# Software Requirements Specification

## for

# EdAssist

**Version 1.2**

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

**Habib University**

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## Revision History

| Name | Date | Reason For Changes | Version |
|------|------|--------------------|---------|
| **EdAssist** | 26-02-22 | Grade Recorder feature removed | 1.1 |
| **EdAssist** | 06-03-22 | PTM Scheduler feature revised | 1.2 |

# 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 explicitly focus on PTM scheduler and recording attendance of students. The system will not be dealing with grades, assignments, announcements or anything mentioned otherwise.*

# 2.     Overall Description

## 2.1     Product Perspective

*Our product aims to design a software that assists teachers and parents by providing an effective communication platform. The main feature of this software is the PTM scheduler which is lacking from the existing Learning Management Systems. For the scope of this project we will only be focusing on making this software to be used as a separate system in itself, however, this software can be integrated as a feature within existing LMS to further improvise their functionality by LMS vendors.*

## 2.2 Product Features

*Our LMS will have following functionalities:*

- *The system shall be able to maintain attendance records.*
- *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*
- *Tech Support- 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

*As per our plan, we are planning to opt for a web browser as an operating environment. The system shall operate on Microsoft Edge and Chrome. Anyone with a functional web browser as specified earlier installed on PC shall be able to use our system.*

## 2.5 User Documentation

*We plan to provide user manuals with the system to help users in making efficient use of our product. Also, IT professionals would be providing online assistance to the users.*
*The manual shall cover following points:*
- *Features of the system with brief descriptions.*
- *Functionalities of the features.*
- *Sample scenarios in which users can make use of our system.*
- *Contact details for support.*
*Workshops for demonstrating use of the system shall be planned for,*
- *teachers*
- *parents*

## 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 a meeting with parents (PTM) and parents can also schedule a meeting with teachers using PTM scheduler. This feature has the highest priority.*

### 3.1.2    Stimulus/Response Sequences

3.1.2.1.        *The system shall allow teacher X to schedule a meeting with the parents of any student. Firstly, the teacher will log in using his/her credentials. The login credentials will be used to retrieve the students associated with the courses of the teachers. The system shall provide an interface to the teacher to click on the student profile of his/her choice after which the personal information and contact details of parents will appear. Next, the teacher will click on the button for scheduling a meeting. For scheduling, the teacher will put in the day she/he is free, this will generate a list of available slots (excluding the booked ones). The system will provide the time slots including after-class timings, during school hours, and on Saturdays. Once the time is selected and the button for booking the meeting is clicked, the system will send out an email to the parents/guardian about the scheduled meeting. Now it will be the parents'/guardian's call to appear for the meeting or not. They shall contact the teacher for canceling or rescheduling the meeting on their personal email address. The system shall not be entertaining the replies made back to emails generated by the system.*

3.1.2.2.        *The system shall allow parent Y to schedule a meeting with any teacher of his/her choice. Firstly, parent Y will enter the ID of their child. Using the information from the server, it will generate a list of courses, along with their respective teachers. They will then select the teacher they want to meet. The system will then provide an option to schedule a meeting. The system shall provide an interface to parent Y where he/she can choose a day that will retrieve the free slots of the teacher. By clicking on the 'book appointment' button, parent Y shall be able to schedule a meeting successfully. The system shall accommodate the booked date, timings, and day in the teacher's calendar so that teacher will be able to keep track of upcoming meetings. The teacher can either accept or reject the meeting as per her choice. In case of rejection, the system shall allow the teacher to schedule a meeting as per his/her availability. In this case, the system shall send out an email to parents about a newly scheduled meeting (refer back to 3.1.2.1).*

## 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 mark attendance for every student online. The connected database will get updated as  per attendance marched regularly.*

# 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 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 interfaces 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.*