SOCIAL MEDIA WEBSITE USING JAVASCRIPT / HTML / CSS / REACT.JS/ FIREBASE

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INTRO/DESC

Social Media plays a crucial role in connecting people and developing relationships, not only with key influencers and journalists covering your company's sector, but also provides a great opportunity to establish customer service by gathering input, answering questions and listening to their feedback.
In this project we have tried to make a social media type of website. In this website we have used React.JS, HTML, CSS for Front end Development and Firebase is used as the Backend for the project.
Following are the functionality that will be provided in our project:

- Sign Up
- Log In and Log Out
- Posting a Social Media Post
- Add Caption to the Post
- Comment on a Post
- Firebase Authentication
- Interactive Interface
- Posting Your Fleet

CHAPTER 1.2: BRIEF INTRO OF ALL THE API'S AND COMPONENTS USED (DESCRIPTION)

HTML5

Hypertext Markup Language 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 and scripting languages such as JavaScript

CSS3

Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript

JavaScript

JavaScript, often abbreviated as JS, is a programming language that conforms to the ECMAScript specification. JavaScript is high-level, often just-in-time compiled, and multi-paradigm. It has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and first-class functions

CHAPTER 1.2: BRIEF INTRO OF ALL THE API'S AND COMPONENTS USED (DESCRIPTION)

React.js

Node.js

FireBase

React is an open-source, front end, JavaScript library for building user interfaces or UI components. It is maintained by Facebook and a community of individual developers and companies. I have used react.js for writing my program. In react we have to write code in JSX format and later it gets converted to respective JavaScript by Babel Compiler

Node.js is an open-source, cross-platform, back-end, JavaScript runtime environment that executes JavaScript code outside a web browser. I have used node.js for creating a runtime environment for my project

Firebase is a platform developed by Google for creating mobile and web applications. It was originally an independent company founded in 2011. In 2014, Google acquired the platform and it is now their flagship offering for app development. I have used Firebase in this project for hosting my website and I am planning to use the database feature of Firebase in future for maintaining the database for my app

INNOVATIVE COMPONENT (USE OF FIREBASE AS OUR DATABSE)

Authentication

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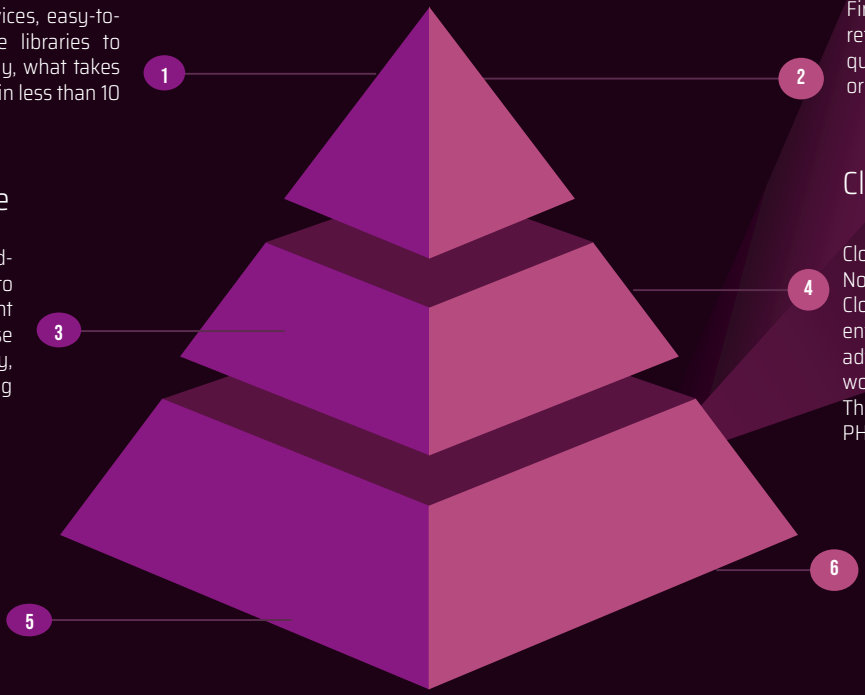
Firebase Authentication provides backend services, easy-to-use SDKs, and out-of-the-box user interface libraries to authenticate users of your application. Normally, what takes months to build i.e. authentication. We can do it in less than 10 lines of code using FIREBASE

Firebase Realtime Database

Realtime Database is essentially a NoSQL cloud-storage that can be connected with the application to provide real time access to the data across different platforms. One of the advantages is that the database can work offline, caching the data in device memory, and after reconnecting to the internet, synchronizing it.

