Software Requirements Specification

for

Educational Blog System

Prepared By

Group 32

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1. INTRODUCTION:

1.1 Document Purpose:

The Document is a Software Requirements Specifications (SRS) for the "**Educational Blog System**" web app for NITC. It will explain the purpose and features of the system, lays out the functional and non-functional requirements, tells about the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This SRS is organized into several sections to help in the development and designing of the system and helps to get clear picture of app during the development stage. This document is intended to propose this software to consumer for their validation and clarification of the system.

1.2 Product Scope:

This Educational Blog system is a web application intended to convey students of NITC regarding all the information teachers want to share related to their subject out of their books course .We usually find that teachers want to share some videos, research papers, news, links, some articles and many more stuffs which are not to be shared in our eduserver portal. Hence this blog website will give them functionality to share this stuffs also students will be allowed to comment and provide their views on the post. Only teachers will be having access to administration of site so they can control they comments and activities on the blog post. Additionally, it is seen that college event organizing groups have to use different social media to promote their events. So we will be giving a special blog posting facilities for such groups to promote their college events they will be organizing. Additionally a calendar keeping dates of all the upcoming events and pending task of students will be shown to student .

1.3 Intended Audience:

This SRS is intended for several audiences, including inmates of institute, teachers , event managers, system designer and developers.
1.   This SRS will help teachers who would be posting the blogs to know all the features .
2.   The developer would be benefited by knowing the requirements of client .
3.   The designer can use this SRS to design the system to meet all requirements.
4.   The admin can get idea of their role and special features they are provided.
5.   The database designer can use this for designing database according to needs of project.

1.4 Document Conventions :

User	Someone who interacts with the web application.
Admin	Who manages and organizes the blog website.
Blog	A web application consisting of posts typically displayed in reverse chronological order.

1.5 References and Acknowledgments:

1. https://ieeexplore.ieee.org/document/278253 - IEEE Guide for Software Requirements Specifications.
2. https://firstiteguide.com/characteristics-of-blog

2. OVERALL DESCRIPTION:

2.1 Product Perspective:

This web application intends to target the problem of finding a place to share important information and events to whole student community. Teachers can use this to post relevant posts related to their subjects but out of their subject notes and books, so that students can explore their subject and can generate better understanding. Also event managing groups can use this to promote the upcoming events they will be conducting. Also as a student this will help them to maintain and know all relevant posts related to college at a single place.

2.2 Product functionality:

- Provide a platform for teachers to posts important links, video, news etc related to their subjects to improve interest of students towards the subject.
- Event organizing clubs can promote their events.
- Student can use it a place to get all college related information at a single place.
- Only teachers and event organizers will have access to post and handle admin panel of blog website.

2.3 User classes and characteristics:

This application has 2 classes:-
- Admin –They can be either teacher or event organizing groups. Only admin is allowed to post anything on blog. Further they are provided special access to admin panel of site where they can control activities related to posts, can know statistics like how many views are present on their posts etc.
- User – User includes whole of student community. They can find all related stuffs and posts related to subjects they are studying and events going to held. They are further provided with calendar which keeps track of upcoming activities.

2.4 Design and implementation Constraints:

1. Availability: The website must be running all day long.
2. Only specific users will have ability to post in blog site.
3. Admin have control on comments and other features of posts.
4. Users must be enabled to access the website and login with their respective username and password credentials only.
5. Implementation of the database using a centralized database system.
6. The challenges in developing the product will involve scaling it to the required number of stakeholders. So providing fast request response time will be a necessity.
7. User will be able to see only posts of subjects they are enrolled for.

2.5 Assumptions and Dependencies:

- Users and admin must be from the same college.
- Language used to communicate in blogs is English.
- All users must have an email and password for the account.
- Internet connection is mandatory.
- Only admin can posts and control the activities in blog.

3. EXTERNAL INTERFACES REQUIREMENTS:

3.1 User Interfaces:

- The user can view relevant posts and comment on them.
- It is easy to interact website where user is not having much access to manipulate the content.

3.2 Software Interface :

- The application supports all major web browsers that will make it convenient for the user to access our system.
- Development tool: PHP, HTML, CSS, Bootstrap , javascript
- DBMS: MySQL

HTML	HTML is standard markup language for documentation of content to be displayed on website
CSS, Bootstrap	They are used for styling our blog website and thus create better interface
Javascript	This is used to handle the interaction of user with the site and also to add up some functionality.
PHP	PHP is used here to provide back-end of our website. It also act as a link between our database and the front-end of website.
MySQL	It is an open-source relational database management system. It helps in storing all information and data of our site.

3.3 Hardware Interface :

- Since the application runs over the internet, the system must always be connected to the internet.
- Backup storage for retrieval of data in case of unexpected failures.
- Laptop or mobiles to access the site are required.

3.4 Admin Interface:

- Admin have all states related to posts and can do the modifications and changes.
- He has control on actions performed by users.

4.SYSTEM FEATURES:

This section provides the functional overview of the application. The application will use html, css and bootstrap as front-end , MYSQL as database management system and PHP as back end language. Functional modules implemented by the application will be as follows

4.1 Login:

- A user who is not registered can create a new account by entering name, mobile, email-id and a password.

- Teachers and head of event organizing groups are selected as admin of website.

- Only admin can login to admin panel of website where they have feature to posts.

- A registered user can enter their email-id and password to start their session.

- The user has an additional option to change password.

4.2 Posts:

- Posts can be done only through admin panel which can be accessed only by some specific peoples.

- Admin have capacity to delete, update their posts. Also they have ability to delete the comments on their posts.

4.3 Calendar for storing deadlines:

- User gets this feature, so that all events deadline is shown at one click.

- Upcoming assignments and projects details can be viewed from here.

- Users get all the information about upcoming events in college.

5. OTHER NON-FUNCTIONAL REQUIREMENTS :

5.1 Performance Requirements:

- A server is required to run this web application.

- The request response time will depend on network speed and latency of the server.

- So, a server capable of handling approx 1000 concurrent requests is required.

- The site load time depends on speed of internet connection and proximity from the server

- The load time may even depend on type of hardware on which site is running.

5.2 Safety And Security Requirements:

- Unique Login Id and password (may or may not be unique) for every user.

- Data backup to be done periodically.

- Admin panel having feature of posting and manipulating the blogs is accessible by admins only.

- Only teachers and selected student representing a college club is selected as admin of blog website.

- User's id and password are secured and no visible to even admins.

- Users have option to save their login credentials.

- All Users have unique id and passwords.

- Password will be hidden while typing.

- Sign out and change password features are given to users.

5.4 Software Quality Attributes:

Reliability

- New posts in database are reflected without any delay.

- Any registration by the user is reflected in database almost instantly.

- Posts are shown in reverse chronological order, hence newest posts will be shown first.

- Application is made to protect inside information from users, only few selected people have access to handle all features of blog website.

Usability

- In case of invalid situations an error message pops up on the screen, directing the user so as to resolve the issue.

- This application works in every browser.

- This application is responsive, so works great with every size of screen.

Correctness

- To provide only reliable content in the post only few people are allowed to handle admin panel.

- Admin have full control to manipulate comments and posts. So in case they don't like the comments on their posts they can delete it.

Maintainability

- Backup of database will be kept.
- SQL server would be having database maintenance routine scheduled monthly.
- Periodic testing and debugging will be done based on users and admins feedbacks.
- In case of any error, re-initialization of program will be done.