Blogging Website

Software Requirements Specification

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1. Introduction

1.1 Purpose

The purpose of this Software Requirements Specification (SRS) document is to define the requirements for a blogging website. This document will serve as a guide for the how I created the whole blogging website using the basic web development tools and languages. The main purpose of this website to act as great website in the field of the blogs field and a handy tool for the bloggers

1.2 Scope

The blogging website will allow users to create and publish blog posts, manage their profiles, and interact with other users through comments and reactions. The website will also support features such as categorizing posts, searching for specific content, and integrating with social media platforms for sharing and promotion.

- Project managers: They refers to person that manages the whole project and keep the whole status of the project and tell the authority which team is working at which part and the current status of the project and also the estimate factors that when our project would get complete. They also assign the role and sometime provide resouces to the development team and market analysis who are our competitors and what our
- Software developers: they are developing the whole website using their programming skills and creativity whatever they can give their best.
- Quality assurance team: They provide the best test case template that the blogging website can have to maximize the bug fixing and error rectification. Basically the test planning and excecution is done by them.
- End-users (bloggers and readers): they help requirements gathering for the website and what are the prioritize of the requirements. User acceptance testing also an important thing done by them.

It is recommended that stakeholders read the entire document, paying close attention to the sections relevant to their roles and responsibilities.

1.3 Definitions, Acronyms, and Abbreviations

This subsection should provide the definitions of all terms, acronyms, and abbreviations required to properly interpret the SRS. This information may be provided by reference to one or more appendixes in the SRS or by reference to other documents.

1.4 References

Web Design and UX Resources: References to books, articles, or websites on web design principles, user experience (UX) design, and usability testing.

Programming Language Documentation: References to official documentation or specifications for programming languages used in development, such as JavaScript, Python, or Ruby

Previous Projects or Prototypes: References to previous projects, prototypes, or proof-of-concept implementations that inform the requirements and design decisions for the current blogging website.

1.5 Overview

This SRS is basically divided into two of its parts:

2. General Description

Here's a general description of the blogging website focused on it being a frontend project made using HTML, CSS, and JavaScript: The blogging website will be a frontend web application developed using HTML, CSS, and JavaScript. It will provide a user-friendly interface and a range of features to support the creation, publishing, and management of blogs. The HTML structure will define the layout and elements of the website, including sections for displaying blog posts, navigation menus, user profiles, commenting systems, and other components. CSS will be used to style and enhance the visual appearance of the website, ensuring a consistent and appealing design across different pages and components. This may include custom fonts, color schemes, responsive layouts, and animations to create an engaging user experience. JavaScript will be the driving force behind the interactivity and dynamic behavior of the website. It will handle tasks such as:

Rich Text Editor: A WYSIWYG (What You See Is What You Get) editor implemented using JavaScript libraries or frameworks, allowing users to compose and format their blog posts with various text formatting options, image and media embedding, and other advanced features. Content Management: JavaScript will be used to handle the creation, editing, and deletion of blog posts, as well as the management of categories, tags, and other organizational features.

Connecting different blogs: It has beautiful blogs connction between different users around the world and their ideas with great visualization and some of the tremendous animation effects

Subscription System: Developing a subscription system that allows readers to leave comments on blog posts, reply to other comments, and engage in discussions. Interactivity and Effects: Adding interactive elements and effects to the website, such as dropdown menus, modal windows, animations, and other features to enhance the user experience.

Data Handling and Storage: Integrating with APIs or local storage mechanisms to handle the storage and retrieval of blog posts, user data, and other relevant information.

2.1 Product Perspective

2.1.1 Product Context

The blogging website will be a standalone web application specifically designed for creating, publishing, and managing blogs. It will be accessible through modern web browsers on various devices, including desktops, laptops, tablets, and smartphones.

