

Software Requirements Specification

For

<Online notice board in CSE Department>

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<05.04.2018>

Table of Contents

Table of Contents	2
Revision History	Error! Bookmark not defined.
1. Introduction	3
1.1 Purpose	3
1.2 Document Conventions	4
1.3 Intended Audience and Reading Suggestions	4
1.4 Product Scope	Error! Bookmark not defined.
1.5 References	Error! Bookmark not defined.
2. Overall Description	5
2.1 Product Perspective	Error! Bookmark not defined.
2.2 Product Functions	5
2.3 User Classes and Characteristics	3
2.4 Operating Environment	3
2.5 Design and Implementation Constraints	3
2.6 User Documentation	4
2.7 Assumptions and Dependencies	4
3. External Interface Requirements	4
3.1 User Interfaces	5
3.2 Hardware Interfaces	6
3.3 Software Interfaces	6
3.4 Communications Interfaces	6
4. System Features	6
4.1 System Feature 1	7
4.2 System Feature 2 (and so on)	7
5. Other Nonfunctional Requirements	7
5.1 Performance Requirements	8
5.2 Safety Requirements	8
5.3 Security Requirements	9
5.4 Software Quality Attributes	9
5.5 Business Rules	9
6. Other Requirements	10
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1. Introduction

An online notice board is a place where people can leave any types of messages and notifications, for example, to advertise things, announce events or provide any information.

Notice board online it can be placed on digital devices such computers, tabs, mobile phones etc.

This online notice board project is very helpful for all type of users like existing users and new users. So admin can leave and erase notification for other people to read and see.

1.1 Purpose

The main aim of this free online notice board project is make information dissemination much easier in a paperless community as the world tends to interact with the online notice board facility as an project, Online notice board admin can send the notification to the particular students regarding fee payments, results, any new activity happen in college campus or college fest participation, libraries dues, hostel room payments, any workshop registrations, warnings and reminders etc for this work online notice board project is make all work much easier and understandable to all.a

This online notice board work generally intends to act as a support system for the all users.

By the help of free online notice board users can access the notifications and articles quickly not only in the particular premises, also wherever and whenever they need to know.

Online notice board usability is fully capable of passing relevant notices and announcements, and keeping the users update from time to time.

The students are kept updated each time with the online notice board for college is uploaded based on their preferences with respect to the departments and categories through a notice board online.

Online notice board is one of the applications to improve the usage of notice board of the college by making it available online.

This web application involves almost all the features of online notice board.

In the online notice board project all the updates like, add, delete, view are done by admin, so that user will get the updated current information through notice board online .

1.2 Document Conventions

In today's world, everything is digitalized and paper is being used less and less every day. How often has it happened that we miss some important notice because we have to go to a wall and read the notice there? The Online Notice Board System is mainly intended for colleges and institutions where information and file sharing on regular basis plays vital role in the performance. The proposed system will act as an online notice board which will make use of the modern communication methodologies and techniques for information flow. The system is planned to consist of various useful features for the said purpose. The "Online Notice Board System" is a web-based software, with supplementary application software, that aims to aid the institutes by providing such digital noticeboard.

1.3 Intended Audience and Reading Suggestions

User	Type
Guest	Public User
Student	Restricted User
Teacher	Manager
Admin	Administrator (Super User)

1.4 Product Scope

The proposed system is currently mainly intended to be applied in educational institutes as an online noticeboard and file sharing system. Further applications of this system may include any type of office or business organizations where computers with working internet connection is available (which is pretty much every organization.)

1.5 References

Feasibility Analysis Guide, Department of Computer Science and Engineering, Jahangirnagar University
<http://www.juniv.edu/cse>

srs_template-ieee https://web.cs.dal.ca/~hawkey/3130/srs_template-ieee.doc
<http://www.cmpe.boun.edu.tr/~akin/> IEEE Recommended Practice for Software Requirement Specifications, IEEE Standard 830–ISM4331 IEEE Recommended Practice for Software Design Descriptions, IEEE Standard 1016–1998

2. Overall Description:

2.1 Product Functions

The system should meet the following functional requirements:

- The system should be able to manage and store notices and files.
- The system should provide appropriate UI for notice and file upload and download.
- The system should be able to recognize and authenticate several levels of users.
- The system should be able to manage and maintain a proper database.
- The system should be easily operable and user friendly.
- The apps should be able to work seamlessly with the web server.
- The apps should be able to provide push messaging in real time, whenever available.

2.2 System Actors and User.

The system has two major actors and each actor has its features to carry out as follows:

Admin

Admin is the person who controls, monitors and keeps the whole follow of the system. The main functions of the Admin are:

- To keep and track down the total number of users in the system.
- Can add, activate and deactivate any user.
- Add New Notice and send notice to Registered users
- Display Old Notice and Manage Old notice
- Update Password

Student

Student is a knowledge seeker, or more theoretical word, a learner. The student has to be registered and log in into the system before he/she carries out their functions.

