

INFS 740 PROJECT

Name: Sanjana Vatsavai

G-Number: G01371785

Email: svatsava@gmu.edu

Project Installation

1. [Install Node \(v20.11.1\)](#)
2. Install Dependencies - `npm install`
3. Create a `.env.local` file and add the following environment variables:

```
MONGODB_URI = MongoDB URI String  
SESSION_SECRET = Create a random session secret  
NODE_ENV = development
```

4. Run the code in **http://localhost:3000/** - `npm run dev`

Tech Stack

1. Frontend: React
2. Backend: Next.js 14
3. Database: MongoDB
4. Development Dependencies: Tailwind CSS, Radix UI, Shad-cn, TypeScript

Collections

1. Users
2. Posts
3. Communities

Basic Queries (CRUD Operations)

1. Users:
 - **View:** Retrieve and display a list of all users (in admin page), or a specific user's details (when user logs in).
 - **Insert:** Add a new user to the collection, including details like name, email, username, phone number, and password. Users can be added in the admin page or users can sign up with their details.
 - **Update:** Modify details of an existing user, such as updating their email address or the communities they're part of.

- **Delete:** Remove a user from the database.

2. Posts:

- **View:** Display posts, with options to filter by user or community.
- **Insert:** Allow users to create a new post, including title, content, associated community, and image.
- **Update:** Enable editing of post content or its associated community.
- **Delete:** Delete the user's post from the database

3. Communities:

- **View:** Show a list of all communities or detailed view of a selected community, including a list of members and posts.
- **Insert:** Add a new community with details like name, description, and community image.
- **Update:** Update community details like name, bio, and community image.
- **Delete:** Remove a community from the database.

Search Queries

1. Display all users, posts they made, and community details of the posts

In the admin page, under the user engagement tab, the admin has the ability to view a list of all users of the website. On clicking a user, all the posts made by that user are shown. Along with the posts, the details of the communities of which the posts are a part, are also shown.

This search query utilizes the posts, users, and the communities collections. First, all users are retrieved and shown in the form of a table. On clicking a particular user, all the posts made by that user are shown in the middle table. For each post, its community of which it is a part is added to a set. From this, we get a list of all communities the user is a part of, and the details of all those communities are shown in the last table.

The screenshot shows the 'User Engagement' section of the dashboard. At the top, there are four cards: 'Users' (172), 'Posts' (913), 'Communities' (68), and 'Active Users' (123). Below these, a navigation bar includes 'Visualization', 'Users', 'Posts', 'Communities', 'Insert Data', and 'User Engagement' (which is highlighted). The 'User Engagement' section displays a list of users: anithaJ77, complexgovernor, rusticorder (selected), greenvoyage, rusticair, dynamictrip, redBullLegend, and rt556. To the right, two columns show community details. The left column lists 'Mysteries of the Mariana Trench' (Community: Ocean) and 'Coral Reef Crisis' (Community: Ocean). The right column lists 'Ocean' (Members: 7823), 'Photography' (Members: 6789), 'Random' (Members: 7890), and 'Dish' (Members: 6780). A 'Logout' button is in the top right corner.