2.2.2 Product Positioning

The blogging website will be positioned as a user-friendly and feature-rich platform for individuals, professionals, and organizations to share their thoughts, expertise, and experiences through written content. It will cater to a wide range of bloggers, from personal bloggers to subject matter experts, journalists, and content creators.

2.2 Product Functions

It allows the user to create and share ideas thorugh blogs by giving them a functional text editor that has many features such as uploading of document and the links an so on. User can vist the blogs of different user that what they are sharing all over the world between them related to their desired topic and. It also have the subscription system that you can add the ads for the revenue generation along with the writing of blogs and different for the buisness

2.3 User Characteristics

- <u>Blogger Individuals or organizations</u> who create and publish blog content May have varying levels of technical expertise, from beginners to advanced users Diverse age groups, backgrounds, and writing styles Varying content topics and genres (e.g., lifestyle, technology, travel, business) Desire for a user-friendly platform to express themselves and share their ideas Require tools for content creation, management, and promotion
- Reader Individuals interested in consuming blog content on various topics Diverse age groups, backgrounds, and interests May access the website from different devices (desktop, mobile, tablet) Desire for an engaging and visually appealing reading experience Expect easy navigation, search, and discovery of relevant content Need the ability to interact with content (comments, shares, likes)
- Administrator Responsible for managing and maintaining the blogging website Requires
 administrative tools and privileges for user management, content moderation, and system
 configuration Ensures the smooth operation and security of the website May have
 advanced technical skills and knowledge 4.4 Guest User Visitors who browse the website
 without creating an account May have limited access to certain features or functionalities
 Ability to search and view public blog content Potential to convert into registered users or
 subscribers
- <u>Technical Support Individuals or teams</u> responsible for providing technical assistance and support May require access to system logs, error reports, and user feedback Knowledgeable about the website's technical architecture and infrastructure Responsible for troubleshooting and resolving user-reported issues

2.4 General Constraints

2.4.1 Technical Constraints

- Browser Compatibility: The blogging website should be compatible with the latest versions of major web browsers (e.g., Google Chrome, Mozilla Firefox, Safari, Microsoft Edge) and support cross-browser functionality.
- Responsive Design: The website should be designed with a responsive approach to ensure an optimal viewing and user experience across various devices and screen resolutions, including desktops, laptops, tablets, and mobile phones.
- Performance and Scalability: The system should be capable of handling a large number of concurrent users and blog posts while maintaining acceptable performance levels in terms of response times, load times, and overall responsiveness.
- Security: Appropriate security measures should be implemented to protect user data, content, and the overall system from unauthorized access, data breaches, and common web vulnerabilities (e.g., cross-site scripting, SQL injection, cross-site request forgery).

2.4.2 Regulatory Constraints

• Data Privacy and Protection: The blogging website should comply with relevant data privacy and protection regulations, such as the General Data Protection Regulationds

- (GDPR) or the California Consumer Privacy Act (CCPA), depending on the target audience and geographic regions.
- Content Moderation: Mechanisms for content moderation and filtering should be in place to comply with local laws, regulations, or community guidelines regarding content deemed inappropriate, offensive, or illegal.
- Accessibility: The website should adhere to accessibility standards and guidelines, such as the Web Content Accessibility Guidelines (WCAG) or Section 508, to ensure an inclusive experience for users with disabilities.

2.4.3 Organizational Constraints

- Branding and Style Guidelines: The design and visual elements of the blogging website should align with the organization's branding guidelines, color schemes, and style preferences.
- Content Ownership and Intellectual Property: Clear policies and guidelines should be established regarding content ownership, intellectual property rights, and the use of copyrighted materials within blog posts.
- Localization and Internationalization: If the blogging website targets a global audience, provisions should be made for localization and internationalization, including support for multiple languages, date and time formats, and cultural considerations.

