FULL STACK PROJECT REPORT (2021-2022)

On "Post Adda"

Submitted by

Mahak Agrawal (191500432)

Isha Singh (191500355)

Department of Computer Engineering & Applications

Institute of Engineering & Technology



GLA University Mathura- 281406,INDIA



Department of computer Engineering and Applications GLA University, Mathura

17 km. Stone NH#2, Mathura-Delhi Road, P.O. – Chaumuha, Mathura – 281406

Declaration

We hereby declare that the work which is being presented in the Full Stack Project "Post Adda Website", in partial fulfillment of the requirements for Full Stack Project viva voce, is an authentic record of our own work carried by the team members under the supervision of our mentor Mr.Mandeep Singh.

Group Members:

- 1. Mahak Agrawal(191500432)
- 2. Isha Singh (191500355)

Course: B.Tech(Computer Science and Engineering)

Year: 3rd

Semester: 5th

Supervised By:

Mr. Mandeep Singh, Assistant Professor,

GLA University, Department of Computer Engineering & Application



Department of computer Engineering and Applications GLA University, Mathura

17 km. Stone NH#2, Mathura-Delhi Road, P.O. – Chaumuha, Mathura – 281406

Certificate

This is to certify that the above statement the best of my/our knowledge and belies	nts made by the candidates are correct to f.
Supervisor	
Mr. Mandeep Singh	
Technical Trainer	
Dept of CEA, GLA University	
ProjectCoordinator	ProgramCoordinator
(Mr.Mandeep Singh)	(Mr. Shashi Shekar)

About the Project

Our full stack project "Post Adda Website" is an online website. The main purposeofthisprojectistoUltimately all these objectives aim at customer satisfaction and emphasize user experience. Therefore, we can easily derive that the most important objective of Post Adda is to aim at better customer Experience. And to better customer experience, Post Adda helps to capture customer feedback and opinions. Consumer perspectives regarding the target products, once analyzed, would encourage and build consumer satisfaction and also help promote the growth of the consumer base.

During past several decades, therecords are supposed to be manually handled forall activities. The manualhandling of the recordistime consuming and highly pronetoerror. To improve the performance of the Social Media, the computerized website is to be undertaken. The basic need of this website is efficiency. The website should be efficient so that whenever a new user submithis or her details the website is updated Security is the main criteria for the proposed system. Since illegal access may corrupt the database. So security has to be given in this project.

The Collection of photos is known as post adda. We will try our best to make the complicated process of Post Adda as simple as possible. We will try to design the project in such a way that user may not have any difficulty in using this website and further expansion will also be possible without much effort.

Motivation

Motivation is a myth In the past decade, the internet has provided a lot of opportunities for growth, advancement, and exposure, as well as changes in American culture. Some which have had a negative connotation, and others which have been categorized as positive. One of the things that Post Adda and the Internet have allowed people to do, is to share their stories. The internet created an increasing number of motivational speakers, Post Adda Influencers, Life coaches and internet personalities that provide content to an audience of people who are either looking for tactics or words that touch and inspire them to do something. With that in mind the question becomes how effective is this approach? Is external motivation actually impacting lives or does the fact that we are being constantly bombarded with information make external motivation a façade? One can better identify the effectiveness of social media motivation through the Ideal definition of culture and Gary Vaynerchuck's take on motivation, combined with how people Gary's description of how people typically use motivation as. In the same token, one can gain a clear sense

Requirements

a). Software Requirements:

- Technology Implemented: Full Stack WebDevelopment
- Languages/Technologies Used: HTML, CSS,JavaScript,React,Express,React-Redux ,Mongodb,NodeJS
- IDE Used: Visual StudioCode
- Web Browser: GoogleChrome
- Netlify for frontend deployment
- Heroku for backend deployment
- GitHub: GitHub is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere. GitHub Repository: A GitHub repository can be used to store a development project. It can contain folders and any type of files (HTML, CSS, JavaScript, Documents, Data, Images). A GitHub repository should also include a license file and a README file about the project. A GitHub repository can also be used to store ideas, or any resources that you wantto share.
- Visual Studio Code: Visual Studio Code is a free source-code editor made by Microsoft for Windows, Linux and macOS. [7] Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git. Users can change the theme,keyboard shortcuts, preferences, and install extensions that add additional functionality. Microsoft has released Visual Studio Code's source code on the VS Code repository of GitHub.com, under the permissive MITLicense, while the compiled binaries are freeware.

