**Software Requirements Specification**

**For**

Student-Faculty Interaction

**Application**

**Version 1.0 approved**

**Prepared by Y. Sai Krishna**

**17/09/2016**

**Table of Contents**

**Table of Contents**

**Revision History**

**1. Introduction**

1.1 Purpose

1.2 Document Conventions

1.3 Intended Audience and Reading Suggestions

1.4 Product Scope

1.5 References

**2. Overall Description**

2.1 Product Perspective

2.2 Product Functions

2.3 User Classes and Characteristics

2.4 Operating Environment

2.5 Design and Implementation Constraints

2.6 User Documentation

2.7 Assumptions and Dependencies

**3. External Interface Requirements**

3.1 User Interfaces

3.2 Hardware Interfaces

3.3 Software Interfaces

3.4 Communications Interfaces

**4. System Features**

4.1 Geo-Lock

4.2 Network Lock

4.3   Password Lock

**5. Other Nonfunctional Requirements**

5.1 Performance Requirements

5.2 Safety Requirements

5.3 Security Requirements

5.4 Software Quality Attributes

5.5 Business Rules

**6. Other Requirements**

**Appendix A: Glossary**

**Appendix B: Analysis Models**

**Appendix C: To Be Determined List **

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
|  |  |  |  |
|  |  |  |  |

**1. Introduction**

**1.1 Purpose**

The purpose of this document is to record the requirements for the design and development of a student-faculty web based interaction. This document is used by designers, testers, programmers and others during the development and maintenance of the software. The document will also serve the basis for acceptance testing by the user. As such it is an involving document reflecting the current requirements of the project as understood by the project team. Careful review and understanding of SRS by different stakeholders of the project including the end user will ensure that the requirements outlined are correct and complete and subsequently the software developed will provide the desired level of functionality and consistency.

**1.2 Document Convention:**

We have used TIMES NEW ROMAN, where the Header size is 18 which is BOLD, Sub-heading size is 14 and the remaining text size is 12.We have taken some Priorities for the Document Conventions .

* To highlight any text in the document we have used text size is 14 with Bold Italic fonts.
* Features of the application are indicated by ★

**1.3 Intended Audience and Reading Suggestions**

Our intended audience mostly is students but it can be any one. This document is to be read by the development team, documentation writers, admin and our users may review the document to learn about the project and to understand the requirements and will give some suggestions if needed. Developers need to become familiar with SRS.

**1.4 Product Scope**

Ours is a WEB Application and it creates a platform for students/faculty to interact with each other. Each student/faculty will be provided with secure login details. This app allows the particular student to know where he stands. The faculty can notify changes regarding anything. Student may rate the faculty on basis of the understandability. This fill the gap between student and faculty

## 1.5 References:

-This is optimized for smartphones, and computers also.

- Compatible with smartphones with Windows, Android operating system and PC’s having windows Version 8 - 10.0 installed.

- Compatibility information may be changed at any time (In upcoming updates).

- Information current as of September 19, 2017

**2. Overall Description**

**2.1 Product Perspective**

We are designing this web application to reduce the communication barrier.

* The project is all about how we can make student/faculty interact at ease.
* How to

**2.2 Product Functions:**

* Can create/delete an account.
* Can view the accounts.
* Can change the password.
* Can hide any kind of features from the both of users.
* Insert/delete/edit the information of users.
* Can access all the accounts of the faculty members/students.

 The features available to the Faculty members are:

* Can mark the attendance of students online.
* Can view the attendance online.
* Can upload assignments, reading materials for students.
* Can notify the students regarding meeting them personally regarding

Low scoring, low attendance etc.

The features available to the Students are:

* Can view the different categories of assignments available in their account.
* Can view the various reading material.
* Can view attendance.
* Can view and modify its profile but can modify it to some limited range.

## 2.3 User Classes and Characteristics

There are various kinds of users for the product. Usually webapplications are visited by various users for different reasons.  The users include:

* Faculty members who will be using the above features by accessing their account using secure login details.
* Students who will also be using the above features by accessing their account through login credentials.

