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RESEARCH ARTICLE

Web Blog Using Machine Learning and Angular

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Abstract – The blogging project is a client-server application built over an Google cloud firebase. Blogging, short for web logging, is an application that runs on a portal site, in which different users (and user groups) can publish and revise daily journal entries, and these entries will be made public for others to view. In essence, it gives everyone his or her own personal editorial column to publish to the world. The purpose of online website blogging is to automate the existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with

Index Terms – Semantic Analysis, Text Summerization, Natural Language Processing(NLP), Key Phrases Extraction, Entity Recognition, Translate

I. INTRODUCTION

The main objective of the project on online Blogging system is to manage the details of Blogs, Comment, New Category, New Blog, Technology Blog. It manages all the information about Blogs, Comment, Technology Blog, Blogs. The project is totally built at administrative end and thus only the administrator is guaranteed the access. The purpose of the project is to build an application program to reduce the manual work for managing the Blogs, Comment, Comment, New Category. It tracks all the details about the New Category, New Blog, Technology Blog.

- Editing, adding and updating of Records is improved which results in proper resource management of Blogs data.
- Manage the information of New Blog
- Integration of all records of technology blog
- It deals with monitoring the information and transactions of new Blog.
- provides the searching facilities based on various factors. Such as Blogs, New Category, New Blog, Technology Blog

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II. DESGIN FLOW

The design flow of this model will be done with respect to the following objectives, Show the processes that change or transform data, Show the movement of data between process and represent a system as a network of processes which transform data flowing between them. To fulfill the first objective, we create a blue print of a database, a schema which will help us to manage the relationship among the entities. We also need to create a duplicate database to back up all the information which helps to prevent the data loss as well as security. After creating the database, we will create a web application which will be the most essential part of the model through which all the users can access and experience the model. The access will be managed only to the officials who undertakes all the activities in the department of law and the revenue department. All the document uploaded will be stored to the least possible quality for printing in order to reduce the storage usage as well as the fetching time. Our project aims at Business process automation, i.e we have tried to computerize various process of online Bogging System.

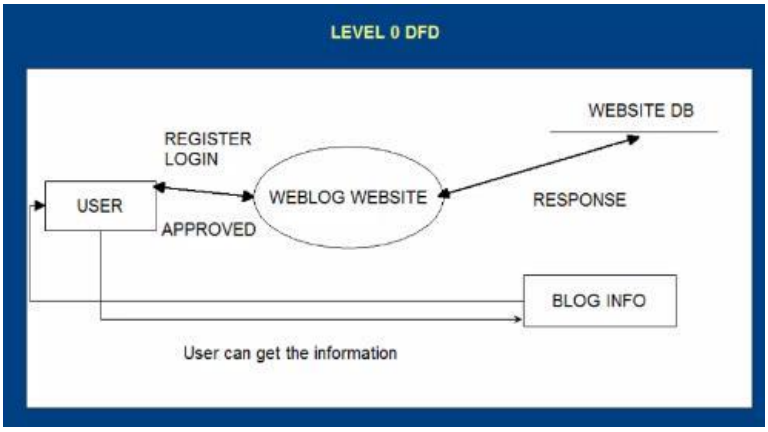

Figure. 1: Getting the information of the user

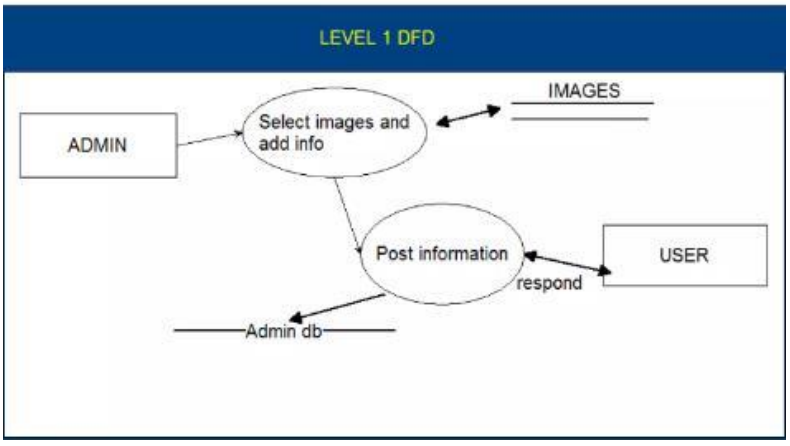

Figure. 2: ER diagram of the model database.

