*STUDENT MANAGEMENT SYSTEM*

SOFTWARE REQUIREMENT SPECIFICATION (SRS)

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**Objective:**

Building an UI/UX for “STUDENT MANAGEMENT SYSTEM”.

**Users of the System:**

1. Student
2. Teachers
3. Parents

**Functional Requirements:**

* Build an application that Public can access and view the STUDENT status.
* The application should have signup, login, profile, dashboard page and individual

records.

1. Profile
2. Notice
3. Attendance
4. Internal
5. Fee details
6. The student helpdesk

**Non-Functional Requirements:**

Non-functional requirements may exist for the following attributes. Often these requirements must be achieved at a system wide level rather than at a unit level. State the requirements in the following sections in measurable terms (e.g., 95% of transaction shall be processed in less than a second, system downtime may not exceed 1 minute per day, > 30 day MTBF value, etc.)

**Performance**

The Student Management System shall be built upon the web development technique and put on the web server online. The system and the server must be capable of handling the real-time error functionality occurs by the defined users. In addition, the system must be must be handled instantaneously to safety critical. All failures reported by the server side allow for user and system safety.

**Reliability**

The system is safety critical. If it moves out of normal operation mode, the requirement to drop or down the server and fix it as soon as possible and open it again. This emergency behaviour shall not occur without reason

**Availability**

When in normal operating conditions, request by a user for an online system shall be handled within 1 second. Immediate feedback of the systems activities shall be communicated to the user by clearing the system and giving space n speed to their hospitality.

**Security**

There shall be a strong security mechanism should be place in the server side of the system to keep unwanted users to hack or damage the system. However, all users of the system give and store the details of privacy related to personal information and many other. However ,our system can be accessed online so we need very secured system as far as security is concerned.

**Maintainability**

There shall be design documents describing maintenance of the software and database used to save the user details as well as the daily updated and modification done in system. There shall be an access on the control system by the admin to maintained it properly at the front end as well as at back end.

**Portability**

There is portability requirement as far as our system is concern because it is an online as well as offline (local server based) system so we can access it from anywhere through the internet connection. And we have to maintain the copy of stored data into our database.

**Key points:**

 Student Management System can be accessed successfully by any client location and it’s not

necessary that every registration is genuine, so there is chances of fake registration that may reflect some errors. So the system is designed such a way that the database will keep updated by administrator and there is better security options available on the server that can prevent fake IP addresses to access

Application assumptions:

1.   The login page should be the first page rendered when the application loads.

2.   Manual routing should be restricted by using A uthGuard by implementing

the can Activate interface. For example, if the user enters

as http://localhost:8000/signup or http://localhost:8000/home the page should not

navigate to the corresponding page instead it should redirect to the login page.

3.   Unless logged into the system, the user cannot navigate to any other pages.

4.   Logging out must again redirect to the login page.

5.   To navigate to the admin side, you can store a user type as admin in the

database with a username and password as admin.

6.   Use admin/admin as the username andpassword to navigate to the admin dashboard.

Validations:

   Basic mobile validation should be performed.

Admission id validations should be performed.

**Product Perspective**

The various system tools that have been used in developing both the front end, back end and other tools of the project are being discussed in this section.

**FRONT END:**

JSP, HTML, CSS, JAVA SCRIPTS are utilized to implement the frontend.

Java Server Page (JSP)

Different pages in the applications are designed using JSP. A java sever page component is a type of java server that is designed to fulfill the role of a user interface for a java web application. Web development write JSPs as text files that combine HTML or XHTML code, XML elements, and embedded JSP actions and commands. Using JSP, one can collect input from users through web page.

HTML (Hyper Text Mark-up Language)

HTML is a syntax used to format a text document on the web.

CSS (Cascading Style Sheets)

CSS is a style sheet language used for describing the look and formatting of a document written in a mark-up language.

Java Script

JS is a dynamic computer programming language. It is most commonly used as part of web browsers, whose implementations allow client side scripts to interact with the user, control the browser, communicate asynchronously, and alter the document content that is displayed.

**BACK END:**

The back end is implemented using MYSQL which is used to design the databases.

**MYSQL**

MySQL is the world’s second most widely used

open source relational database management system (RDMS). The SQL phrase stands for structured query.

**PHP**

PHP is a server side scripting language designed for web development but also used as a general purpose programming language. PHP code is interpreted by a web server with a PHP processor module, which generates the resulting web page: PHP commands can be embedded directly into an HTML source document rather than calling an external file to process data.

**SMS GATEWAY**

An SMS gateway allows a computer to send or receive short message services(SMS) transmissions to or from a telecommunications network. Most messages are eventually routed into the mobile phone networks. Many SMS gateways support media conversion from email and other formats. A direct to mobile gateway is a device which has built-in wireless. GSM connectivity. It allows SMS text messages to be sent or received by email, from web pages or from other software applications by acquiring a un

que identifier from the mobile phone's subscriber identity module, or "SIM card". Direct to mobile gateways are different from SMS aggregators, because they are installed on an organization's own network and connect to a local mobile network.

The connection to the mobile network is made by acquiring a SIM card number from the mobile operator and installing it in the gateway