## INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, ALLAHABAD Software Engineering

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### SOFTWARE REQUIREMENT SPECIFICATION For

# BLOGR

A WEB APPLICATION FOR BLOGGING

#### **Group Members:**

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#### 1. Introduction:

"Blogr" is basically a web application, which provides user a platform to share his ideas with the whole world in form of text/audio. It is a blogging website with additional features to maximize the learning capabilities of the user.

#### 1.1 Purpose:

Blog is an important social networking tool included in a web application, to facilitate interaction and collaboration with the users. Blog in a web application is used for promoting products and services, writing articles, providing product updates, educating users. Blog facilitates communication and interaction with the user to share knowledge and expertise

#### 1.2 Scope:.

So, this project is an attempt to create a web application to cater all these requirements of the user.

- Express your views to the world in the form of blogs.
- Get to know everyone's opinion in your preferred method (audio / text)
- It is easy to operate.
- It has a good user interface.
- It is scalable for catering large audiences.

#### 1.3 References:

**IEEE SRS format** 

#### 1.4 Overview:

The rest of this SRS is organized as follows: Section 2 gives an overall description of the software. It gives what level of proficiency is expected of the user, some general constraints while making the software and some assumptions and dependencies that are assumed. Section 3 gives specific requirements which the software is expected to deliver. Functional requirements are given by various use cases. Some performance requirements and design constraints are also given

#### 2. Overall Description:

#### 2.1 Product Perspective:

"Blogr" is aimed to provides an efficient and user-friendly platform and solve issues using the ML model to convert text to audio and vice-versa, and recommend blogs to users.

#### 2.2 Functional Requirement:

"Blogr" supports the following use cases:

• User Login: Allows users to login on platform using the credentials to get personalized content.

- Authentication : Secure password protection and data encryption.
- Search Blogs: User can search blog based on their needs through tags and authors
- DashBoard: It is the default page of the site and we can access this option from the left hand side anytime.
- Accessing Content: Content can be accessed in both audio and text format.
- Content Recommendation: It recommends content to the user based on his preferences.
- Text feature extraction (Auto tagging articles): Using NLP we can extract the features of the blog and automatically tag the articles. This will help to recommend and search for the blogs
- Data Storage: The received data of the user based on username from various profile is stored in the database

#### 2.3 User Characteristics:

The user should be familiar with the operations of web applications.

#### 2.4 Principal Actor:

The principal actor in "Blogr" is **USER**.

#### 2.5 General Constraints:

- a. Working on "Blogr" requires Internet connection.
- b. "Blogr" is a single-user application. Every user must have this web application on their end to use the features.

#### 3. Non-Functional Requirements

#### 3.1 Product requirements

- The web application must have a simple, user-friendly interface so customers can save time and confusion.
- The website shall be functional for 24\*7.
- The app must load between 2-4 seconds, for fast and effective responses.
- Data should be saved in case of any failure.

#### 3.2 Security Requirements:

- Only registered users can post the blogs
- Back-end servers or databases should only be accessed by the website management.

#### 3.3 External Requirements:

 A modern web browser to access all the features of the website without facing any issue.

The technical requirements for blogging software are much more specific than what you'd need for a typical Web site. Most blog

software use a mix of several kinds of Web server technology that are ideal for running dynamic Web sites like blogs. The following technologies are considered the bare minimum that most blogging packages need to function:

- Disk space: For blogging, disk space is important if you decide to store a lot of images on your blog or to upload audio and video files.
- Email management: You'll need an email address to sign up to our website in order to post blogs.
- CPU Resources: Computers/Smartphones and internet is also needed in order to access our website and read/write blogs.

#### 3.4 Tech Stack

- MongoDB: MongoDB is a source-available cross-platform document-oriented database program. Classified as a NoSQL database program, MongoDB uses JSON-like documents with optional schemas. MongoDB is developed by MongoDB Inc. and licensed under the Server Side Public License (SSPL).
- Mongoose :- Mongoose is a JavaScript object-oriented programming library that creates a connection between MongoDB and the Express web application framework.
- JavaScript :- JavaScript (JS) is a lightweight, interpreted, or just-in-time compiled programming language with first-class functions.

- NodeJS: Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that runs on the V8 engine and executes JavaScript code outside a web browser.
- Express :- It is a back end web application framework for Node.js, released as free and open-source software under the MIT License
- Node-Modules
  - Nodemailer to send emails
  - Body-parser to parse json content
  - Passport user authentication
  - Bycryptjs salt hash password
  - Url format data through url