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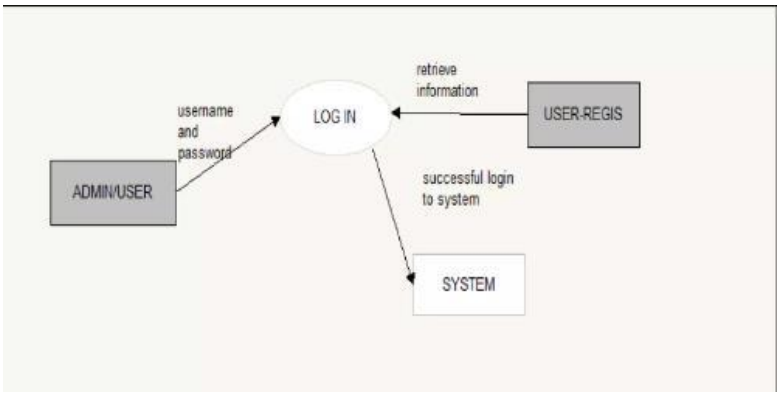

Figure. 3: Login

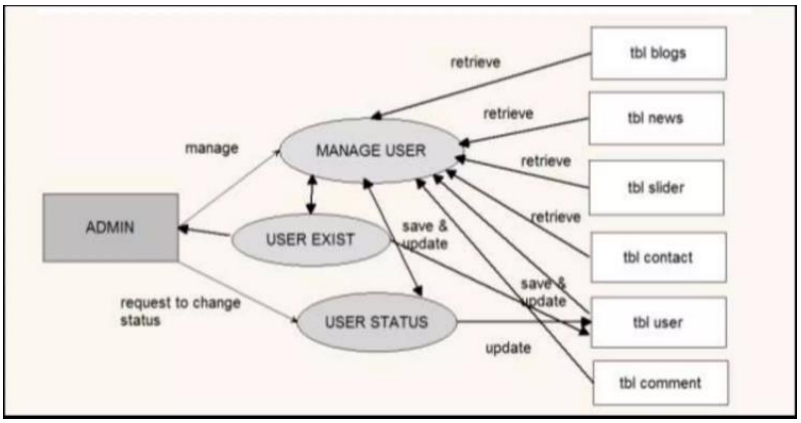

Figure. 4: Manage User

III. METHODOLOGY

The first step in any project is to define the problem statement. In this case, you need to define the objective of the web blog project, what kind of content you want to generate, and how you want to use machine learning in it. Once you have defined the problem statement, you need to choose the right machine learning algorithm. The choice of the algorithm will depend on the type of data you are working with and the problem you want to solve.

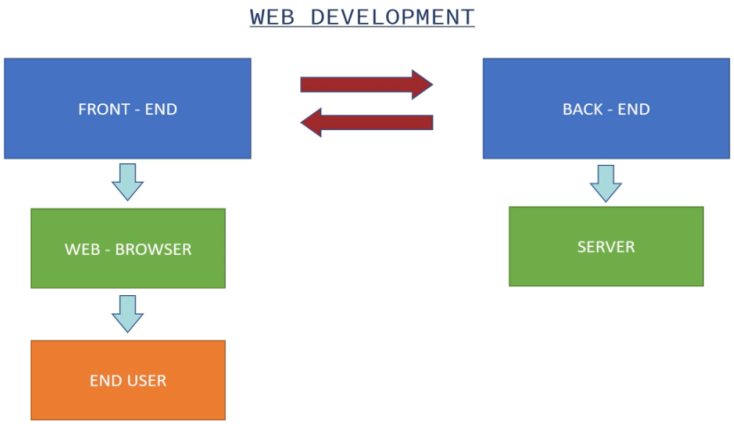

Figure. 6: Web Development

For example, you can use natural language processing (NLP) algorithms to analyze the text content of the blog and extract insights from it. Once you have selected the algorithm, the next step is to collect and prepare the data. You need to gather a large dataset of blog articles that you can use to train your machine learning model. You also need to preprocess the data to remove any noise and inconsistencies. After preparing the data, you can start training the machine learning model. You can use tools like TensorFlow or PyTorch to train the model on the dataset you have collected. The model will learn to identify patterns in the data and make predictions based on those patterns.

