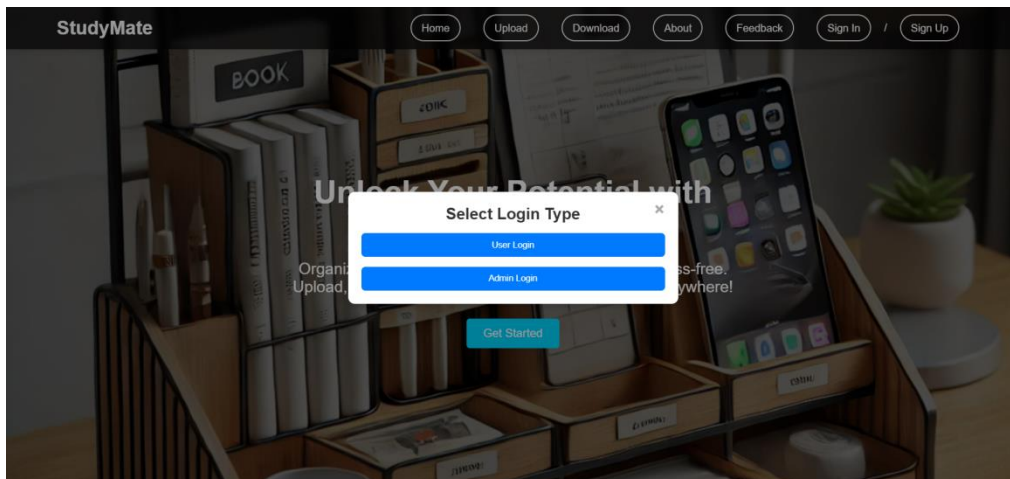- Secure authentication mechanisms

2.6 User Documentation

- Online user guide and FAQs
- Interactive help sections within the web interface

2.7 Assumptions and Dependencies

- Requires stable internet connectivity
- Users should have a valid email ID for authentication

3. System Features

3.1 Navigation Bar

3.1.1 Description and Priority

Provides easy access to all system functionalities. **Priority: High**

3.1.2 Functional Requirements

- REQ-1: The navbar should be present on all pages
- REQ-2: Active state should be highlighted for the current page

3.2 Upload Feature

3.2.1 Description and Priority

Allows users to upload study materials. **Priority: High**

3.2.2 Functional Requirements

- REQ-3: Users should be able to select and upload files
- REQ-4: File format validation must be implemented

4. External Interface Requirements

4.1 User Interfaces

- Modern UI with a dark theme, inspired by the provided navbar screenshot
- Intuitive buttons with rounded edges
- Consistent color scheme and typography

4.2 Hardware Interfaces

- Compatible with standard computing devices (PC, Mac, Mobile)

4.3 Software Interfaces

- Runs on a web server
- Utilizes a database for storing user credentials and files

4.4 Communications Interfaces

- Supports HTTPS for secure communication
- User authentication via email/password

5. Other Nonfunctional Requirements

5.1 Performance Requirements

- Page load time < 2 seconds

- Supports concurrent users without lag

5.2 Safety Requirements

- Users must not be able to upload harmful files

5.3 Security Requirements

- Data encryption for stored files
- Secure authentication mechanisms

5.4 Software Quality Attributes

- Scalability, maintainability, and responsiveness

6. Other Requirements

- The system should support future integrations with cloud storage

Appendix A: Glossary

- **StudyMate**: The web application for study materials
- **Navbar**: The top navigation bar

Appendix B: Analysis Models

- Wireframes and UI mockups (to be added)

Appendix C: Issues List

- TBD

Flowchart