Ewing Christian College, Prayagraj

SOCIAL MEDIA WEB APP FOR STUDENTS

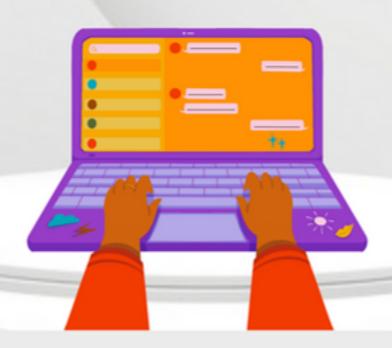
using











Abhijeet Kushwaha (ECC1905046) Ashish Bhushsan Kumar (ECC1905017)

Contents of Project

- 1. Title of the Project
- 2. Purpose of the Project
- 3. Scope of the Project
- 4. System Analysis
- 4. Tools/Platform
- 5. About HTML
- 6. About Chakra UI
- 7. About Javascript
- 8. About NodeJS
- 9. About NextJS
- 10. About MongoDB
- 11. Project on Production
- 12. Conclusion

Title of the Project



Title of the project is "Incampus Social Platform for Students". This project is hosted on VERCEL as a web app so that this app can run and be available 24/7.

It was developed in HTML, ChakraUI, NextJS and all the user data is stored on MongoDB Atlas database

This project was submitted by-

ASHISH BHUSHAN KUMAR ECC1905017 ROLL NO. 263011 ABHIJEET KUSHWAHA ECC1905046 ROLL NO. 263012

Purpose of the Project

Now-a-days the need for higher education institutions to a have a reliable, effective and attractive web presence is increasing as online technology is becoming an important part of the educational process. The higher education institutions play a vital role in the development of a society while higher education websites have a lot of roles to fill. They need to provide information for prospective students , current students, parents of students, Faculty and alumni. They often need to include reams of information in a way that makes everything easy to explore and its a great challenge. And, thus to overcome this challenege we have created a platform called

THE COLLEGE SOCIAL MEDIA so that all indivisuals of a institution from parents to alumini remain under one roof, connected to each other.

CERTIFICATE

This is to certify that

Ashish Bhushan Kumar

and Abhijeet Khushwaha students of B.Sc
(PCAM) have succesfully completed their
project of Semester VI on the topic

"Incampus Social Platform for Students"
with Project id 3.

Under the guidance of
Er. Sonu Kumar Pandey.

Scope of the Project

Social media is an internet-based form of communication. Social media platforms allow users to have conversations, share information and create web content. There are many forms of social media, including blogs, microblogs, wikis, social networking sites, photo-sharing sites, instant messaging, video-sharing sites, podcasts, widgets, virtual worlds, and more.Billions of people around the world use social media to share information and make connections. On a personal level, social media allows you to communicate with friends and family, learn new things, develop your interests, and be entertained and stay up to date with latest information.

Keeping all this things in mind we came with the idea of creating a Social Media platform for Colleges so that there is a continuous flow of information between parents ,students, teachers and alumini.



System Analysis

• Existing System

The System that exists today is quite distributed and non even in nature, if we see closely we have all the features available but in a very unorganised fashion.

We have tools to communicate with our colleagues and batchmates and teachers but they have n number of groups on various social media platforms like whatsapp, telegram etc...

When it comes to information about college and any event of sorts we have our college websites but it's not as efficient as it can be and not all the students get informed in time and apart from that thereis no platform for exchanging information regarding events and other non official activities of the college which is also a part of student lives.

When we put light on the resources available to students, sure we have teachers and their lectures but still student may need some extra materials of enhance their knowledge and often it gets very hard for students to get them, they may ask them from their seniors or somehow arrange it through their batchmates etc...

in simpler terms, it's quite hefty work to even get the study material and resources regarding the course for students.

And finally when we see one of the most important things in college life i.e Alumnis we have little to no knowledge or contact to our senior and our previous batches, as they are very essential to students in providing knowledge and help them from the experience they have gained throughout their time and even real world job experiences etc... which will be very beneficial to students, sadly we do not have any such system in place to record our alumnuus.

Proposed System

The proposed system will cover all the caveats of the existing system in a very efficient way or atleast try to do so.

Firstly the system will have an integrated chat and information system on the webpage so that all the members such as faculty, teachers and students are all in one place and no one has to take roundabouts of different types of messaging apps and such things just to communicate with each other.

