TECHUNITY

Description

Techunity is a **community-driven platform tailored for developers**, combining the best aspects of social networking with practical coding engagement.

It empowers coders to **connect, collaborate, and grow** by sharing posts, completing challenges, showcasing code, and contributing to developer-centric conversations.

Designed with **scalability and extensibility** in mind, **Techunity** promotes meaningful peer interaction while fostering continuous learning through technical content and collaborative activities.

Technology Stack

Frontend:

- **React.js** – Component-based UI development

- **Tailwind CSS** – Utility-first styling for rapid, responsive design

- **React Query** – Data fetching, caching, and synchronization

Backend:

- **Appwrite** – Backend-as-a-service (BaaS) for authentication, databases, file storage, and functions

Other Libraries:

- **TypeScript** – Type-safe development

- **ShadCN UI** – Pre-built accessible UI components

- **React Router** – Page routing and nested layouts

Requirements

Node.js v18+ and npm installed.
Appwrite server configured with project, database, and storage IDs.

Environment variables:

- `VITE_APPWRITE_URL`

- `VITE_APPWRITE_PROJECT_ID`

- `VITE_APPWRITE_DATABASE_ID`

- `VITE_APPWRITE_STORAGE_ID`

- `VITE_APPWRITE_USER_COLLECTION_ID`

- `VITE_APPWRITE_POST_COLLECTION_ID`

- `VITE_APPWRITE_SAVES_COLLECTION_ID`

Features

Authentication & Profiles

- Sign-up and sign-in via email/password

- Editable user profiles with avatars and bios

Post System

- Create, edit, and delete posts with image uploads

- Tags, captions, locations

- Like and save posts

- Infinite scroll on feed

Social Graph

- View other users

- Follow and explore posts by peers

Storage & Media

- Secure file upload and preview via Appwrite Storage

- Proper cleanup of unused files on post/user updates

Advanced Filtering

- Search posts by caption

- Sort by recency or popularity (likes)

Architecture

- Modular API layer (3-Tier Model)

- React Query caching

- Type-safe types for user, post, and API contracts

==Testing==

Manual Testing

- UI tested across Chrome, Firefox, Edge

- All post flows (create/edit/delete/like/save) verified

- Image upload and deletion behavior validated

==GiHub Repository==

[Techunity's Github Repository](#)

References & Tutorials

[Full Stack Social Media App | React JS, Appwrite, Tailwind CSS](#)

[TypeScript Full Tutorial](#)

[React Full Tutorial](#)