Google Analytics

Google Analytics comes first as it's a well-known tool integrated into Firebase platform. Google Analytics provides valuable metrics about your user retention, user engagement rates, or any other type of user behavior data. In terms of Firebase, the reporting capabilities are unlimited and free. You can choose which events to track, and integrate it with analytical partners that names 52 companies on the integration page.



Firebase Database Query

Firebase has simplified the process of retrieving specific database data through queries. Queries are created by chaining one or more filtering methods

Cloud Firestore

Cloud Firestore is another cloud-hosted real-time NoSQL database. Unlike Firebase Realtime Database, Cloud Firestore is designed for enterprise use, which entails scalability, complex data models, and advanced querying options. There are SDKs for working with server-side code of both databases. These are available for Python, Node.js, Golang, Ruby, PHP, Java, .NET, and C#.

Cloud Storage

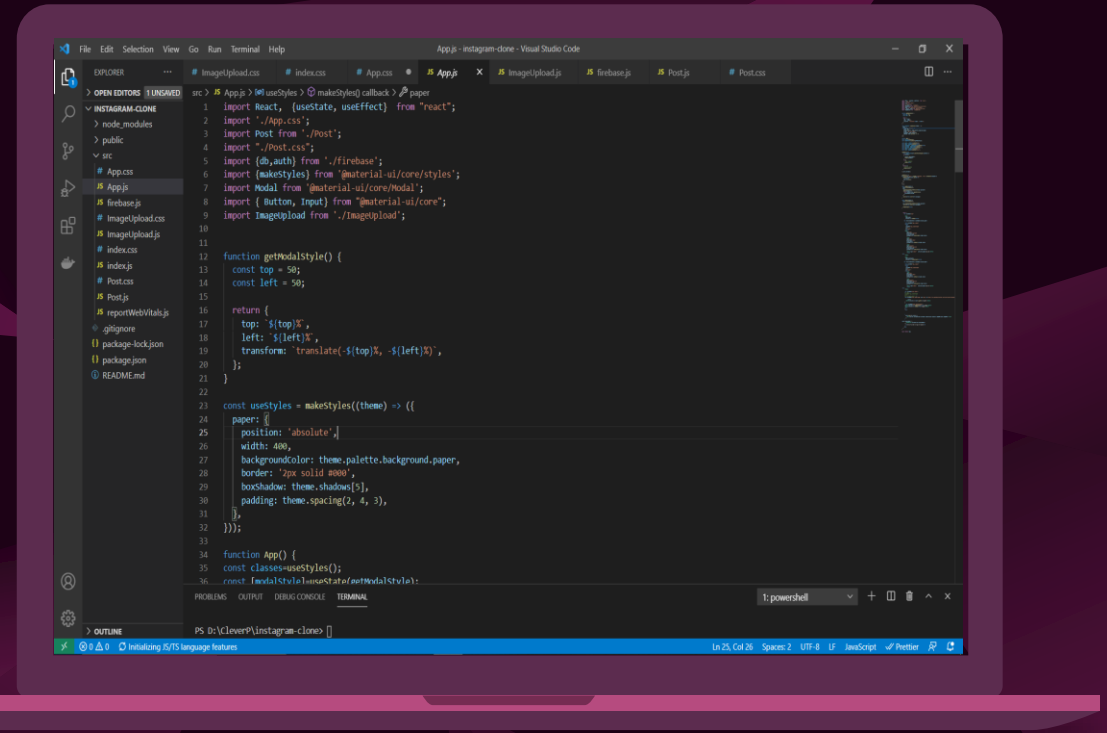
Cloud Storage is basically a Google Cloud for in-app user generated content, like photo, audio, or video files.

WORK DONE TILL 1ST REVIEW

WORKED ON THE FRONT-END

We started learning about Google's Firebase. All the features that firebase offers were briefly Learned by us. Then we started working on the Front end part of the website.