As we mentioned the notices and the information regarding college activities will all be there in a centralised panel and visible to all members with admin access to some people to maintain it hence securing it from uneccesary information being floating out.

This web app will also feature a dedicated section for resources that would be strored in a database of a mongoDB atlas cluster which will be accesible for the students 24*7.

and we will be also featuring a portal for alumnis of the college grouped by their subjects and streams so their respective juniors can take advantage of their knowledge adn experience.

and by doing all this we expect that our system will higly improve the current situation.

Tools/Platform

Visual Studio Code:-

It is a source-code editor made by Microsoft for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git.



Javascript :-

JavaScript, often abbreviated JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. Over 97% of websites use JavaScript on the client side for web page behavior, often incorporating third-party libraries.



Node.js:-

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.



Next.js :-

Next.js is an open-source web development framework built on top of Node.js enabling React based web applications functionalities such as server-side rendering and generating static websites.



Chakra UI :-

Chakra UI is a React components library with built-in accessibility. It comes with a modern-looking design system that's easily extendable and configurable. The simple styling API significantly reduces development time, so developers can quickly prototype their ideas and achieve the desired style and "brand" by editing a single file.



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.



About HTML

The **HyperText Markup Language or HTML** is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as **Cascading Style Sheets (CSS)** and scripting languages such as **JavaScript**.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as
img/> and <input/> directly introduce content into the page. Other tags such as
surround and provide information about document text and may include other tags as subelements. Browsers do not display the HTML tags but use them to interpret the content of the page.

About Chakra Ul

Chakra UI is a component-based library. It's made up of basic building blocks that can help you build the front-end of your web application.

It is customizable and reusable, and most importantly it supports ReactJs, along with some other libraries too.

Chakra UI supports Reactjs, and every component is customizable using the Style props. They map to almost all necessary CSS properties that are available.

For example, for margin-top in CSS, you would write it as

<Text mt={8} >. This will set a top margin of 8px on the selected element.

Chakra UI is inspired by TailwindCSS's color palette, so you can find all your favorite colors!

About Javascript

JavaScript (often shortened to JS) is a lightweight, interpreted, object-oriented language with first-class functions, and is best known as the scripting language for Web pages, but it's used in many non-browser environments as well. It is a prototype-based, multi-paradigm scripting language that is dynamic, and supports object-oriented, imperative, and functional programming styles. 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.

JavaScript can function as both a procedural and an object oriented language. Objects are created programmatically in JavaScript, by attaching methods and properties to otherwise empty objects at run time, as opposed to the syntactic class definitions common in compiled languages like C++ and Java. Once an object has been constructed it can be used as a blueprint (or prototype) for creating similar objects.

About 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. Node.js lets developers use JavaScript to write command line tools and for server-side scripting—running scripts server-side to produce dynamic web page content before the page is sent to the user's web browser. Consequently, Node.js represents a "JavaScript everywhere" paradigm, unifying web-application development around a single programming language, rather than different languages for server-side and client-side scripts.

Node.js has an event-driven architecture capable of asynchronous I/O. These design choices aim to optimize throughput and scalability in web applications with many input/output operations, as well as for real-time Web applications (e.g., real-time communication programs and browser games).

About NextJS

Next.js is a flexible React framework that gives you building blocks to create fast web applications.

But what exactly do we mean by this? Let's spend some time expanding on what React and Next.js are and how they can help.

Building Blocks of a Web Application

There are a few things you need to consider when building modern applications. Such as:

- User Interface how users will consume and interact with your application.
- Routing how users navigate between different parts of your application.
- Data Fetching where your data lives and how to get it.
- Rendering when and where you render static or dynamic content.
- Integrations what third-party services you use (CMS, auth, payments, etc) and how you connect to them.
- Infrastructure where you deploy, store, and run your application code (Serverless, CDN, Edge, etc).
- Performance how to optimize your application for end-users.
- Scalability how your application adapts as your team, data, and traffic grow.
- Developer Experience your team's experience building and maintaining your application.

For each part of your application, you will need to decide whether you will build a solution yourself or use other tools such as libraries and frameworks.

About MongoDB

MongoDB is a non-relational document database that provides support for JSON-like storage. The MongoDB database has a flexible data model that enables you to store unstructured data, and it provides full indexing support, and replication with rich and intuitive APIs.