2.4.4 Environmental Constraints

- Hosting and Infrastructure: The blogging website should be compatible with the organization's existing hosting environment, cloud infrastructure, or third-party hosting services.
- Integration with External Systems: If the blogging website requires integration with external systems or services (e.g., social media platforms, analytics tools, content delivery networks), compatibility and interoperability constraints should be considered.
- Maintenance and Upgrades: Provisions should be made for regular maintenance, updates, and upgrades to ensure the system's security, performance, and compatibility with evolving technologies and standards.

2.5 Assumptions and Dependencies

2.5.1 Assumptions

- User Knowledge: It is assumed that users have a basic understanding of web browsers, internet navigation, and common web conventions (e.g., links, forms, buttons).
- Internet Connectivity: It is assumed that users have access to a stable and reliable internet connection to access and interact with the blogging website.

- Supported Devices and Browsers: It is assumed that users will access the website using modern and up-to-date web browsers on desktop computers, laptops, tablets, or mobile devices with compatible operating systems.
- User Authentication: It is assumed that users will provide accurate and valid information during the registration and authentication processes.
- Content Ownership: It is assumed that users will only publish and share content that they have the legal rights and permissions to distribute.

2.5.2 Dependencies

- Web Hosting Service: The blogging website will depend on a reliable and scalable web hosting service or cloud infrastructure to host the application and serve the content to users. Content Delivery Network (CDN): The website may depend on a CDN service to improve content delivery performance, reduce server load, and provide a better user experience, especially for users in geographically dispersed locations.
- Third-Party Libraries and Frameworks: The development of the blogging website may depend on various third-party libraries, frameworks, and tools for specific functionalities, such as rich text editing, multimedia handling, user authentication, and social media integration.
- External Services and APIs: The website may depend on external services or APIs for features like social media sharing, analytics tracking, payment processing (if applicable), or integration with other systems.
- Database or Storage Solution: If the blogging website requires persistent data storage, it will depend on a database management system (DBMS) or a storage solution, such as a relational database, NoSQL database, or cloud-based storage service.
- Email Service: The website may depend on an email service or server for sending email notifications, password reset emails, or other communication with users.

3. Specific Requirements

The blogging site will be accessible through a modern web browser on a variety of devices, including desktop computers, laptops, tablets, and smartphones. The site will be hosted on a secure server with regular backups and maintenance

Each requirement in this section should in this srs:

- Correct
- *Traceable (both forward and backward to prior/future artifacts)*
- Unambiguous
- *Verifiable (i.e., testable)*
- Prioritized (with respect to importance and/or stability)
- Complete
- Consistent

• *Uniquely identifiable (usually via numbering like 3.4.5.6)*

Attention should be paid to the carefuly organize the requirements presented in this section so that they may easily accessed and understood. Furthermore, this SRS is not the software design document, therefore one should avoid the tendency to over-constrain (and therefore design) the software project within this SRS.

3.1 External Interface Requirements

3.1.1 User Interfaces

- Home page: it showcase the trending blogs and the famous blog writers around the world that are sharing their ideas all around the world in the forms of beautiful blog card and a nav bar that has easy interface for the naive users
- Join us page: This page shows the subscription plan of the website that what are the plans that our website and the special plans which are provided under each price
- Blog: This page has a blog text writer and a preview option where you can write and upload all the necessary options while writing the blogs
- Blogs: It consists of all the blogs of your famous categories such as food, technology,

3.1.2 Hardware Interfaces

For a hardware interfaces you just need the laptop, mobile, tablet, i-pad, mac so on as the website is responsive in nature and can be suitable for any devices just there should be a proper internet service.

3.1.3 Software Interfaces

3.1.4 Communications Interfaces

3.2 Functional Requirements

This section describes specific features of the software project. If desired, some requirements may be specified in the use-case format and listed in the Use Cases Section.

3.2.1 User management

Registration: Users should be able to create accounts with unique usernames and passwords. Authentication: Users should be able to log in securely using their credentials.

Profile Management: Users should be able to update their profiles, including adding a profile picture and personal information.