Some snapshot of that is given on the side



WORK DONE TILL 1ST REVIEW

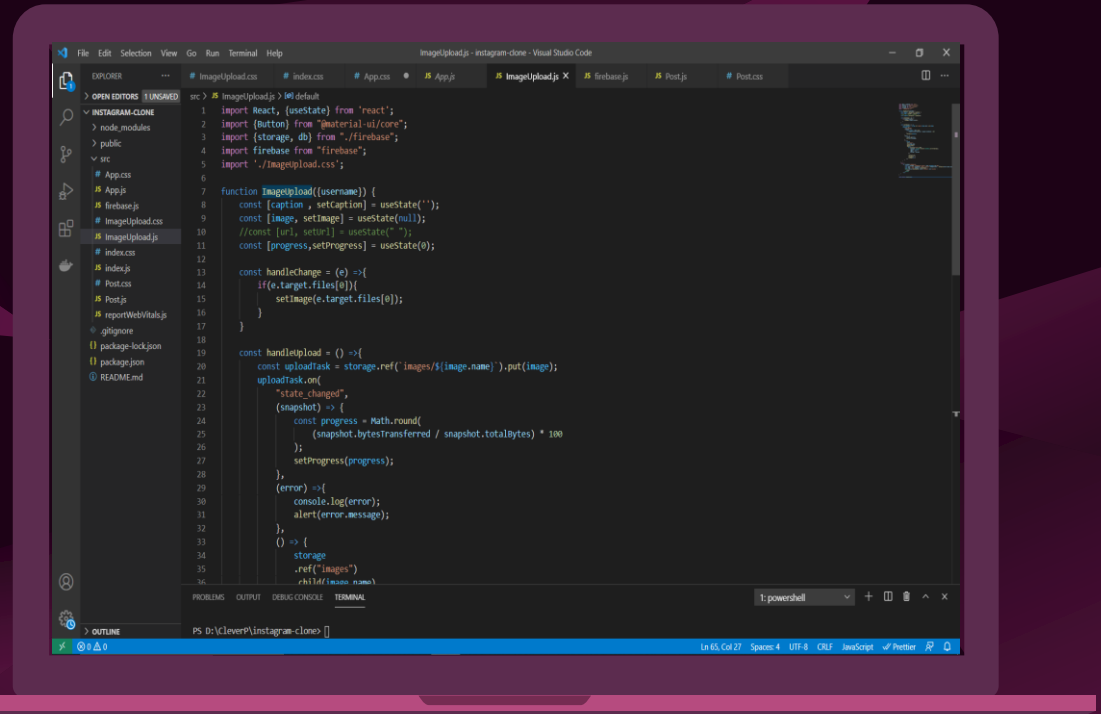
WORKED ON THE FRONT-END

We started learning about Google's Firebase. All the features that firebase offers were briefly Learned by us. Then we started working on the Front end part of the website.

We had completed the login logout functionaility.

We also decided the layout of the database and things we needed to keep inside our database during the first review.