- Student Registration
- Login

- Check Notification sent by admin
- Update Profile
- Update Password
- Log out the whole system

2.3 Project Environment

Front end : HTML, CSS, JQuery, Bootstrap

Middleend : PHP

Back end : MySQLi

2.4 Design and Implementation Constraints

This project will teach us the practical implementation of object-oriented programming. Moreover, this will also provide us first-hand experience about several important fields of a Computer Engineer, like Web Development and Application Development. It will also help us learn programming languages like C# and Java, webdevelopment scripts like PHP, XAML and CSS and DBMS like MySQL. Apart from these, we strongly believe going through this project will make us more competent for similar future tasks and enhance our technical and other abilities.

• Problem Statement

In today's world, everything is digitalized and paper is being used less and less every day. How often has it happened that we miss some important notice because we have to go to a wall and read the notice there? There are dedicated file hosting sites and clouds used by some institutions, but there is a definite need for a dedicated noticeboard system. The proposed system is such a system.

• Need

Almost all leading institutions, excepting a few, currently lack an electronic noticeboard system. Though some have taken the aid of third-party websites like Facebook® to interact, it comes at the cost of mixing one's social life with professional. Keeping this in mind, educational institutes

will find this software extremely useful. The “Online Notice Board System” is a web- based software, with supplementary application software, that aims to aid the institutes by providing such digital noticeboard

2.5 User Documentation

Hardware Interfaces

The system will interact with the hardware resources of the system on which it is running. While any system will support the core software, a device with push messaging facility is recommended for Windows 8™ or Android™ app.

Software Interfaces

Only Windows 8™ and Android™ OS will support this software’s apps. It will have the most interaction with an external database server. It may also be integrated with other systems like Employee Management System and/or Student Management System.

3. External Interface Requirements

3.1 User Interfaces

The system will start with a login page to identify the user level and the features will be available accordingly. The application will have easily accessible buttons for all major activities of the software. Key features and recent events will be highlighted to attract user attention.

3.2 Hardware Interfaces

The system will interact with the hardware resources of the system on which it is running. While any system will support the core software, a device with push messaging facility is recommended for Windows 8™ or Android™ app .

3.3 Software Interfaces

Only Windows 8™ and Android™ OS will support this software’s apps. It will have the most interaction with an external database server. It may also be integrated with other systems like Employee Management System and/or Student Management System

3.4 Communications Interfaces

An active internet connection will be required for the functioning of the software. In case of the mobile apps, an internet connection will then allow the software to connect to the online database. The system will use the Hyper Text Transfer Protocol (HTTP) to transmit data

4. System Features

4.1 File Sharing

Description:

This will allow primary users to share files. These files may range from simple text or image notices to files of other formats. The pre-loaded notices and files could be accessed without an internet connection.

Stimulus/Response Sequences:

Files can be downloaded by clicking a single download button which triggers the download event. Any file to be uploaded can be browsed and then uploaded using another button event.

Functional Requirements:

REQ-1: Access to the internet REQ-2: Required user

4.2 Push Messaging

Description and Priority:

The system shall notify the primary users with recent notices and events with an automated message in their mobile phones or computers.

Stimulus/Response Sequences:

A change in the value in the database, caused by a user uploading a notice from his client side, will trigger an event which in turns triggers the push messaging event across all users who are set to receive push message for that particular notice and/or uploading user in question.

Functional Requirements:

REQ-1: Access to the Internet REQ-2: Push Messaging Supporting Device REQ-3: Proper user authentication

4.3 Database and UI Auto-Update

Description and Priority:

The system shall auto update its database. Recently posted notices and events as well as prioritized files shall be focused while outdated notices and files shall be cleaned up to make memory space available for new posts.

Stimulus/Response Sequences:

Any notice uploaded by any of the users triggers an event to append it to the database and update the UI accordingly across all the clients with users of the same class.

Functional Requirements:

REQ-1: Access to the internet REQ-2: Proper User Authentication

REQ-3: An easy and flexible database management system

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The system in itself does not require anything specific for basic operation, but the complete software with all its components running may have some performance requirements. Except viewing pre-loaded notices and files (in mobile apps), an internet connection is needed for the features of the system to become available.

5.2 Safety Requirements

Major attention should be given to the safety and security of the data and information that are stored in the software. The database must be trustworthy and non-leakage to ensure no data loss occurs.

5.3 Security Requirements

User authentication must be absolute and non-by-passable. No user should be able to access the software without providing proper authentication. In case of guest users, only public notices and events should be visible. Also, the IP address of the client machine can be recorded for future follow up of any security issues that may arise.

5.4 Software Quality Attributes

Several additional qualities and characteristics of the system will be important to the client and/or the developers, like correctness, maintainability, portability, testability and usability. For correctness, proper care and attention should be given during the design and coding from both developers and customer (should correct some false and unwanted features) side. Usability is achieved by developing the product as user friendly as possible. Similarly, maintainability and testability plays vital role in the long life of the software

6. Other Requirements

The system should meet the following functional requirements:

The system should be able to manage and store notices and files. The system should provide appropriate UI for notice and file upload and download. The system should be able to recognize and authenticate several levels of users. The system should be able to manage and maintain a proper database. The system should be easily operable and user friendly. The apps should be able to work seamlessly with the web server. The apps should be able to provide push messaging in real time, whenever available.

