Software Requirements Specification

for

Student-Faculty Interaction

Version 1.0 approved

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Revision History

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| **Name** | **Date** | **Reason For Changes** | **Version** |
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# Introduction

## PURPOSE

## The purpose of this SRS document is to specify the software requirement of our product, to make Student and Faculty interaction better. This document will have all the ideas and targets we have to make a system having a future. Other feature will also be added with time.  Hence this document provides all the information about our project like it's specifications, target customer and working of our project. It is all to set some ideas about it's SDLC process and how it's going to work.

## Document Conventions

## We are trying to keep this document as simple as possible to make everyone understand our project. We are also trying to put everything about our project in a simple language and every information is point to point and specific. And also some of the requirements for our project are inherited.

## Intended Audience and Reading Suggestions

The intended audience for this SRS are both the developers and the users. The users will be able to track the product functions, user documentation and the operating environment.The developers will be able to find the design and implementation constraints to be more interesting.

## Product Scope

## The goal of out project is to create a platform between student and Faculty so that by being on a same platform they can interact with each-other easily and handle each other's problems by cooperating with each other. Many students face some problems regarding their studies, so this will help them. Many teacher as well can upgrade their teaching style after taking feedbacks from students. And our project will help in each of this.  Our objective is to make students understand better in their classes and keep their record in various exams and others.

# Overall Description

## Product Perspective

## Our project is the replacement of certain existing system which is present in our university , in which students can interact with the teachers in their cabin. But this system doesn't provide us with a platform between them. It's not very effective. And everyone does not follow it. So we came across this idea . This project works as a platform between students and faculty and every problem faced by students and faculty also can be solved easily.

## Product Functions

Our project provides students and teachers a platform to communicate with each – other. So they can do their work easily. It allows students to communicate with teachers about all their queries regarding anything. For example, if they have any doubt in any topic they can request teacher to explain it again whenever the teacher has time. Same with teacher , he can review any student’s performance and if he wants to meet the students , he can do that.

## User Classes and Characteristics

Our product will be used by students, teachers and HOD. Students will use it for any of their problem solving. If they have any problem in their studies, they will use it. Teachers will use it to help students. Also they can review student’s performance. HOD will use to track both student’s and teacher’s performances.

## Operating Environment

Our product does not require any specific hardware platform because it is a web platform. For software requirement, our software will require a good and decent internet connection.

## Design and Implementation Constraints

TBD

## User Documentation

TBD

# External Interface Requirements

## User Interfaces

## Our GUI would be same as our current moodle feedback and block format. Since moodle has a particular design for accepting a moodle plug-in. We won't us any keyboard shortcut at the starting but we will add shortcut keys to redirect our page if we have opened moodle through which we can increase its assessibility.

## Hardware Interfaces

## Our product will be usable in any device which can be connected to internet. Because every information which is shared will only be seen by using Internet. Devices like mobile phones and laptops will be used.

## Software Interfaces

## For our webpage, we will use PHP , JavaScript , CSS , .net , jnode etc. Our server is Apache and database in MySQL. We will use moodle 2.6

## Communications Interfaces

## The communication in our software will be through moodle and mail also. If there is any information which should be shared to students, that can be anything like their attendance, marks etc , will be shared through moodle and mail. This same will be present for faculty members also . If they need to be provided with some information regarding students , that will be done by same moodle or mail.

# System Features

There are various good features of our product which are :

## Communication

4.1.1 Description and Priority

Our product is basically focusing on this feature because there has to be good communication between students and faculty members by which teachers can understand the problems of students. Our product provides the platform to both so they can communicate with each other. This feature of our product is of high priority because because the communication between both student and faculty members is very important.   
Priority components:  
Benefit -9   
Penalty - 4  
Cost - 9  
Risk - 7

4.1.2  Stimulus / Response Sequence

In this feature ,when a student had any problem in his/her lecture taught by any particular teacher , than he/she can ping the teacher saying that he/she couldn't understand a particular topic taught in today's class . Than the system will record the comment and send the information to the respective faculty member. When the teacher sees this than he will answer back providing the next action of his. And the information will be sent to the student and it will be followed further by both.

4.1.3 Functional Requirements

- If students has any problem regarding anything taught by teacher , the system will connect him to the respective teacher, so that they can communicate.   
- Any information shared by them will be sent to both by mail.   
- If there is any reply from any side , system will notify them.

## Tracking

4.2.1 Description and Priority

This feature of our product concentrates on tracking all data. Like what teacher has taught in class, what exam is done , what is to be done etc. Whatever teacher has taught till now , student can see that and plan accordingly his study schedule or decide what should be revised . The priority of this feature is high.

4.2.2  Stimulus /Response Sequence

Anything taught by teacher will be shared by him, so that students can see it whoever they want to. Student should go through it time to time to study accordingly.

4.2.3  Functional Requirements

The list of topics shared by teacher will be recorded by the system in a good organized manner.

**4.3 Rating**

4.3.1 Description and Priority

This feature helps the students in understanding a particular topic . Students can rate the topic on the basis of his/her understanding so that teacher gets the idea about his teaching skills or the difficulty level of the particular topic. If a large number of students are facing problems in same topic than the teacher can take immediate action to help the students. The priority if this feature is high.

