NPRENEUR - THE ENTREPRENEUR WEBSITE

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Abstract: NPRENEUR is a user-friendly web project that serves as a social media platform exclusively for entrepreneurs. It offers a space where entrepreneurs can showcase their creativity by uploading and sharing their ideas, gadgets, and valuable information. The platform aims to foster a supportive community for entrepreneurs and facilitate connections with potential investors. NPRENEUR allows entrepreneurs to post content in three formats: gadgets, ideas, or informative articles. This flexibility enables them to present their work in a way that resonates with their target audience. Moreover, the platform facilitates direct communication between entrepreneurs and interested investors, providing opportunities for collaboration and investment. The platform encourages engagement by allowing users to like and comment on entrepreneurs' posts, enabling valuable feedback and discussions. This interactive environment creates a nurturing ecosystem that promotes knowledge-sharing and growth within the entrepreneurial community. NPRENEUR specifically caters to the needs of small entrepreneurs, offering a centralized hub for content sharing, networking, and potential funding opportunities. By connecting entrepreneurs and providing avenues for collaboration, NPRENEUR empowers them to thrive in their respective industries.

Index Terms: Entrepreneurship, Social media, platform, Creativity, Ideas, Gadgets, Information sharing.

I. Introduction:

In the ever-evolving landscape of entrepreneurship, the journey from idea to realisation often hinges on access to resources, support networks, and opportunities for collaboration. Recognizing this need, NPRENEUR emerges as a beacon of innovation—a user-friendly web platform designed exclusively for entrepreneurs.

At its core, NPRENEUR serves as more than just a social media platform; it's a vibrant community where entrepreneurial spirits converge to showcase their ingenuity, share insights, and forge meaningful connections. Whether you're a seasoned innovator or just embarking on your entrepreneurial journey, NPRENEUR offers a space where creativity knows no bounds.

The versatility of NPRENEUR lies in its intuitive interface, allowing entrepreneurs to effortlessly share their ideas, gadgets, and valuable insights in three distinct formats: gadgets, ideas, or informative articles. This flexibility empowers users to tailor their content presentation to resonate with their target audience, fostering engagement and sparking discussions.

But NPRENEUR is more than just a digital stage—it's a catalyst for collaboration and growth. By facilitating direct communication between entrepreneurs and potential investors, the platform opens doors to funding opportunities and strategic partnerships. Through likes, comments, and shared experiences, NPRENEUR cultivates a supportive ecosystem where feedback flows freely, enriching the entrepreneurial journey for all involved.

In particular, NPRENEUR caters to the needs of small entrepreneurs, providing a centralized hub for content sharing, networking, and access to funding. Whether you're seeking validation for your latest innovation or searching for like-minded collaborators.

The objective of NPRENEUR is to create a user-friendly web platform exclusively for entrepreneurs, providing a supportive community where they can showcase their creativity, share valuable insights, and forge connections with potential investors. By offering a space for content sharing, networking, and collaboration, NPRENEUR aims to empower small entrepreneurs to thrive in their respective industries and foster a culture of innovation and growth within the entrepreneurial community.

II. Literature Survey:

Title : Building a social network with MERN stack.

Author : Balasubramani,S.(2019).

Abstract: This research uses the MERN stack to show how to design and create a social networking site with a convenient and acknowledging user interface. The app's achievement and scalability are assessed by the authors, who also go into the advantages and drawbacks of adopting the MERN stack for this kind of work.

Title : Building a social media application with the MERN stack.

Author : Moon, J. (2019).

Abstract: This research uses the MERN stack to show how to design and create a social networking site with a user-friendly and responsive user interface. The app's performance and scalability are assessed by the authors, who also go into the advantages and drawbacks of adopting the MERN stack for this kind of task.

Dependencies Installed

To build the social media app using the MERN stack, various dependencies were installed in the Visual Studio Code (VS Code) integrated development environment. These dependencies provided the necessary tools and frameworks for building and running the app. In this section, we will discuss the key dependencies that were installed, their purpose, and how they were used to develop the social media app.

1) Express

It is a minimal and flexible Node.js web application framework which gives a set of robust features for building single-page, multi-page, and hybrid web applications. It provides a simple and easy-to-use API for routing, handling HTTP requests, and handling middleware. To use it, you need to install it using npm and require it in your server.js file.

