Social Network Application for Developers

A Ashritha Reddy[1], Ananya Penuballi[2], J Pranathi Reddy[3], B Mohana Krishna[4] , P Pavan[5],

Prof.N.M.S.Desai[6]

B Tech (IV-CSE), Department of Computer Science and Engineering[1,2,3,4,5]

Associate Professor, Department of Computer science and Engineering[6]

Computer Science and Engineering, ACE Engineering
College, Hyderabad, Telangana, India.

Abstract-

Social Networking refers to grouping of individuals and organisations are brought together via some means to share their opinions, interests, and activities, which is known as social networking. There are various web-based social networking sites available, such as facebook, twitter, linkedin, Google+, and others, that provide an easy-to-use and dynamic interface for connecting with individuals both locally and internationally. There are also a number of mobile-based social networking services available in the form of apps, including as Whatsapp, hike, and others.

The goal of this project is to construct a user-friendly education platform that allows developers from all around the world to connect and share their profiles. It includes information about your schooling, social media links, work experience, and GitHub repositories. Users who log in to the app can construct a portfolio by entering their educational details, social network links, and writing entries. Users can also leave comments on other users' postings, as well as like and dislike them. We used React, MongoDB, Express js, and Node js to complete this project. The application is deployed using Heroku.

Keywords – Social Network , react js, MongoDB, Express js, Node js, Heroku , Postman, Redux, MongoDB atlas

I. INTRODUCTION

As you can see, technology is a vast industry with a large number of software programmers and developers working in various capacities for various technology domains. As a result, there is a huge need for these professionals to build a global online network and stay connected. It helps them keep on top of the most recent developments, opportunities, and news. It also allows them to demonstrate their ability and expertise over a longer period of time.A programming language or technology in particular There are a number of web platforms that appeal to social networking as well as programmers' collaborative needs. A few well-known Q&A websites allow young programmers to post their questions and receive answers from experts.

Expert programmers can even earn a boost by answering difficult questions on such sites. It aids them in increasing their web visibility and improving their professional illustration. There are also some additional forums designed specifically for developers that do a good job of bringing these smart software specialists together on one platform and facilitating the sharing of useful information. To summarise, these sites allow programmers to take advantage of a global platform to notice various technological difficulties and potential answers; exchange relevant job ads; submit illuminating articles; and share enlightening resources.

II. LITERATURE SURVEY

DEVELOPMENT OF WEB PAGES

The foundations of today's commercial internet began in 1990. Tim Berners-Lee invented the basic concepts of the World Wide Web and several tools for effective web usage at the end of 1990. These technologies include the HyperText Transfer Protocol (HTTP), HyperText Markup Language (HTML), the first web browser and code editor, the first web server, and the first web page, which defined a new term, the World Wide Web, as well as a mechanism for creating one's own web page [1]. The internet has been rapidly evolving since 1990, and its evolution can be divided into four generations (Fig. 2) [3]. Users could only view web information on the first web generation's web pages, which were static and not frequently updated. The key motto was "only read the web."
HTML was used to create all web sites, and HTTP was the primary communication mechanism [3]. The second generation begins in 2004, with words such as multiple social networks, blogs, the ability for users to create web page content, and improved user experience when surfing web interfaces. During that time, well-known social networks such as Facebook, Twitter, LinkedIn, and others arose.
These social networks allowed users to connect from all around the world. New technologies, such as JavaScript, Document Object Model (DOM), Ajax, Cascading Style Sheets (CSS), eXtensible HTML (XHTML), eXtensible Markup Language (XML), eXtensible Stylesheet Language (XSL), and Flash, were also introduced at the time, allowing web services to be

presented and delivered without the problems associated with web distribution. The semantic web (adding semantics to the web), content personalisation, intelligent search, and computers' ability to create varied material are all hallmarks of the third web generation, which began in 2010. Ontologies are used to represent and reason about meaning. In addition to ontologies, the Resource Description Framework (RDF), Web Ontology Language (OWL), and other technologies are employed in the third web generation. People may be able to refer to Internet 4.0 as the fourth generation.

