Software Requirements Specification

For

Boost Learner

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Introduction:

The introduction of the Software Requirements Specification (SRS) provides an overview of the entire SRS with purpose, uses, references, and overview of the SRS. This document aims to gather and analyze and give an in-depth insight into the complete Classroom management system by defining the problem statement in detail. Nevertheless, it also connects students and teachers in a single platform and solves their needs with high-level product features. The detailed requirements of the are Classroom management system provided in this document. We are creating this project to help teachers and students to maintain their daily task. A teacher can easily create classes and generate random classroom codes for enrolling students. Students also access their class materials and also known their marks. Students and teachers are also post anything and commented on their posts quickly.

_ 1.1 PURPOSE: _

This project aims to provide a web application platform where a teacher can provide assignments and assessments to the students, and these would be simultaneously saved to drive.

_ 1.2 INTENDED AUDIENCE: _

This project will be implemented under the guidance of our course instructor. This project will be restricted to the developers and admin.

_ 1.3 INTENDED USE: _

Our project has a platform where many teachers attach materials like class syllabus, rules, or helpful lesson guides. So, this project is useful in the field of education.

_ 1.4 Product Scope: _

From the project purpose, the idea of " **LearnBoost**" comes in.

_ Manage: _

_ Simplify teaching and learning _

* Add students directly, or share a code or link so the whole class can join.

* Setup a class in minutes and create classwork that appears on the student's calendar.

_ MEASURE: _

_ Move students forward: _

* Store frequently used feedback in the comment bank and personalized responses.

* Grade submission

_ Secure: _

_ Keep data be secured: _

* Ensure each user has a unique sign-in to keep individual accounts secure

* Restrict the activities to members of the class.

* Protect student privacy: student data is never used for advertising purposes

_ Benefits of our project: _

*Easy to use and accessible from all devices.

* Effective communication and process.

* Speed up the assignment process.

* Effective feedback

* Clean and user- friendly interface

* Great communication system.

* Everyone can use.

_ RISK DEFINITION: _

_ Difficult account management __ **: ** _

Needing an account will have to be something that the educator has to have.

_ Limited integration options _:

Some features can be known to be challenging to integrate.

_ Difficult leaner sharing _:

Leaders cannot share their work unless they 'own' it. They will have to go through the hassle of approving sharing options. Therefore, an object arises when collaborating a piece of work

_ Editing Problem _:

Although there is the option of everyone editing, and collaborating there may be a possibility that they accidentally delete something important.

_ No automated quizzes or tests _:

Both the online and physical teaching and learning experience has to work in collaboration

_ Impersonal _:

Interaction between teachers and learners can happen only through google documents.

Chapter 2

Overall Description

2.1User classes and characteristics
In this web application there are two kind of users. One is Faculty member and another is student. First, the faculty member will resister on the website. Then

he/she will make a virtual class using a unique class code. Student will also need to resister. Then student make a request for joining the class by using the class code. When the faculty member accept the request the student will able to enter the class.

2.2 User needs

1. Need easy process of registration for both of the users.
2. Need easy process to enroll a new class.
3. Need a page where all the grades and marks of that semester will show.
4. Need an attendance taking system.
5. Need a notification system where the latest deadline of the submission will show.

2.3 Operating Environment

The system operates with the following software components and applications

It is a web browser based web application. It will operate in all well-known browsers like Mozilla Firefox, Internet explorer, chrome, opera browser latex etc. The OS needed to access this web application is windows 8 and above, 32 or 64 bit and macOS.
A full internet connection is required for successful access to the platform as it is web based.

2.4 Constrains

1. Software doesn't require any specific Operating System.
2. The device will have 2GB internal hard drive. Software and database Cannot exceed this amount.
3. Implement the database using a centralized functions.
4. Proper query commands for such complex functions.
5. Lack of high configured processor or, device, it is difficult to execute Important tasks, codes on usual devices available at hand.
5. The deadline for the project is less than two months.
6. Because of the home quarantine due to Covid-19, work from home has Significantly limited the scope of group work.
7. Communicating with project members have become challenging due to Constantly failing internet connection.
8. It internet accessibility is not familiar then it will be tough to use this Web Application.

Requirements

3.1 Functional Requirements

1. User can register as Teacher or a Student.

2. Teacher can create class.
3. Teacher can create class code.
4. Teacher can share class code to students.
5. Teacher can upload marks, take exams.
6. Teacher can create new post.
7. Teacher can upload new materials.
8. Teacher can give grades.
9. Student can see their registered course.
10. Student can join by code in any class.
11. Student can see their marks.
12. Student can attend in exams.

3.2 Non Functional Requirements

Performance Requirements:

• The system must not accumulate high numbers of users without any fault.
Security Requirements:
• 1. System will use secure database.
Error Handling:
• 1. System must handle expected or non-expected errors in ways that prevent loss in information and long down time period.

Safety Requirements:
• 1. System use must not cause any harm to human users.