**2.4 Operating Environment**

Client:

|  |  |
| --- | --- |
| Processor | Any |
| HDD | Any |
| RAM | Any |
| OS | Windows(8.1 - 10.0),Android 4.4 – 6,Linux |

- Not compatible for IOS operating systems.

-The onlyrequirement to use this online product would be the internet

## 2.5 Design and Implementation Constraints:

* The Product is developed using JavaScript, php.
* The backend database for this is SQLServer.
* The product is accomplished with login facility so that specific function is available to specific student.

## 2.6 User Documentation:

* There should be enough documentation to the users about the configuration and usage of the system.
* The documentation provided should be clear enough to act as the first line of support for any problem.
* The documentation must include details regarding the knowledge of set-up,

Configuration, maintenance, on-going management and error recovery procedures.

## Assumptions and Dependencies:

* This is web based application developed using JavaScript, php.
* SQL server to store the database.

# 3. External Interface Requirements

## 3.1 User Interfaces

There are primary elements, and each of these may

Be accessed directly from the main window

* Within the windows, primary navigation is provided on the top of the

Screen, in a horizontal list of graphical links.

* Buttons will be available for all provided options.
* Error messages like Connection error and file Upload error will be displayed in popups which the user has controls.

## Hardware Interfaces

ServerSide**:**

* Operating System: Windows, Linux.
* RAM: 256 Mb or more
* Hard Drive: 10 GB or more

Client side**:**

* Operating System: Windows 8 and above, Linux.
* Processor: Pentium III or 2.0 GHz or higher.
* RAM: 256 Mb or more

## 3.3 Software Interfaces

* Database:SQL Server
* Application:ASP (Active Server Pages)
* Web Server**:** IIS (Internet Information Services (IIS) is a powerfulWeb server that provides a highly reliable, manageable, andscalable Web application infrastructure)

## 3.4 Communications Interfaces

The Customer must connect to the Internet to access the Website:

* Dialup Modem.
* Broadband Internet.
* Dialup or Broadband Connection with an Internet Provider.

# 4. System Features.

4.1.2 **Stimulus/Response Sequences**

* When students/faculty wants to notify/share something with other users, first the user should login onto website.
* The materials online can be downloaded in only courses they have been registered.
* A list of all files that are shared by other are displayed with the name of use.
* The receiver has to enter the valid key and access criteria in order to get access (password, location, and network).

4.1.3 **Functional Requirements**

* Basic Internet connection.
* Android(4.4 - 6)
* Windows(8.0 - 10.0)

**5. Other Nonfunctional Requirement**

**5.1 Performance Requirements**

The proposed system that we are going to develop will be used as theChief performance system within the university

Which interact with the university staff and students. Therefore, it is expected that the database would perform functionally all the requirements that are specified by the university

.

**5.2 Safety Requirements:**

The database may get crashed at any certain time due to virus oroperating system failure. Therefore, it is required to take the database backup

**5.3 Security Requirements**

Security is the main criteria for the proposed system. Since illegal access may damage the privacy. So security has to be given in this project. The system must be secured, so that unauthentic users cannot enter in the system**.**

* **Authentication**
  + Authentication required for the user to login.
  + For the user to view/share/download anything he should have the valid access login details.

**5.4 Software Quality Attributes**

* **Security:**
  + Access keys are encrypted and the user should have a valid access key and must fulfill the required criteria like location, network or password criteria to get access.
* **Maintainability:**

We will be in constant implementation of the requirements according to the product backlog throughout the process of designing the program and after release of it. So we can make significant changes in the latter stages of the program for better user Interface.

* **Portability:**

This works both in smartphones and personal computers.

* **Reliability/Availability:**

The availability of the system is a key requirement by nature. The candidate architecture must ensure failover capabilities. Targeted availability is 24x7: 24 hours a day, 7 days a week.