2) React:

It is a JavaScript library for building user interfaces. It provides a declarative and efficient way to build reusable UI components and manage the state of your application. It is used to build the front-end of your application and can be integrated with your Node.js backend using various APIs like RESTful API or GraphQL.. To use it, you need to install it using npm and create React components in your front-end code.

3) Mongoose:

It is an Object Data Modeling (ODM) library for MongoDB and Node.js. It provides a schema-based solution to model your application data. It provides several built-in data types and validators, and you can also create custom validators. To use it, you need to install it using npm, require it in your server.js file, and connect it to your MongoDB database.

4) Nodemon

It is a tool that helps in developing Node.js-based applications by automatically restarting the server whenever changes are made in the code. It saves developers time and effort by reducing the need to manually restart the server after every code change.

5) CORS

It stands for Cross-Origin Resource Sharing and is a middleware that allows web applications to access resources from different domains. It enables cross-origin requests from the client-side and can be used to secure your server from cross-site request forgery (CSRF) attacks. To use it, you need to install it using npm and add it as middleware in your server.js file.

6) Body-Parser

It is a middleware that parses incoming request bodies in a middleware and makes it available under req.body property. It can handle JSON, raw text, URL-encoded, and various other data formats. To use it, you need to install it using npm and require it in your server.js file.

ExistingSystem:

Imagine a bustling digital square where entrepreneurs gather to showcase their latest innovations, exchange insights, and form invaluable connections—that's NPRENEUR. In this dynamic online ecosystem, entrepreneurs from around the globe converge to share their ideas, gadgets, and informative articles, each contribution adding a unique flavor to the vibrant tapestry of innovation.

At the heart of NPRENEUR lies its commitment to fostering a supportive community for small entrepreneurs. Through a user-friendly interface, members can effortlessly navigate the platform, discovering new ideas, engaging with fellow innovators, and exploring potential collaboration opportunities. Whether you're a seasoned entrepreneur looking to expand your network or a newcomer seeking validation for your latest venture, NPRENEUR offers a welcoming space where creativity knows no bounds.

But NPRENEUR is more than just a digital showcase—it's a catalyst for meaningful connections. Through direct communication channels, entrepreneurs can connect with potential investors, opening doors to funding opportunities and strategic partnerships. Likes, comments, and shared experiences abound, creating an interactive environment where feedback flows freely, enriching the entrepreneurial journey for all involved.

In a world where innovation drives progress, NPRENEUR stands as a testament to the power of collaboration and community. Join us on this exciting journey and unlock the potential of your entrepreneurial endeavors.

III. Proposed System:

The proposed system of NPRENEUR presents a comprehensive solution tailored to the needs of entrepreneurs seeking to showcase their innovations and connect with investors. At its core lies a user-friendly interface, enabling seamless navigation and interaction with various content categories such as gadgets, ideas, and informative articles. Direct communication channels facilitate networking and collaboration opportunities, while robust feedback mechanisms foster community engagement and idea refinement. With personalized search and discovery features, users can easily find relevant content and connect with like-minded individuals across devices. Upholding strict security and privacy standards, NPRENEUR ensures a safe and inclusive environment for entrepreneurial endeavours. Through continuous improvement and support resources, the platform remains responsive to user feedback, striving to be a leading hub for entrepreneurial innovation and collaboration.

System Design:
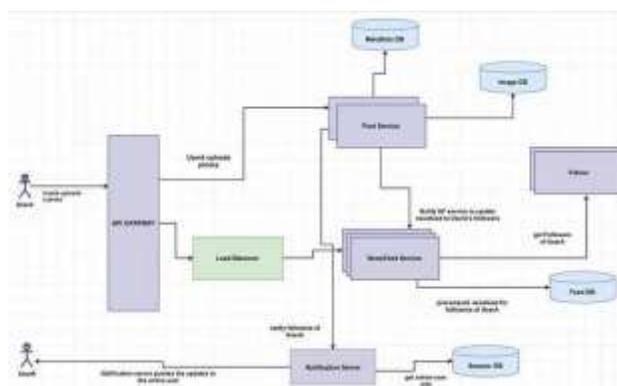
1. **Frontend:**
   - **User Interface:** Responsive web design for seamless user experience.
   - **Content Display:** Dynamic rendering of gadgets, ideas, and articles.
   - **Engagement Features:** Like and comment functionalities for user interaction.
2. **Backend:**
   - **Database Management:** Storage of user profiles, posts, and engagement data.
   - **Content Management:** Categorization and retrieval of gadgets, ideas, and articles.
   - **User Authentication:** Secure login and registration process.
3. **Networking:**
   - **Direct Messaging:** Facilitating communication between entrepreneurs and investors.
   - **Collaboration Opportunities:** Matching users for potential partner.