3.2.2 Content management

Post Creation: Users should be able to create new blog posts, including titles, content, tags, and categories.

Post Editing: Users should be able to edit and update their existing posts. Post Deletion: Users should be able to delete their own posts.

Draft Saving: Users should be able to save posts as drafts before publishing.

3.2.3 Navigation

Search Functionality: Users should be able to search for posts by keyword, tag, category, or author.

Navigation: Users should be able to browse posts by category, tag, or date.

3.2.4 Social Interaction

Social Sharing: Users should be able to share posts on social media platforms. Like/Dislike: Users should be able to like or dislike posts.

Follow/Unfollow: Users should be able to follow or unfollow other users to receive updates on their posts.

3.2.5 Administration

User Management: Administrators should be able to manage user accounts, including banning or suspending users if necessary.

Content Management: Administrators should be able to manage blog posts, including editing or deleting them if necessary.

Analytics: Administrators should be able to view site analytics, including traffic, user engagement, and popular posts.

3.2.6 Accessibility

Accessibility Standards: The website should adhere to accessibility standards to ensure usability for people with disabilities.

Keyboard Navigation: Users should be able to navigate and interact with the website using keyboard shortcuts.

3.2.7 Content Sharing

User are sharing their content and can wrote by using the text editor is there for you where tou can preview write the content

3.5 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).

3.5.1 Performance

Response Time: The system should respond to user actions (e.g., posting, commenting) within an acceptable time frame.

Scalability: The system should be able to handle increasing numbers of users and posts without significant performance degradation.

3.5.2 Reliability

- Regular Backups: Implement regular backups of website data to prevent data loss in case of system failures or disasters.
- Backup Storage: Store backups in secure and reliable locations, preferably offsite or in the cloud.
- Restore Procedures: Document procedures for restoring the website from backups in case of data loss or corruption.

3.5.3 Availability

3.5.4 Security

- Secure Authentication: User authentication should be secure, using encryption and proper validation techniques.
- Data Protection: User data should be protected against unauthorized access or misuse.
- Spam Prevention: The system should have measures in place to prevent spam comments or posts.
- Payment: Ther is a secure payment gateway

3.5.5 Maintainability

Modular Code: Write modular and well-structured code using best practices to facilitate maintenance and future enhancements.

Documentation: Provide comprehensive documentation for codebase, APIs, and system architecture to aid in maintenance and troubleshooting.

Version Control: Use version control systems (e.g., Git) to track changes and collaborate on code development.

Code Comments: Include descriptive comments in the code to explain its functionality and purpose.

3.5.6 Portability

Since HTML, CSS, and JavaScript are web technologies, the blogging website should be platform-independent and accessible from any operating system, including Windows, macOS, Linux, iOS, and Android.

3.7 Design Constraints

- Technology Stack: The SRS may specify the use of specific technologies for development, such as HTML, CSS, JavaScript for the frontend, and a particular backend framework like Django, Ruby on Rails, or Node.js.
- Platform Compatibility: The website may need to be compatible with certain platforms or environments, such as specific web browsers (Chrome, Firefox, Safari, Edge) and operating systems (Windows, macOS, Linux, iOS, Android).
- Performance Requirements: Constraints may include performance targets such as maximum page load times, server response times, or throughput requirements to ensure a responsive and scalable system.
- Scalability: The SRS may outline scalability constraints, specifying the expected growth in user traffic and content volume over time and how the system should accommodate this growth through horizontal or vertical scaling.
- Security Requirements: Constraints related to security may include compliance with industry standards (e.g., GDPR, HIPAA), data encryption requirements, authentication mechanisms, and protection against common vulnerabilities (e.g., SQL injection, cross-site scripting).
- Accessibility Standards: Design constraints may include compliance with accessibility standards such as the Web Content Accessibility Guidelines (WCAG), ensuring that the website is usable by people with disabilities.
- Regulatory Compliance: The blogging website may need to comply with legal and
 regulatory requirements specific to the industry or region, such as data privacy laws (e.g.,
 GDPR, CCPA) and copyright regulations. Integration with Third-Party Systems:
 Constraints may arise from the need to integrate the blogging platform with external
 systems or services, such as social media platforms, analytics tools, or content delivery
 networks (CDNs).