Some snapshot of that is given on the side



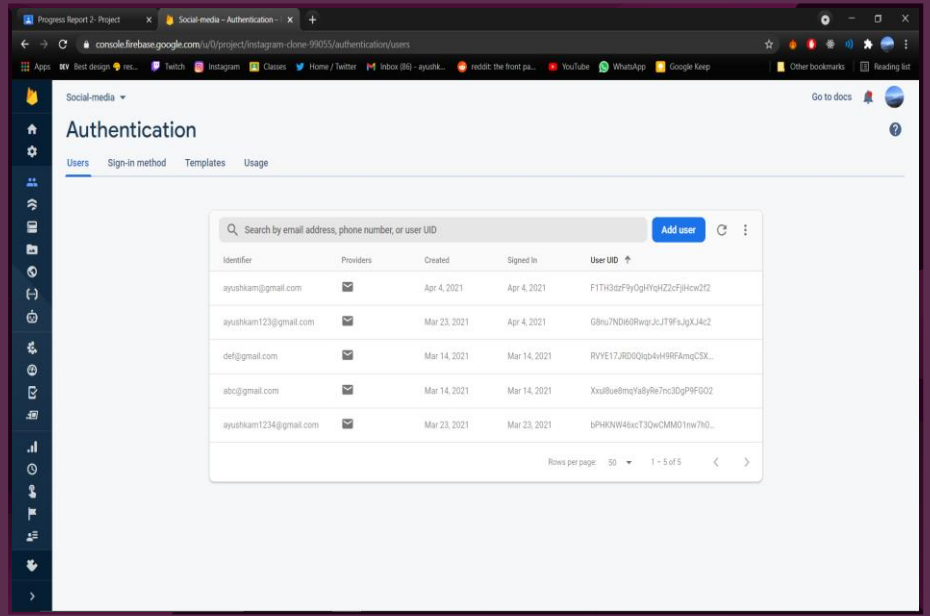
WORK DONE AFTER 1ST REVIEW

WORKING ON THE BACKEND AND FIREBASE

We learnt whatever was necessary to implement The things needed for this project. We created the Backend of this project on firebase. We also crea-Ted our database inside of the firebase and conn-ected the website to authenticate upload and post images to the website.

NoSql database of Firebase called Firestore Was implemented

Signup and Signout feature was implemented



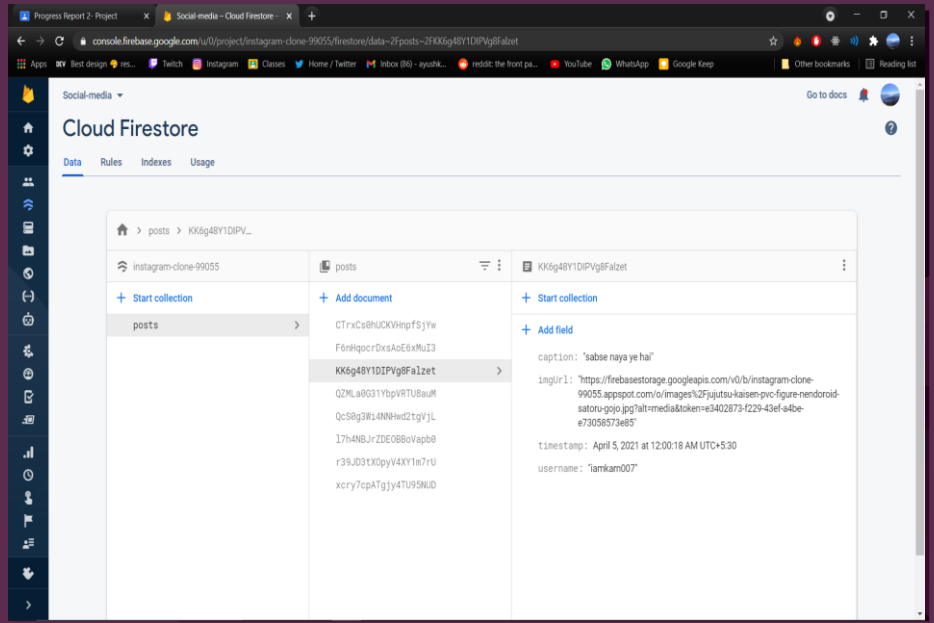
WORK DONE AFTER 1ST REVIEW

WORKING ON THE BACKEND AND FIREBASE

NoSql database of Firebase called Firestore
Was implemented.

Collection of posts was made. Inside the collection
We stored our documents that included fields and
Their respective datatypes. Such as caption as text
imageURL as a URL of the image to be uploaded
Timestamp for storing date and time of the image
And username who uploaded the image

Posting the photo feature was implemented.