Integration with angular JS

Once you have trained the machine learning model, you can integrate it with your Angular web application. You can use Angular components to display the blog content and the insights generated by the machine learning model. In summary, the methodology for a web blog project using machine learning and Angular involves defining the problem, choosing the ML algorithm, data collection and preparation, training the model, integrating it with Angular deployment in google cloud firebase. Angular is not a language it's an front end framework build using the JAVASCRIPT by GOOGLE Angular is an front end JavaScript framework to build Client Side application using HTML, CSS and JAVASCRIPT.

We are using database google cloud firebase for hosting also we are using google cloud firebase Google Cloud Firebase is a cloud-based mobile and web application development platform that offers a range of tools and services to help developers build high-quality apps quickly and easily. It is a comprehensive platform that includes a variety of features, such as real-time database, cloud storage, hosting, authentication, and more. Google Cloud Firebase consists of several key components, each of which plays an important role in the development and management of applications:

Authentication: Firebase Authentication provides a secure and easy-to-use way to manage user authentication for your app, with support for a wide range of authentication methods, including email and password, phone number, Google Sign-In, and more.

Real-time Database: Firebase Real-time Database is a cloud-hosted NoSQL database that allows you to store and sync data in real-time across multiple clients. It uses a flexible data model based on JSON and supports automatic data synchronization between clients and the server.

Cloud Storage: Firebase Cloud Storage is a scalable and secure cloud storage solution that enables you to store and serve user-generated content, such as photos and videos, directly from Firebase servers. It provides a simple and efficient way to manage large files and enables easy integration with other Firebase services.

Hosting: Firebase Hosting allows you to deploy and host web applications quickly and easily on Firebase servers. It provides fast, reliable, and secure hosting with built-in SSL and CDN, and allows you to customize your deployment with powerful tools and features.

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IV. CHALLENGES/ISSUES FACED

There can be several challenges and issues that one may face when developing a webblog project using Angular and machine learning. Some of them are, Data quality and quantity, Machine learning algorithms require a large amount of high-quality data to train the model effectively. However, getting access to the required amount of data and ensuring its quality can be a challenging task. Model selection Choosing the right machine learning algorithm that fits your project's requirements can be difficult. Different algorithms have different strengths and weaknesses, and selecting the right one can be challenging. Integration, The Integrating machine learning into Angular can be complex, especially if you're not familiar with the technology stack. There may be compatibility issues between the machine learning libraries and Angular, which may require additional configuration and customization.

Performance optimization, Machine learning algorithms can be computationally expensive, which can slow down your application's performance. It is essential to optimize your code and utilize techniques such as caching and data pre-processing to reduce the computational overhead. Deployment and scalability: Deploying machine learning models on web applications can be challenging. You need to ensure that the infrastructure is capable of handling the machine learning workload, and the deployment process is scalable and can accommodate future growth and User Experience (UX), Machine learning models can significantly improve the user experience by providing personalized and relevant content. However, it is essential to ensure that the machine learning models' predictions align with the user's expectations and preferences to avoid frustrating the user.

V. CONCLUSION

In conclusion, developing a web blog project using machine learning and Angular can offer several benefits, including personalized and relevant content for users, improved user experience, and better engagement. However, it also comes with several challenges and issues, including data quality and quantity, model selection, integration, performance optimization, deployment and scalability, user experience, and maintenance and updates. In conclusion, we can say that blogging is very powerful technology for sharing information and what we believe is the issues like privacy and security of data is continuous developments in the security field and increasing awareness Benefits and usage of this will eventually increase in the future with continuously growing popularity. To overcome these challenges and build a successful web blog project, it is crucial to have a clear understanding of the requirements and limitations of the project, select the right machine learning algorithm, optimize the performance of the application, and regularly monitor and maintain the machine learning models. With careful planning and execution, a webblog project using machine learning and Angular can provide a unique and engaging experience for users, while also offering valuable insights into user behavior and preferences that can help drive business growth and success.

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