Data Management and Storage

Firebase, a cloud-based real-time database, was chosen as the data storage solution for the NPRENEUR project. Firebase offered a NoSQL database system that provided real-time synchronization and automatic scaling. The database design involved appropriate data modeling, structuring data into collections and documents, to optimize data retrieval and minimize redundancy. Firebase provided authentication mechanisms to secure user accounts and control access to data. Firestore, a component of Firebase, was used for efficient storage and retrieval of user-generated content, including gadgets, ideas, and information posts.

Algorithm:

Search Algorithm

It is used in a social media website for entrepreneurs and would typically involve indexing and retrieving relevant content based on user queries. Here's a high-level overview of a common search algorithm:

Filtering and Sorting: The algorithm may apply additional filters based on user preferences or criteria, such as content type, location, date range, or specific categories. The filtered and sorted results are then presented to the user, typically in a list or grid format.

Continuous Improvement: The search algorithm can incorporate user feedback, click-through rates, and other analytics to continually improve the search results' relevance and accuracy.

Techniques like machine learning and natural language processing can be employed to enhance the search algorithm's capabilities and provide more personalized and context-aware results.
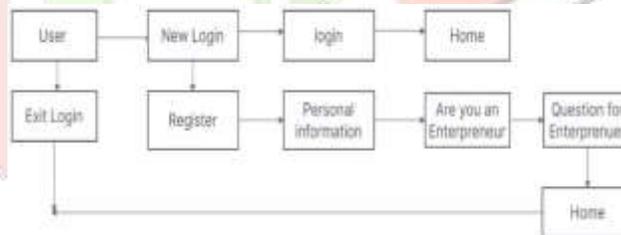
Modules:

1. **User Registration Module:**
   ● **User Registration Form:** Allows new users to sign up by providing necessary details such as username, email, and password.
   ● **Input Validation:** Ensures that the provided information meets the required format and criteria.
   ● **Registration Confirmation:** Sends a verification email or confirmation message to the user upon successful registration.
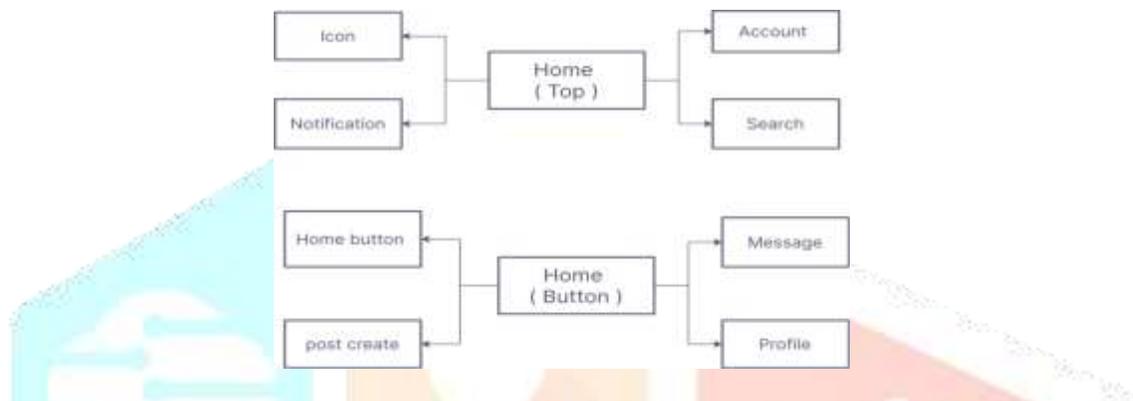
2. **User Login Module:**
   ● **Login Form:** Provides fields for users to enter their credentials (username/email and password).
   ● **Authentication:** Verifies user credentials against stored data in the database.
   ● **Session Management:** Maintains user session upon successful login to keep them authenticated across pages.