Search engines are still important in the contemporary web 3.0, and they provide us with knowledge in the form of vast content web apps that we may utilise according to our needs. This will not be the case with Web 4.0. While fully established, it will not require several of the procedures required when utilising web 3.0, allowing for a more direct and invisible use.


Fig. 1. Web Generations

DESIGNING STAGES OF WEB PAGES

Web design refers to the user interface of a web page. Design is the universal language in the visual world. The design's major aim and goal is to focus on content so that consumers can easily access and utilise web material [5]. Web design has evolved significantly as a result of various technological advancements and trends, from the first web generation web page that displayed contents using a simple textual web page, to the second-generation web page with lots of graphics and vivid colours to create memorable web pages, and finally to today's simple and intuitive web design. The design of a website should always be current, with fresh content.

III. SYSTEM ARCHITECTURE

The system architecture is divided into three sections: front-end, middleware, database, and state management with Redux.


Figure 2. System Architecture

The first step is to create react components. Following the creation of components, each component will be subjected to redux state management.

The middleware is the next phase, which works as a server and keeps user information in a database.

If there are any mistakes in the data, it tests the functionality and displays an error to the user.

Node js and express js are used to accomplish this.

The final step is to enter the information into the database.

The information is stored in Mongodb.

React Js, MongoDB, Express Js, Node Js, and Redux for state management are the technologies utilised to build this project.

After the four major technologies that make up the stack, MERN stands for MongoDB, Express, React, and Node.

•Node.js web framework Express(.js)

•React(.js) Is a JavaScript framework for the client.

•Node.js - the world's most popular JavaScript web server

The middle (application) tier is made up of Express and Node. Node.js is a popular and capable JavaScript server platform, while Express.js is a server-side web framework. ME(RVA)N is the best way to work with JavaScript and JSON from start to finish, regardless of whatever form you choose.

The MERN design makes it simple to build a three-tier architecture (frontend, backend, and database) using only JavaScript and JSON.

React.js Front End

React.js, a declarative JavaScript framework for generating dynamic client-side apps in HTML, sits at the top of the MERN stack. React allows you to create complex interfaces by connecting simple Components to data on your backend server and rendering them as HTML. React excels at handling stateful, data-driven interfaces with minimal code and suffering, and it comes with all the bells and whistles you'd expect from a modern web framework, including excellent

support for forms, error handling, events, and lists, among other features.

Express.js and Node.js Server Tier

The Express.js server-side framework, which runs inside a Node.js server, is the next step down. Express.js describes itself as a "quick, unopinionated, minimalist web framework for Node.js," and it is precisely that. For URL routing (matching an incoming URL with a server function) and handling HTTP requests and answers, Express.js includes strong models. You can connect to Express.js functions that power your application by sending XML HTTP Requests (XHRs), GETs, or POSTs from your React.js front-end. To access and change data in your MongoDB database, those functions leverage MongoDB's Node.js drivers, either via call backs or Promises.

MongoDB Database Tier

If your app saves any data (user profiles, content, comments, uploads, events, and so on), you'll need a database that's as simple to use as React, Express, and Node. JSON documents written in your React.js front end can be transmitted to the Express.js server, where they can be processed and (if they're valid) stored straight in MongoDB for subsequent retrieval.

IV. METHODOLOGY

The project is split into three stages: front-end, back-end, and database for storing user information.

Step 1: Registration

The user creates an account in the application and fills up information such as his or her name, email address, and password.

Step 2: If passwords do not match it shows the pop like Passwords do not match

Step 3: Go to the login page

If the user is already a member, he can log in to the programme.