Below is an example of a JSON-like document in a MongoDB database:

```
JSON
{
company_name: "ACME Limited Foodstuffs",
address: {street: "1212 Main Street",
city: "Springfield"},
phone_number: "1-800-0000",
industry: ["food processing", "appliances"]
type: "private", number_of_employees: 987
}
```

MongoDB has become popular with developers in part due to the its intuitive API, flexible data model, and features that include:

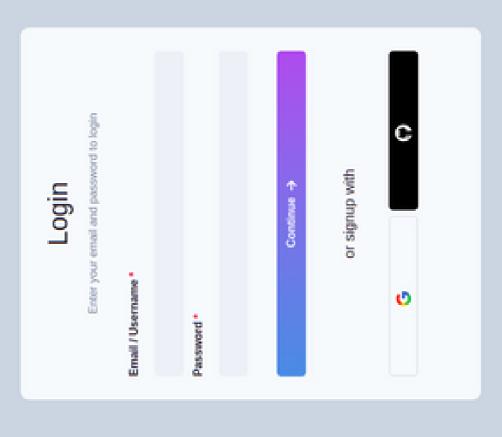
- Ad-hoc queries: MongoDB supports field, range, and regular-expression queries which can return entire documents, specific fields of documents, or random samples of results.
- **Indexing:** Fields in a MongoDB document can be indexed with primary and secondary indices. MongoDB supports a number of different index types, including single field, compound (multiple fields), multikey (array), geospatial, text, and hashed.
- **Replication:** MongoDB provides high availability with replica sets including two or more copies of the data. Writes are handled by the primary replica, while any replica is capable of serving read requests. If the primary replica fails, a secondary replica is promoted to become the primary replica.