2. Display all the posts made by a user with the communities the posts are a part of

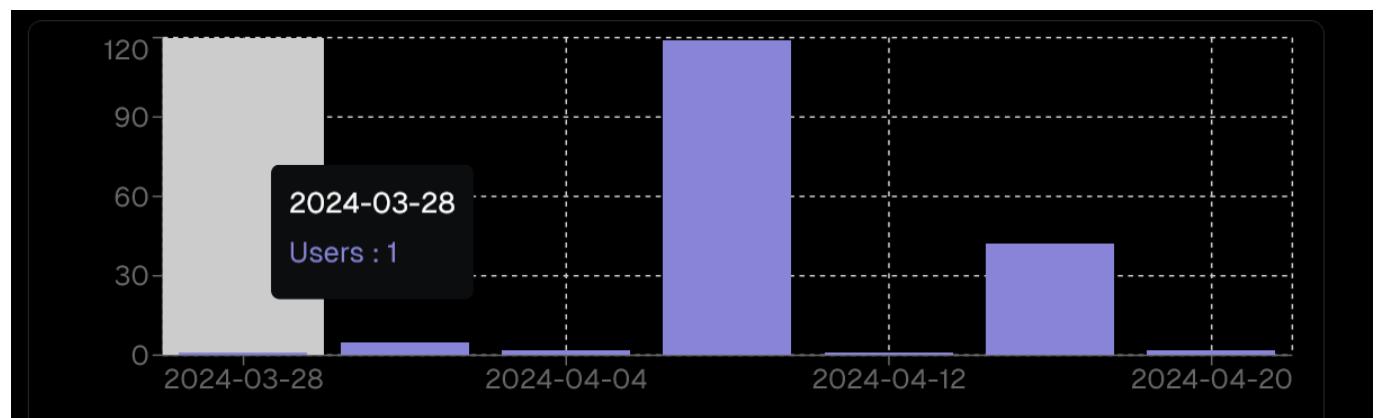
In the profile page of the user, under user activity, all the posts made by the user and the communities the posts are a part of are shown. This search query utilizes all three collections: posts, users, and communities. First, the user's details are retrieved, and using the posts collection and communities collection, all of the user's contributions are shown in the user activity section.

The screenshot shows a dark-themed user profile page. At the top, it says "Settings" and "Manage your account settings". Below that is a navigation bar with "Profile", "Account", and "Activity" tabs, where "Activity" is highlighted. The main section is titled "User Activity" with the sub-instruction "See your latest activity". Below this, there is a post from a user named "anithaj77" with the caption "Nature". To the right of the post are the date "March 28, 2024" and a three-dot menu icon. The post itself contains the text "I love nature!!!!" and a large image of a mountain range under a cloudy sky.

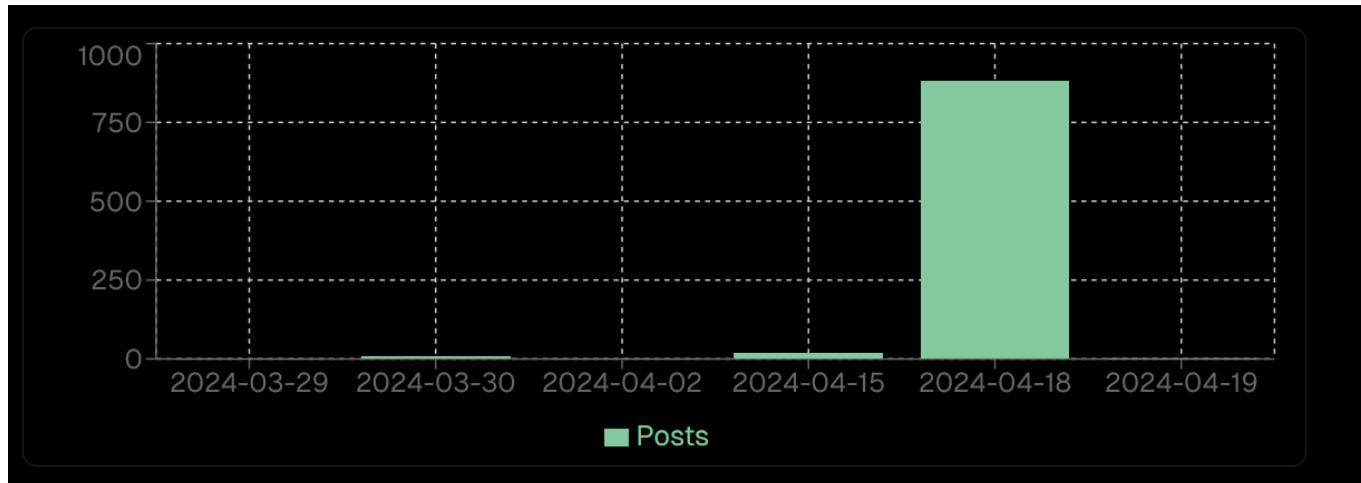
Visualization

There are 3 visualizations for 3 communities. Each visualization shows the number of entries made to each collection in the past 30 days.

