**3. Functional Requirements**

**User Authentication:**

*There will be two roles: User and Admin. A User will be able to perform both visitor and author activities.*

* Password recovery

**User Profile Management:**

Users can update personal information, including profile pictures.

* "My Profile" section displaying their posts, followers/following, and other user details.
* The profile design can be similar to popular platforms like Facebook or X (Twitter).
* Verified users will receive a badge displayed alongside their profile image if a user subscribes to the site.

**Post Creation & Sharing:**

* Rich Text Editor or Markdown (such as **Quill.js, Draft.js, or TinyMCE**) support for creating and editing tech tips and tutorials.
* Ability to attach images, screenshots, or visual aids to posts for better comprehension.
* Post creation should be done within a modal for seamless user experience.
* Allow users to easily categorize their post during creation by selecting from a list of predefined categories (e.g., "Web," "Software Engineering," "AI," etc.).

*This makes it easier for other users to discover relevant posts based on categories.*

* Additionally, posts can be tagged as **Premium**, which will only be accessible to verified users.

**Upvote & Downvote System:**

* Users can upvote or downvote posts and comments based on quality or relevance.

**Commenting System:**

* Users can comment on posts, with options to edit or delete their own comments.

**Payment Integration:**

* Integration with Aamarpay/Stripe for users to make payments for premium features like exclusive access to advanced tech tips and tutorials.
* To access the premium blogs/videos users need pay $20/month.

**PDF Generation:**

* Users can generate PDFs of their own tech guides or other users’ content for offline reference.

**News Feed:**

* A post creation option will be available at the top of the news feed.
* The news feed will display the latest tech tips, tutorials, and guides.
* Infinite scroll for dynamically loading more content as users scroll down.
* Sorting options for showcasing the most upvoted and helpful content.
* **Search & Filter Functionalities:**
  + Users can search for tips and tricks using keywords and filter them by categories.
  + Debouncing will be implemented to optimize search and minimize API calls.

**Following System:**

* Users can follow other tech enthusiasts to stay updated with their content and tips.

**Micro Animations:**

* Smooth transitions, hover effects, and loading animations to create an engaging user experience.

**4. User Interface Design**

**Required Pages:**

* **Login/Registration Page:** Secure forms for user sign-up and login.
* **User Dashboard:** A personalized dashboard where they manage their profile information, view analytics[see bonus], My Posts, following activity and make payments. My Posts: You can view and manage(CRUD) posts with filtering, searching, pagination, and sorting
  + **My Posts:** You can view and manage(CRUD) posts with filtering, searching, pagination, and sorting
* **Admin Dashboard:** A control panel for administrators to manage users, content, and payment history. Graphs will show data on monthly payments, posts, and user activity.
  + **Admin Controls**: Admins can block/unblock users, delete accounts, and manage posts and can create, update, delete, and manage admin accounts.
* **Profile Page:** Users can view and edit profiles, posts, followers, and those they follow.
* **News Feed:** Displays tech posts, with filtering options for categories and other relevant properties.
* **Post Details Page:** Description , category, comments, ratings, images/videos and other relavant information.
* **About Us Page**: Information about the team or organization behind the project, including mission and vision.
* **Contact Us Page:** A form or contact details for user support and inquiries.

**Design Guidelines:**

* A consistent color scheme reflecting a tech-forward, modern theme.
* Intuitive navigation to ensure easy access to key features and content.
* A mobile-friendly design with responsive layouts suitable for different devices.

**Bonus Requirements:**

**Analytics & Reporting:**

* **Content Analytics**: Show share counts, reaction counts, comment counts and views counts on the User Dashboard for the overall posts. Design will be something similar to the picture given below.

**Social Media Integration:**

* **Sharing Options**: Users can share posts on social media platforms.

**Security Features:**

* **Activity Logs**: Admin can see the login activities with along time, role and user information like name and email.

**Optional but highly recommended**

**Comment System**

* Users can reply to others' comments is for enhancing conversations.

**Post Creation**

* **Draft Mode:** Allow users to save incomplete posts as drafts so they can continue working on them later.

**Payment System**

* Author will get paid each time a user visit a blog/a video for the first time