b). Hardware Requirements:

• Processor Required: Inteli5

• Operating System: Windows10

• RAM: 8GB

• Hardware Devices: ComputerSystem

• Hard Disk:256GB

Acknowledgement

We thank the almighty for giving us the courage and perseverance in completing the project. This project itself is an acknowledgement for all those people who have given us their heartfelt co-operation in making this project a grand success. We extend our sincere thanks to Mr. Mandeep Singh, Assistant Professor at "GLA University, Mathura" for providing his valuable guidance at every stage of this project work. We are profoundly grateful towards the unmatched services rendered by him. And last but not least, we would like to express our deep sense of gratitude and earnest thanks giving to our dear parents for their moral support and heartfelt cooperation in doing the mainproject.

POST ADDA

Abstract

One click and you're done! Sharing on social media is as easy as clicking a single button.

But a little more effort gets you a lot better results. Especially in a super crowded space like social media, more time and attention on each social media post is the key to better engagement.

Let's start with an example of a social media post that combines all the elements we recommend. It's easy to imagine how this sample post would get more traction than just a simple share.

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Introduction

Full Stack development refers to creating and maintaining the part of the website that users directly interact with. Full Stack developers need to create a website's entire interface and user experience, as well as its design and overall look. They usually work with HTML, JavaScript, CSS, React, Express, NodeJS, React-Redux, Mongodb languages to create a basic layout of the website and then add various visual elements to improve its aesthetic quality and backend for data storing. Some of the most commonly performed tasks for a front-end developer include:

- Optimizingtheuser's experience on a website and making sure it's not interrupted by any design or functionality issues
- CreatingroughconceptsandusingHTML,CSSandJavaScripttomaterialize them
- Developinganeasy-to-useandintuitiveuserinterfaceandgradually improving it based on userfeedback
- Adaptingawebsite's design to look and function properly on mobile devices
- Making sure that a website looks and functions according to the same parameters regardless of the internet browser that the end-user chooses to open it with
- Helping with organizing and managing the entire softwareworkflow
- Constantlytestingthewebsite's frontend for ease of use and potential errors and optimizing it to ensure a smoother user experience
- Considering SEO practices when creating a website's frontend to ensure that it's correctly indexed by search engines and users have easier access to it.

HTML

Hypertext Markup Language (HTML) is a computer language that makes up most web pages and online applications. A hypertext is a text that is used to reference other pieces of text, while a markup language is a series of markings that tells web servers the style and structure of adocument.

HTML is not considered a programming language as it can't create dynamic functionality. Instead, with HTML, web users can create and structure sections, paragraphs, and links using elements, tags, and attributes.

CSS

Cascading Style Sheets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.

CSS handles the look and feel part of a web page. Using CSS, you can control the colourofthetext,thestyleoffonts,thespacingbetweenparagraphs,howcolumns are sized and laidout, what background images or colours are used, layout designs, variations in display for different devices and screen sizes as well as a variety of other effects.

CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the markup languages HTML or XHTML.

JAVASCRIPT

JavaScript runs on the client side of the web, which can be used to design / program how the web pages behave on the occurrence of an event. JavaScript is an easy to learn and also powerful scripting language, widely used for controlling web page behavior.

REACT

React is a declarative, efficient, and flexible JavaScript library for building user interfaces. It lets you compose complex UIs from small and isolated pieces of code called "components". React has a few different kinds of components, but we'll start with React. Component subclasses: class Shopping List extends React.

EXPRESS JS

js, or simply Express, is a back-end web application framework for Node. js, released as free and open-source software under the MIT License. It is designed for building web applications and APIs. It has been called the de facto standard server framework for Node.

NODEJS

Node. js (Node) is an open source development platform for executing JavaScript code server-side. Node is useful for developing applications that require a persistent connection from the browser to the server and is often used for real-time applications such as chat, news feeds and web push notifications.

MONGODB

MongoDB is an open source NoSQL database management program. NoSQL is used as an alternative to traditional relational databases. NoSQL databases are quite useful for working with large sets of distributed data. MongoDB is a tool that can manage document-oriented information, store or retrieve information.