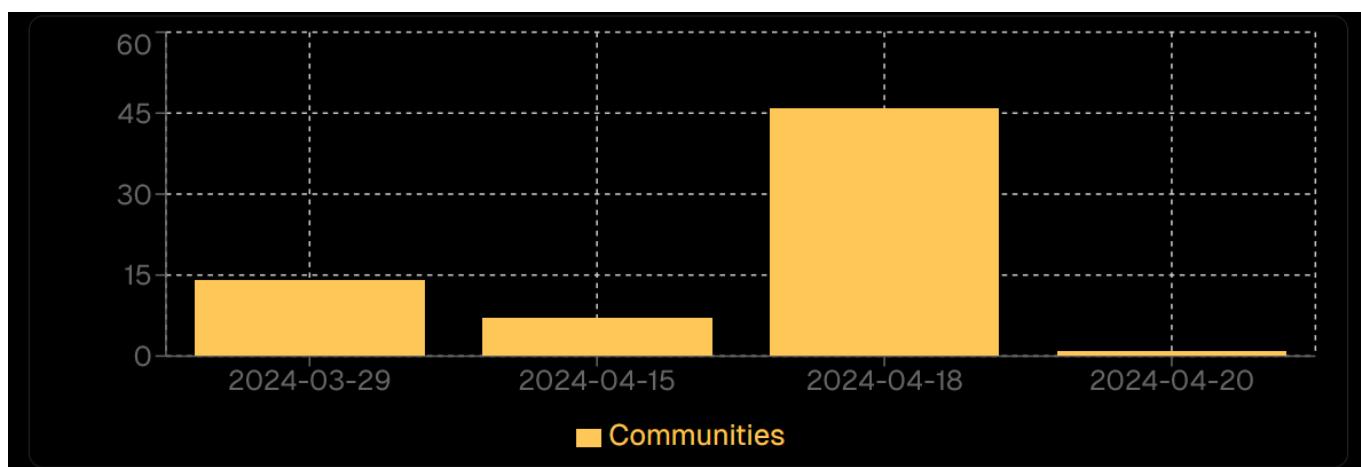
For the users collection, the visualization shows the number of users that signed up to the website in the last 30 days



For the posts collection, the visualization shows the total number of posts made in the last 30 days



For the communities collection, the visualization shows the number of communities created in the last 30 days



UI Screenshots

The screenshot displays the Connexion user interface. At the top, there is a navigation bar with links for Home, Community, Create, Profile, and Logout. On the left, a sidebar contains links for Advertise, Help, Blog, Careers, Press, Content Policy, Privacy Policy, and User Agreement. A copyright notice at the bottom left states: "Connexion, Inc. © 2024. All rights reserved."

The main content area features two news articles:

- Plastic Pollution: The Ocean's Silent Threat** by **greenvoyage** • **Ocean** | March 29, 2024. The image shows a close-up of plastic debris floating in water. The text discusses plastic pollution in marine ecosystems.
- Sustainable Seafood: A Guide to Ethical Consumption** by **greenvoyage** • **Ocean** | March 29, 2024. The image shows a person at a dock. The text discusses sustainable seafood practices.

To the right of the articles, a "Connexion News" sidebar lists recent news items:

- Connexion introduces new feature to schedule posts in advance
- The battle for AI talent blows up
- McKinsey ramps up promotion stress
- Connexion updates privacy settings for better user control

Connexion

Home Community Create Profile Logout

Advertiser Help Blog Careers Press Content Policy Privacy Policy User Agreement

Connexion, Inc. © 2024. All rights reserved.

localhost:3000/community/ocean

Communities

Search communities...

Ocean 7823 posts sdfsdf

Hiking 9421 posts Embark on thrilling adventures and explore the great outdoors with fellow hiking enthusiasts.

Photography 6789 posts Capture the world through your lens and share your artistic perspective with others.

Computer science 8234 posts Dive into the fascinating world of computer science and explore cutting-edge technologies.

