

CS532: Final Project Report

Project Title: Blog Post Application

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I. PROBLEM

For this project we have worked on building a blog post application where we used public dataset. The application involves a bunch of operations that make it more interesting and its easy to use at the same time. Our idea while making this application was that to make an application that can collect news and blogs from different genre and display it under one roof. So that the user doesn't have to go site to site searching for different topics and instead of that it can be found all under one site.

II. SOFTWARE DESIGN AND IMPLEMENTATION

First we had to decide which nosql database to go for which can give us high performance, durability, easy access, high availability and easy scaling. By comparing all the measure with different nosql database we opted to go with Mongodb and for the frontend we decide to go with Springboot and for browser plugin we used Postman. We first established the connection between mongodb and Springboot using terminal. We made different jsp pages for different operations and different interface that were involved in our application. We first made the login page where if the user is already registered they can directly login otherwise we have made registration page where a new user can sign in themselves and can register themselves for using the application. The user information is then transferred and stored in our database for further reference. Once that is done, the page is been redirected to the login page where the user can login using their credentials such as login id and password. Once the user enters their login id and password both the fields are validated by checking the database and then if the login credentials are correct it will let you login otherwise it will throw an error of invalid user. Once the user is logged in it will lead them to the main login page which is also called as homepage where they can track different activities that are happening into their account and also there are different operations that can be performed. The main login page contains different fields and action related to user needs, like the user can view Top 10 trending stories which are being most liked by other user and which are upvoted the most. Then there come the section of writing their own story/blog which we have named as "What's your story?", below that we have designed the section where the user can view their own blogs. We have also implemented different filtering operation by which the user can find different blog by first name, email, genre and story name by satisfying different criteria under it, like 1) There is search by email where the user can search for different users blog by entering their email, once the user enters a valid email id the

blogs/stories written by that particular user will be displayed and user can view their story. If the logged in user likes the story they can also follow them and upvote for their story. 2) Search by First name where the user can search for different stories by entering valid users first name and the result related to that user name will be generated, this will also generated the same kind of result as above but the result page to which it will redirect will have one of the columns that will display the desired user name. 3) Then comes the search stories by genre, where the user directly searches the story by adding the genre they want to search by writing in the empty field provided and the result for the same will be generated, here the result which is generated will show the stories written by all the users under that genre and their will be a column indicating the genre name. 4) Search story by name gives the liberty to the user to search the story by writing the heading of the story and the result will be generated. Here the name of the story should be mentioned correctly in order to obtain result. Below that we have designed a section where the user can view the blogs they have written. Below that there will be a section where the user can see which user are following them and the users they are following. So under the what's your story section it will redirect you to a new page where the user can write its own story. The page contains a section for writing your own story that will contain an empty field where you can write your story title and the story for that, below that there is genre where the user can select under which genre they want there story to be and once everything is done the user can publish its story which cannot only viewed by him but others user can also view their story by entering by entering their first name, email, story title and genre in the filtering section. The user can also edit their own blog whenever they want and as per there need. We have included two features where the user can follow other user by clicking the following button and also they can upvote(like) if they like any story. The upvoted story are than being shown under Top 10 trending stories. For our project the jsp pages are being made by Shivani Singh and the Mongodb nosql operations are done by Kumudini Thote.

A. Software Design and NoSQL-Databse and Tools Used

Software design was done on eclipse ide in Springboot and for Nosql Database we used Mongodb.

B. Supported Queries

Queries that are supported by our applications are as follows:

- 1) New User Registration
- 2) User Login
- 3) Publish Story
- 4) Show Story
- 5) Edit Story
- 6) Delete story
- 7) User can follow and unfollow a user
- 8) User can upvote a Story
- 9) Search user by name, Email
- 10) Search stories by genre , story title

- 11) Show trending stories

REFERENCES

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- [3] https://www.tutorialspoint.com/spring_boot/spring_boot_introduction.htm