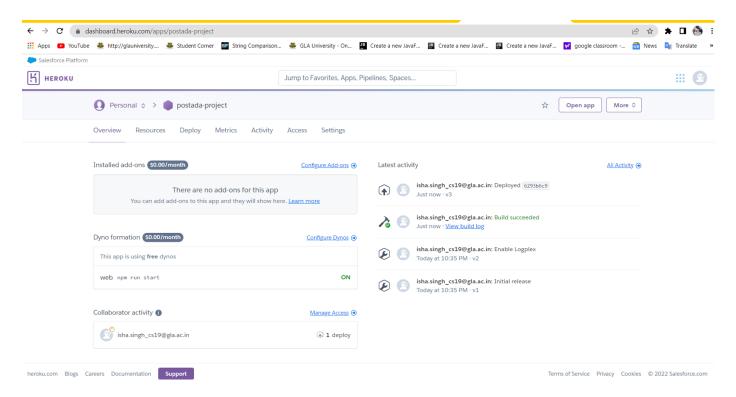
Pre-requisite

Hands-on knowledge of JavaScript, HTML, React, ExpressJS, NodeJS, Mongodb and CSS is essential before working on the concepts for making of webpages. Make sure that you have the browser or chrome installed and running before opening website.

Heroku

After the successful completion of our project, we deployed the backend on the site known as Heroku. The Heroku network runs the customer's apps in virtual containers which execute on a reliable runtime environment. Heroku calls these containers "Dynos". These Dynos can run code written in Node, Ruby, PHP, Go, Scala, Python, Java, or Clojure. Heroku also provides custom build packs with which the developer can deploy apps in any other language. Heroku lets the developer scale the app instantly just by either increasing the number of dynos or by changing the type of dyno the app runs in.

Here is the snapshot from the backend deployment:



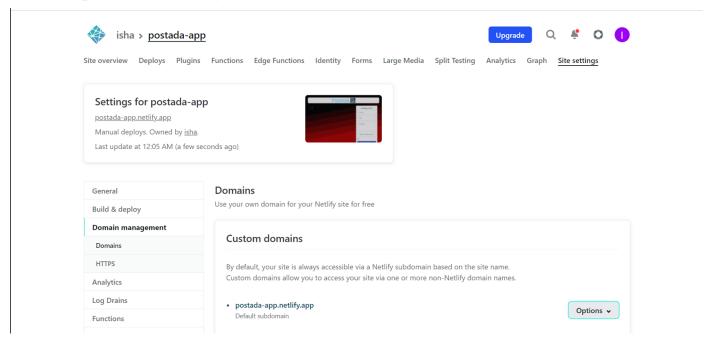
All records are stored:

Netlify

After the successful deployment of out project on backend we used the netlify platform to deploy our frontend. Netlify is a <u>San Francisco</u>-based <u>cloud computing</u> company that offers <u>hosting</u> and <u>serverless</u> <u>backend</u> services for <u>web applications</u> and <u>static websites</u>.

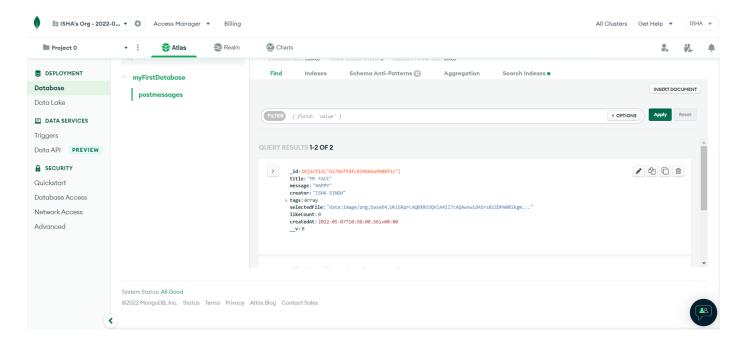
The company provides hosting for websites whose source files are stored in the <u>version</u> <u>control system Git</u> and then generated into static web content filesserved via a <u>Content Delivery Network</u>. Given the limitations of the purely static model, the company later expanded services to include <u>content management systems</u>, and features of <u>serverless</u> computingto handle websites with interactive features.