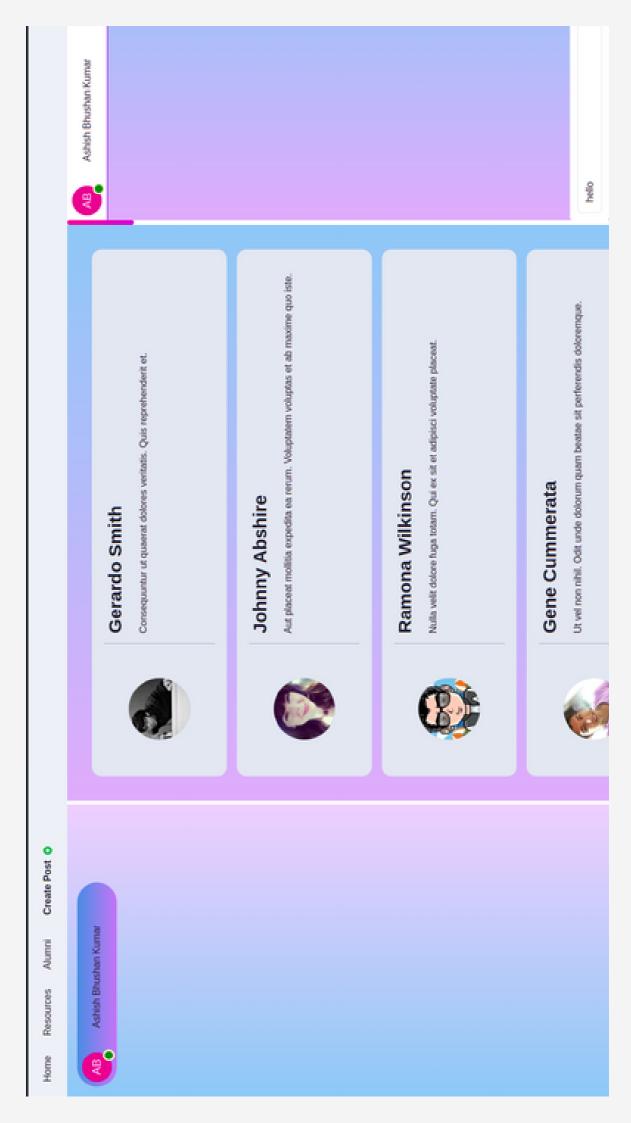
Project on production

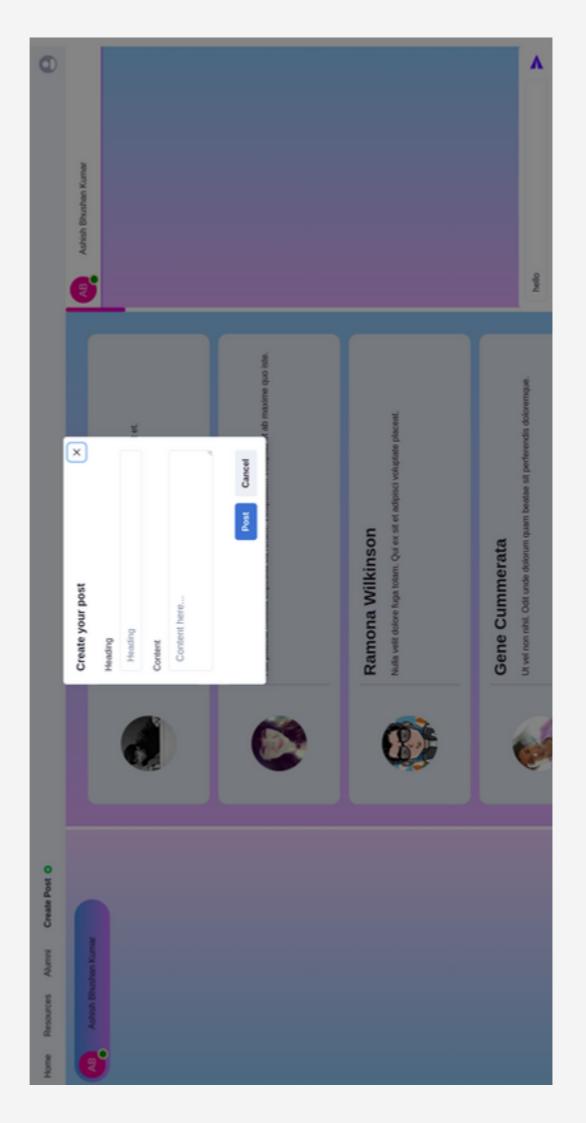
Hello, your batchmates are waiting for you!!!

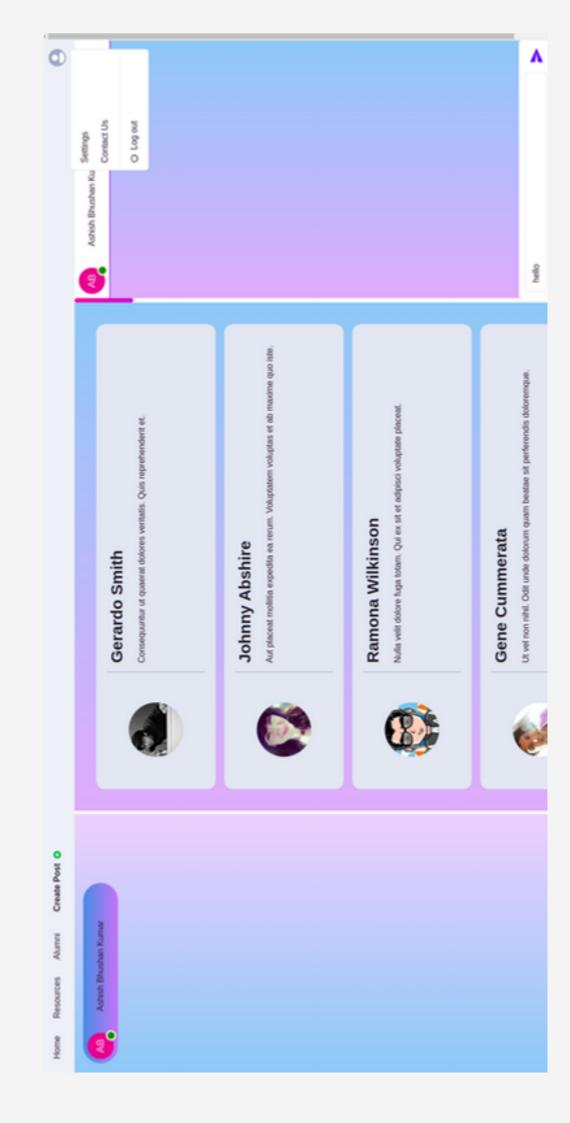
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Conclusion

It has been a matter of immense delight, respect and challenge to have this opportunity to take up this venture and complete it effectively. It was a pleasant experience working with the professors.

This will be helpful when we are going work in industry & educational field where we can put all these it in our practice.

While creating this web app have learnt a part about the working of system. Amid the development process, | have got it the concept of planning and building a system.

Whereas working on my framework | have utilized all the information which was instructed us and all that produces this project complete.

Our project is only a humble venture to satisfy the needs . Several user-

friendly coding has also adopted. This package shall prove to be a_ powerful package in satisfying all the requirements