
Software Requirements Specification

for

EdAssist

Version 1.0 approved

**Prepared by
Syeda Areesha Najam
Shalin Amir Ali
Sana Fatima
Ragini Gopchandani
Suhana Rajput**

Habib University

17-02-2022

Table of Contents

Table of Contents	ii
Revision History	ii
1. Introduction	1
1.1 Purpose	1
1.2 Intended Audience and Reading Suggestions	1
1.3 Project Scope	1
1.4 References	1
2. Overall Description	2
2.1 Product Perspective	2
2.2 Product Features	2
2.3 User Classes and Characteristics	2
2.4 Operating Environment	2
2.5 User Documentation	2
2.6 Assumptions and Dependencies	3
3. System Features	3
3.1 PTM Scheduler	4
3.2	
4. External Interface Requirements	4
4.1 User Interfaces	4
4.2 Hardware Interfaces	4
4.3 Software Interfaces	4
4.4 Communications Interfaces	4

1. Introduction

1.1 Purpose

The purpose of this document is to build an online education system named EdAssist in order to monitor the students' progress of class IX and X, specifically. The following document will specify the design and features of the software.

1.3 Intended Audience and Reading Suggestions

The intended audience of this document are the development team, project managers, software developers and testers. The testers of the software need to thoroughly read the document in order to test it according to the mentioned design and features, and give feedback to the developers for errors identified or advise further improvements. The document can also be read by the head of the department, who could then ask for any desired changes in the features or design. This document will first provide the reader with an overview of the system features and the external interface requirements of . This system is being designed for teachers, parents and students of grade 9 to 10.

1.4 Project Scope

The scope of our project is to build a system that is capable of bridging the gap between parent and teacher communication. In this regard, the system will provide a feature of PTM scheduler. The system will also help teachers to record the grades and attendance of students for maintaining progress of each child and report to parents.

2. Overall Description

2.1 Product Perspective

The product we are aiming to design is to assist teachers in making academic progress among their students. Along with it, the product will also help parents in tracking the academic progress of their kids. The motivation behind this product is existing learning management systems which can be improvised to an easy to use version for parents and teachers.

2.2 Product Features

Our LMS will have following functionalities:

- *The system shall be able to maintain attendance records.*
- *The system shall be able maintain grades for students in enrolled subjects.*

- *The system shall be able to perform PTM scheduling.*

2.3 User Classes and Characteristics

The users of our system are:

- *Teacher - The teacher is expected to have maximum proficiency in using this software as they are one of the users to use this system frequently.*
- *Student - The student should have at least knowledge of using a web browser and navigate through website*
- *Parent - Should have basic knowledge of navigating through web pages.*
- *Administration - They should have high software proficiency as they would be an intermediate link between teachers and the system*
- *IT professionals - Experienced and have a degree in IT or related field to be able to maintain and resolve any technical failures or bugs.*

2.4 Operating Environment

The product is expected to simulate on the web. It will ensure that, product is able to run on multiple browsers. A PC or mobile phone that supports a web browser is required.

2.5 User Documentation

We plan to embed user manuals with the system to help users discussed above, so that they can make efficient use of our product. Also, IT professionals would be providing online assistance to the users. Workshops for demonstrating use of websites will be provided to teachers, students, and parents for ease of use.

2.6 Assumptions and Dependencies

We have assumed that all the users will have a good internet connection, updated web browsers to ensure optimal user experience. The database servers will be connected with the application all time. The parents, students, and teachers are considered as end users and with a basic expertise to use devices. We have also assumed that they will have the basic ability to navigate through web pages.

3. System Features

3.1 PTM Scheduler

3.1.1 Description

This feature will provide an interface for teachers to schedule PTM and parents to schedule PTM with teachers as well. This feature has the highest priority.

3.1.2 Stimulus/Response Sequences

The teacher will approach the admin to book an appointment on PTM scheduler. Admin will search for the student in the system using student id. The system will return the data of the student along with his parent/guardian detail. Admin will click on the book appointment button and enter time and date according to the teacher's instruction. If there are no conflicts in booking appointments, the system will successfully schedule a meeting. The admin will send a reminder to the parent via their contact information (the system won't be doing it).

3.2 Attendance Recorder

3.2.1 Description

As per this feature, the system shall be able to maintain a record of attendance. By record, we refer to the number of absences and presents in class. Along with it, it would maintain the number of leaves taken by a student. Based on this data, our system shall be able to generate a percentage that would get shared with parents as a component of monthly reports.

3.1.2 Stimulus/Response Sequences

Each day, the teacher will fill an online attendance sheet which will get saved in a connected database. The student can ask the teacher to modify his/her attendance in case of any discrepancy

4. External Interface Requirements

4.1 User Interfaces

Initially, the user will see the login screen where the user can log in by providing their account details. The screen will display some error messages if the user has put the email or password wrong. After logging in, there will be many features the user will see;

- **The profile:** where the user will see its profile and can log out.
- **The courses:** where the user will be able to see the grades and attendance.
- **Calendar:** where the user will be able to see all the previous, current, and future meetings.
- **Help feature:** this will help the user in tackling any difficulties the one has with using the website.

4.2 Hardware Interfaces

- Windows
- A browser that supports HTML

4.3 Software Interfaces

Following are the software used:

- *Database: To keep a record of all the information related to the user.*
- *Operating systems: we have chosen the windows operating system for its best support and user friendliness.*

4.4 Communications Interfaces

Our application will be compatible with web browsers like Chromes,Microsoft Edge.

Communication between application and database server will be communicated through APIs. Our application will use HTTPS communication standards.