Step 4: Designing the Dashboard

After logging in successfully, the user can establish his dashboard by entering information such as creating a

profile, adding education, and adding experience.
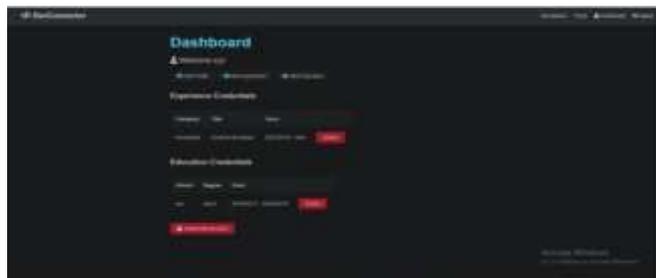
Step 5: Presenting the developers

Other developers and their skills can be viewed, and the user can communicate with them.
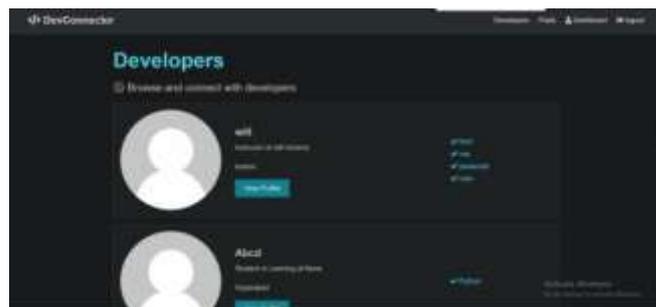
Step 6: Examining the entire profile

The user can see the entire profile of other developers as well as his own. He can also download his profile as a pdf document.
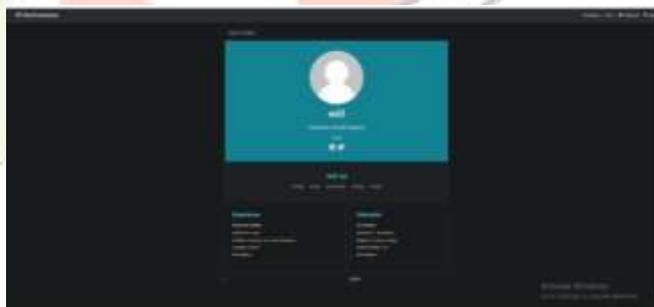
Step 7: Make a post

Users can engage with other developers and publish their thoughts.They can even like and dislike other developers' posts.

V . RESULT

An experiment was undertaken to see how fast the described stacks performed in developing a single page application. Two simple apps were developed with MERN and the loading, adding, updating, and removing times were measured. We've created an application that allows developers to interact with one another based on their knowledge of current technologies. They can also interact with one another by leaving comments, enjoying, and disliking posts. This project was completed using MERN, a cutting-edge technology. Finally, we used MERN to develop.

VI. CONCLUSIONS

The web application will expand and perform better with more study and mastery of new technologies, frameworks, and testing tools. Web development employing various technologies would be beneficial to many enterprises in India and around the world in the future, as it builds a digital ecosystem and makes doing business easier for everyone.

VII. ACKNOWLEDGMENT

REFERENCES

[1] Offifice for National Statistics, Internet users in the UK: 2016. Retrieved September 26, 2017, from https://www.ons.gov.uk/ businessindus tryandtrade/itandinternetindustry/bulletins/internetus ers/ 2016.

[2] Liang, L., Zhu, L., Shang, W., Feng, D., Xiao, Z. (2017). Express supervision system based on NodeJS and MongoDB.

[3] M. R. Solanki, A. Dongaonkar, A Journey of human comfort: web1.0 to web 4.0, International Journal of Research and Scientifific Innovation (IJRSI), Volume III, Issue IX, pp. 75-78, 2016

[4] Javeed, A. (2019). Performance Optimization Techniques for ReactJS. 2019

[5] J. M. Spool, Content and design are inseparable work partners, 2014. Retrieved September 29, 2017, fromhttps://articles.uie.com/ content and design.