4.3.2 Stimulus/Response Sequence

Anything taught by teacher will be shared the teacher so all students can go through that. Students will rate the topic on the basis of their understanding. And the teacher will take some action based on the rating . Like if many students are having the problem in the topic, than the teacher can take an extra class to make them understand better.

4.3. 3 Functional Requirements

Whatever taught by teacher will be displayed in an organized manner.   
The student will choose the topic and rate it on his/her understanding level.  
If the teacher wants to repeat the same topic in some other class , the information will shared with every student.

## 4.4Meeting faculty

4.4.1 Description and Priority

This feature focuses on the meetings between students and faculty. If a students has some problems regarding the subject, he/she can share it with the teachers and teacher can find some free time to meet the student to resolve his/her problem. This same applies for teacher also . If any students is having very low performance in every exam, than teacher can personally meet him/her to know what are the problem faced by him/her and how they can be solved. The priority of this feature is high.

4.4.2  Stimulus/Response Sequence

Any students who wants to meet the teacher will share this with the teacher and than the teacher will share the time he/she can meet the student .  
If teacher wants to see any student in his/her cabin , he/she will share this with the student.

4.4.3 Functional Requirements

If the student wants to meet any teacher , the system will send a message to the respective teacher and than the timings provided by the teacher will be shared with the student by mail .   
If a teacher wants to meet any students, the system will inform him by mail.

## 4.5 Record

4.5.1 Description and Priority

The marks gained by students will be recorded so the students can see where they stand and what needs to be improved to get higher marks. The priority of this feature is low.

4.5.2 Stimulus/Response Sequence

After every exam , the marks gained by every student will be shared with them. And student can see their marks.

4.5.3 Functional Requirements

The system will record the marks shared by faculty member and show it to the respective student.

## 4.6Change in class timings

4.6.1 Description and Priority

If there is any possibility of cancelling of any class in future or the class is rescheduled ,teacher can inform the students in advance. The priority of this feature is high.

4.6.2 Stimulus/Response Sequence

The teacher will share the information about canceling or rescheduling the class.

4.6.3 Functional Requirements

The system will record the timing of the class if the class is rescheduled and show it to the students. The system will also display if the class is cancelled.

## Attendance information

4.7.1 Description and Priority

If any student has very low attendance , than the teacher can notify him about that so that he can be careful and be able to sit in the exams. The priority of this feature is high.

4.7.2 Stimulus/Response Sequence

The teacher will ping or send a message to the student about his low attendance so that he can take required actions.

4.7.3 Functional Requirements

The system will ping the student or send him/her a massage about his low attendance.

## Exam Information

4.8.1 Description and Priority

Any information regarding the exams comes in this feature. Like the syllabus of the particular exam , what topics need extra class . Students can ask teacher for an extra class for some particular topics they are facing problems in. The priority of his feature is medium.

4.8.2 Stimulus/Response Sequence

The list of the topics which are coming in the exam will be shared by the teacher . Students can go through it and decide what topics are difficult and will need some extra work .  
4.8.3 Functional Requirements

The system will record the list of the topics and display it in the arranged order .

## Tracking by HOD

4.9.1 Description and Priority

Every information shared by teachers and students will be visible to the HOD of the respective department. So that he/she can keep track of teacher's teaching skill and student's records also. The priority of this feature is medium.

4.9.2  Stimulus/Response Sequence

HOD will go through every course to see what is going on in it . How the teachers are teaching and how students are learning.

4.9.3 Functional Requirements

Every information shared by the teacher and the students will be open for the HOD.

# somya-usecase.png

## 

|  |  |  |
| --- | --- | --- |
| REQ. ID | REQ. NAME | REQ. DESCRIPTION |
| REQ1 | COMMUNICATION | Our product is a platform for a good communication between students and faculty. |
| REQ2 | TRACKING | students and teachers can track all the data |
| REQ3 | RATING | Students can rate the topics taught by teachers. |
| REQ4 | MEETING FACULTY | Students can request teachers to meet. |
| REQ5 | RECORD | Records of marks gained by students will be visible to students. |
| REQ6 | CHANGE IN CLASS TIMINGS | if there is any change in class timings, students will know beforehand. |
| REQ7 | ATTANDANCE INFORMATION | Attendance information of students will be displayed. |
| REQ8 | EXAM INFORMATION | exam related information will be visible to students. |
| REQ9 | TRACKING BY HOD | HOD of respective department will be able to see everything. |

## 5.Other Nonfunctional Requirements

## 5.1Performance Requirements

## The performance of the system will vary something when there is more traffic. So we have take care of that.

## 5.2 Safety and security requirements

## The system should be safe from unauthenticated users. The log in password for every teacher and student should be unique. The user will get a massage every time his/her account is logged in on his/her registered mobile phone number or his/her mail account.

# Other Requirements

TBD

Appendix A: Glossary

TBD – To be decided

Appendix B: Analysis Models

TBD