- Resource Constraints: Constraints related to available resources such as hardware, software licenses, development time, budget, and personnel may impact the design and implementation of the system.
- User Experience Guidelines: Design constraints may include adherence to user experience (UX) guidelines and branding requirements to maintain consistency with the organization's brand and ensure a cohesive user experience.
- Legacy System Compatibility: If the blogging website needs to integrate with existing systems or databases, constraints may arise from compatibility requirements with legacy technologies and data formats.
- Localization and Internationalization: Constraints related to supporting multiple languages, currencies, date formats, and cultural preferences for a global audience may influence the design and implementation of the system.

3.9 Other Requirements

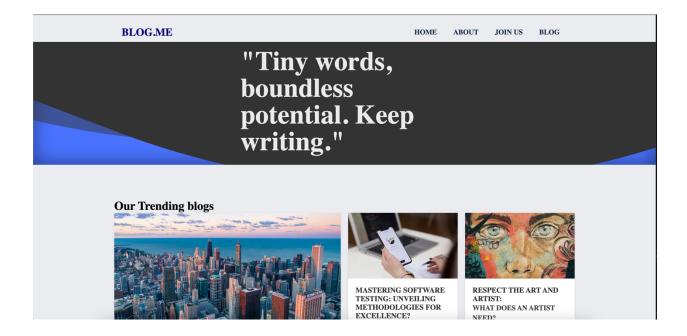
- User Interface (UI) Requirements: UI Design Guidelines: Specify design principles, style guides, and branding requirements for the user interface.
- Navigation Requirements: Define navigation patterns, menus, and user flows to ensure intuitive navigation throughout the website. UI Components: Detail the design and behavior of UI elements such as buttons, forms, dropdowns, and tooltips.
- Content Management Requirements: Content Workflow: Describe the process for creating, editing, reviewing, and publishing content, including roles and permissions for content creators, editors, and administrators. Version Control: Specify requirements for versioning and revision history of blog posts and other content items.
- Search Engine Optimization (SEO) Requirements: Metadata: Define requirements for meta titles, descriptions, and keywords to optimize content for search engines. URL Structure: Specify guidelines for creating SEO-friendly URLs and handling redirects and canonicalization.
- Performance Monitoring and Analytics Requirements: Key Performance Indicators (KPIs): Define metrics and KPIs to monitor website performance, user engagement, and traffic. Analytics Integration: Specify requirements for integrating with analytics platforms such as Google Analytics to track user behavior and measure the effectiveness of marketing efforts.
- Content Moderation and Compliance Requirements: Content Guidelines: Define rules and policies for acceptable content, including restrictions on prohibited content (e.g., hate speech, explicit material).