Some snapshots from netlify:

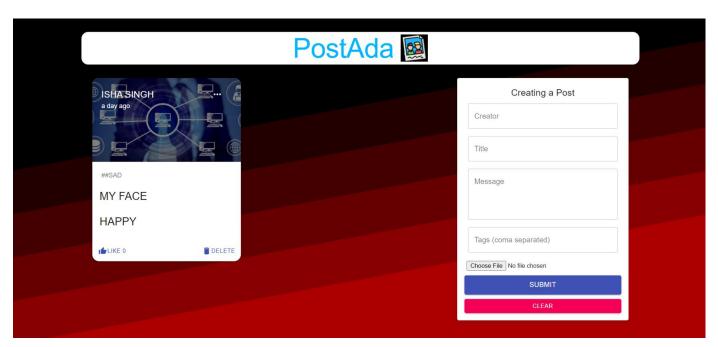


SNAPSHOTS FROM THE PROJECT

1. Project data stored at mongo DB cloud:



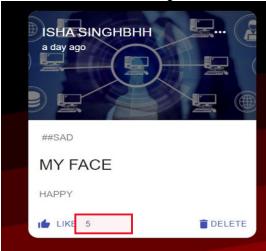
2.our project main page:



3. creating a post:



4. like feature on the post



SOFTWARE TESTING

Once source code has been generated, software must be tested to uncover as many errors as possible before delivery. It is very important to work the system successfully and achieve high quality of software. Testing includes designing a series of test cases that have a high likelihood of finding errors by applying software-testing techniques. System testing makes logical assumptions that if all the parts of the system are correct, the goal will be successfully achieved. The system should be checked logically. Validations and cross checks should be there. Avoid duplications of record that cause redundancy of data. In other Words, Testing is the process of evaluating a system or its component(s) with the intent to find whether it satisfies the specified requirements or not. It is executing a system

The preliminary goal of implementation is to write source code and internal documentation so that conformance of the code to its specifications can be easily verified, and so that debugging, testing and modifications are eased. This goal can be achieved by making the source code as clear and straightforward as possible. Simplicity, clarity and elegance are the hallmark of good programs, obscurity, cleverness, and complexity are indications of inadequate design and misdirected thinking. Source code clarity is enhanced by structured coding techniques, by good coding style, by, appropriate supporting documents, by good internal comments, and by feature provided in modern programming languages. The implementation team should be provided with a well-defined set of software requirement, an architectural design specification, and a detailed design description. Each team member must understand the objectives of implementation.

TERMINOLOGY

Error The term error is used in two ways. It refers to the difference between the actual output of software and the correct output, in this interpretation, error is essential a measure of the difference between actual and ideal. Error is also to used to refer to human action that result in software containing a defect or fault.

Fault is a condition that causes to fail in performing its required function. A fault is a basic reason for software malfunction and is synonymous with thecommonly used termBug.

Failure is the inability of a system or component to perform a required function according to its specifications. A software failure occurs if the behavior of the software is the different from the specified behavior. Failure may be caused due to functional or performance reasons.

TYPES OF TESTING

- a. Unit Testing The term unit testing comprises the sets of tests performed by an individual programmer prior to integration of the unit into a larger system. A program unit is usually small enough that the programmer who developed it can test it in great detail, and certainly in greater detail than will be possible when the unit is integrated into an evolving software product. In the unit testing the programs are tested separately, independent of each other. Since the check is done at the program level, it is also called program teasing.
- **b. Module Testing** A module and encapsulates related component. So can be tested without other system module.
- **c. Subsystem Testing** Subsystem testing may be independently design and implemented common problems are sub-system interface mistake in this checking we concern on it. There are four categories of tests that a programmer will typically perform on a program unit.
- i Functional test
- ii Performance test
- iii Stress test
- iv Structure test

Functional Test Functional test cases involve exercising the code with Nominal input values for which expected results are known; as well as boundary values (minimum values, maximum values and values on and just outside the functional boundaries) and special values.

Performance Test Performance testing determines the amount of execution time spent in various parts of the unit, program throughput, response time, and device utilization by the program unit. A certain amount of avoid expending too much effort on fine-tuning of a program unit that contributes little to the overall performance of the entire system. Performance testing is most productive at the subsystem and system levels.

Stress Test Stress test are those designed to intentionally break the unit. A great deal can be learned about the strengths and limitations of a program by examining the manner in which a program unit breaks.

Structure Test Structure tests are concerned with exercising the internal logic of a program and traversing particular execution paths. Some authors refer collectively to functional performance and stress testing as "black box" testing. While structure testing is referred to as "white box" or "glass box" testing. The major activities in structural testing are deciding which path to exercise, deriving test date to exercise those paths, determining the test coverage criterion to be used, executing the test, and measuring the test coverage achieved when the test cases are exercised.

Conclusion

- We have completed our project within time limit with the coordination of our team members under the supervision of our mentor Mr. Mandeep Singh.
- Our project repository is available at

https://github.com/ishasingh23/MERNstack-project

• Our project live website link is

https://postada-app.netlify.app/

Bibliography

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