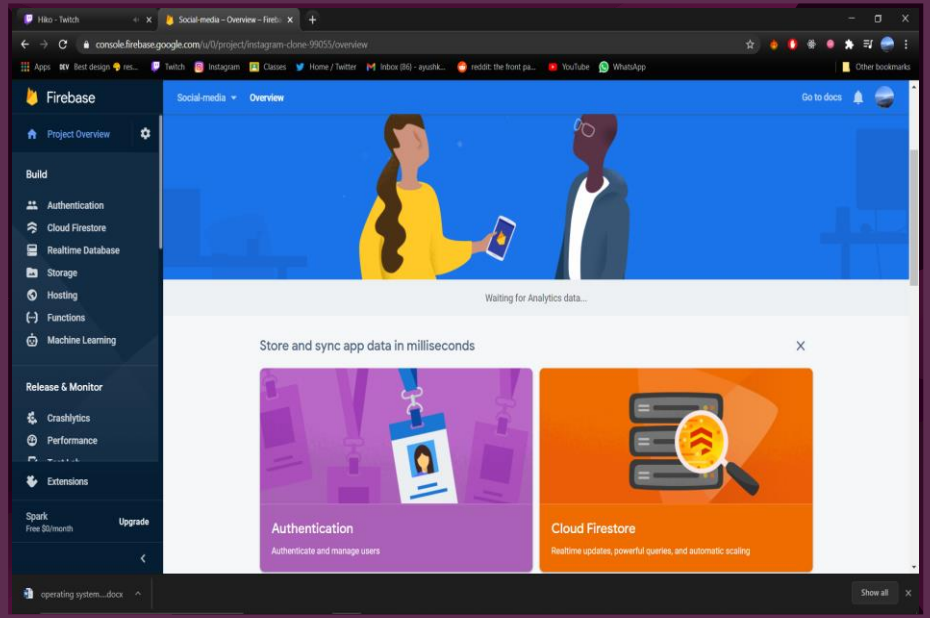


WORK IN FUTURE/WHAT'S NEXT

COMPLETE THE WORK ON FIREBASE

Currently we have a website that is hosted on the local host. We are planning to host the website on Google's firebase as firebase also gives us the functionality to host the website.

The post that are posted by a user is not arranged according to the timestamp for now but we will be working on that feature so that posts are arranged on the basis of time of upload

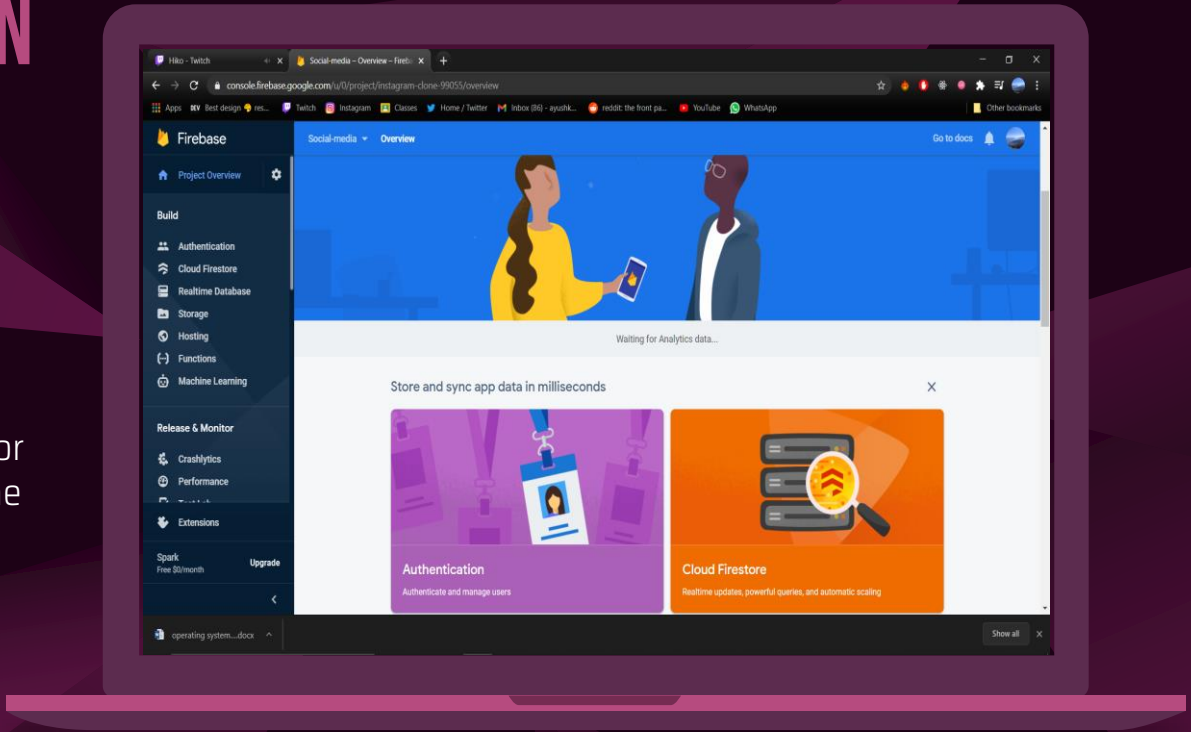


WORK IN FUTURE/WHAT'S NEXT

COMPLETE THE WORK ON FIREBASE

We will be working on the css part of the project too as our website needs to look decent.

Finally we will add the feature to comment or add a caption to the post so that it makes the website a little bit interactive.



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