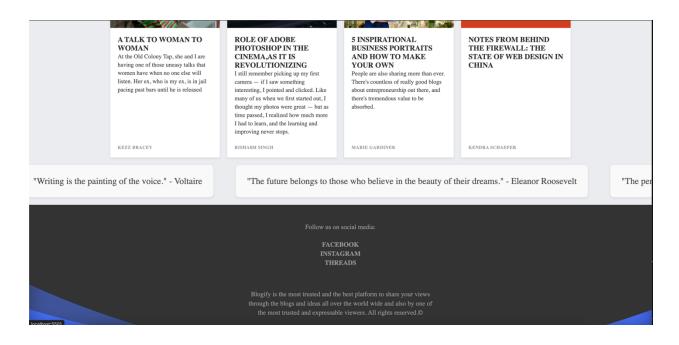
- Compliance Standards: Specify requirements for compliance with legal and regulatory standards related to content moderation, such as copyright laws and community guidelines. Backup and
- Recovery Requirements: Backup Frequency: Define the frequency of backups for website data and content, including databases, media files, and configuration settings. Recovery Procedures: Specify procedures for restoring the website from backups in case of data loss, corruption, or disaster.
- Localization and Internationalization Requirements: Language Support: Specify requirements for supporting multiple languages and locales, including translation capabilities and language-specific content.
- Cultural Adaptation: Define requirements for adapting content, date formats, currencies, and other cultural elements for different regions and markets.
- Documentation and Training Requirements: User Documentation: Specify requirements for user manuals, help guides, and tutorials to assist users in using the website effectively.
- Training Materials: Define requirements for training materials and resources for administrators, content creators, and other users involved in managing the website. Testing and Quality
- Assurance Requirements: Test Cases: Define requirements for test cases, scenarios, and acceptance criteria to validate the functionality, performance, and security of the website.
- Testing Environments: Specify requirements for testing environments, including staging servers, testing tools, and access permissions. Deployment and Configuration Requirements: Deployment
- Procedures: Define requirements for deploying the website to production servers, including configuration settings, environment variables, and deployment scripts.
- Configuration Management: Specify requirements for managing configuration settings, including version control, change management, and rollback procedures.

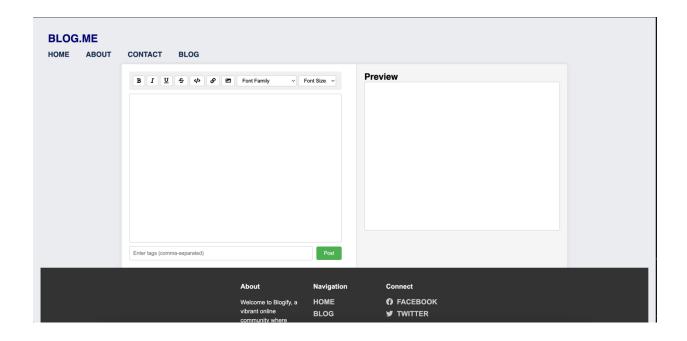
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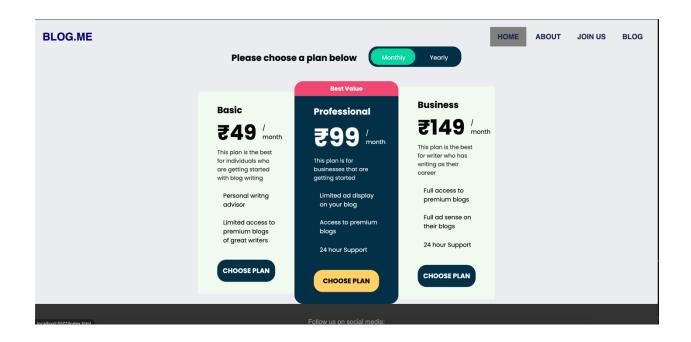
https://github.com/Medhanshalok/Bloggingwebsite.git

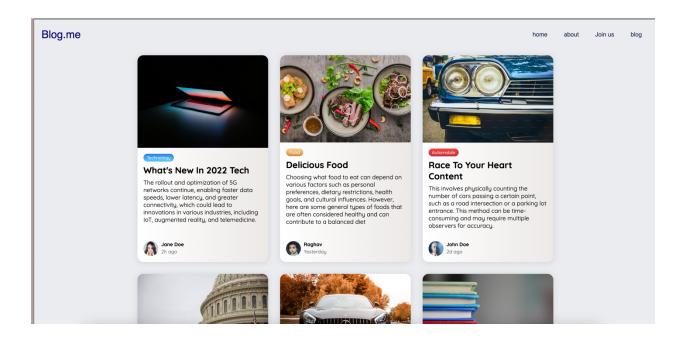
SCREENSHOTS











Blogging website