Homepage Module:
   ● **Dashboard:** Displays a personalized dashboard for each logged-in user upon successful authentication.
   ● **Create New Post:**
      ● **Form Interface:** Allows users to create new posts ku by selecting the type (gadget, idea, or article) and providing relevant details.
      ● **Image/Video Upload:** Enables users to upload media files associated with their posts.
   ● **View Post:**
      ● **Post Feed:** Displays a feed of posts created by users, categorized by type (gadget, idea, or article).
      ● **Post Details Page:** Shows the full content of a selected post along with comments and engagement options.
   ● **Share Post:**
      ● **Social Media Integration:** Allows users to share posts on external social media platforms for wider visibility.
      ● **Copy Link:** Provides a shareable link to the post for users to distribute manually.
   ● **Edit Post:**

- **Edit Form:** Enables users to modify the content of their own posts, including title, description, and media files.
        - **Save Changes**: Updates the post with the edited content upon submission.
    - **Delete Post:**
        - **Confirmation Dialog:** Prompts users to confirm the deletion of their post to prevent accidental removal.
        - **Removal Process:** Deletes the post and associated data from the database upon user confirmation.
        - **Like and Comment:**
            - **Like Button:** Allows users to express their appreciation for a post by liking it.

            - **Comment Section:** Provides a space for users to leave comments on posts, fostering interaction and discussion.

Key features of NPRENEUR:
1. **Content Creation and Sharing:** Users can create and share their entrepreneurial ideas, gadgets, and informative articles to showcase their creativity and expertise.
2. **User Profiles:** Each user has a customizable profile where they can display their portfolio, bio, and contact information, facilitating networking and collaboration.
3. **Engagement Tools:** Like and comment functionalities enable users to interact with posts, providing feedback and fostering discussion within the community.
4. **Direct Messaging:** Entrepreneurs can communicate directly with interested investors, facilitating collaboration and potential funding opportunities.
5. **Content Categorization and Discovery:** Posts are categorized into gadgets, ideas, and articles for easy browsing, with search and filter options to discover relevant content.
6. **Investor Connection:** Dedicated features allow entrepreneurs to connect with potential investors, showcasing investment opportunities and initiating collaborations.
7. **Analytics and Insights:** Comprehensive analytics provide users with insights into post performance, user engagement, and platform usage, aiding in decision-making and optimization.

User Testing and Feedback Collection:

In order to evaluate the effectiveness and usability of the social media app developed using the MERN stack, user testing was conducted. The goal of user testing was to obtain feedback from users and to identify any issues or areas for improvement. A group of college students were recruited to participate in the user testing phase.

Software testing has a component called system testing that concentrates on assessing a system's overall functionality. Usually, it is carried out after the person

The system's components have undergone testing and integration. System testing's objective is to confirm that the system as a whole complies with the given requirements and performs as intended. A software testing approach known as unit testing entails evaluating individual software application units or components separately from the rest of the program. Unit testing aims to confirm that all component of the software program functions as calculated and complies with all criteria.

The user testing process was divided into two parts: usability testing and feedback collection. In the usability testing phase, participants were asked to perform a set of tasks using the app while being observed. These tasks

were designed to evaluate the app's usability, user-friendliness, and navigation. During this phase, participants were encouraged to think aloud and provide feedback on their experience using the app.

In the feedback collection phase, participants were asked to complete a survey which asked questions about their overall experience using the app, its features, and any suggestions for improvements. The survey also included open-ended questions, allowing participants to provide detailed feedback on their experience and suggestions for future development.

IV. Conclusion:

The project focused on the development and design of the social media app Sociogram Using MERN stack, with the goal of providing users with a personalised and engaging social media experience. Through the implementation of various features, such as user login/signup, post creation, interactions with posts, dark and light mode and profile page. The app successfully fulfilled the core functionalities expected in a social networking platform.

The outcomes of the testing and user comments demonstrated how well the app met user needs and expectations. The app's user registration procedure was simple and dependable, enabling both new users to establish accounts and logged-in users to do so safely. Users could easily make and publish posts, show their admiration by giving them likes, participate in user dialogues by leaving comments, and keep in touch with other users by using the follow feature.

Additionally, by accommodating different tastes in aesthetics, the integration of the dark and bright mode functionality improved the user experience. Users had access to profile pages that displayed their timelines and personal information, giving them a complete overview of their app usage.

The social media software, as a whole, showed excellent performance, usability, and user happiness. A user-friendly and interesting social networking site was created as a consequence of the MERN stack's effective integration and the thoughtfully created features. The app's durability, dependability, and user-friendly UI all help to make it efficient at giving users a personalised and pleasurable social networking experience.

The research project was a success in achieving its goals of creating a user-friendly social networking application utilising the MERN stack. The project's results help to progress social media technology by laying the groundwork for further advancements and breakthroughs.

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