Connexion News

- Connexion introduces new feature to schedule posts in advance
- The battle for AI talent blows up
- McKinsey ramps up promotion stress
- Connexion updates privacy settings for better user control

Connexion

Home Community Create Profile Logout

Advertiser Help Blog Careers Press Content Policy Privacy Policy User Agreement

Connexion, Inc. © 2024. All rights reserved.

Ocean

sdfsdf 7823 posts

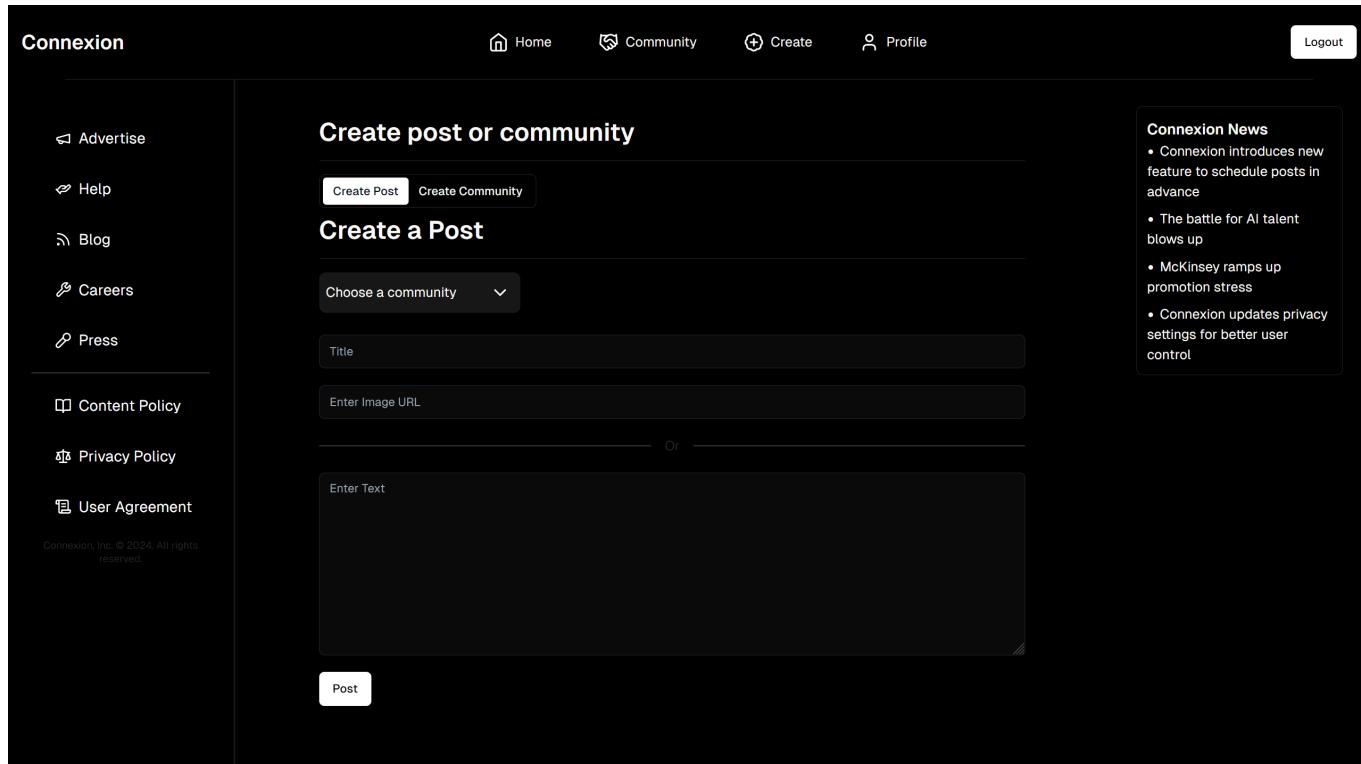
Related Posts

rusticorder • Ocean March 29, 2024 ...

Mysteries of the Mariana Trench

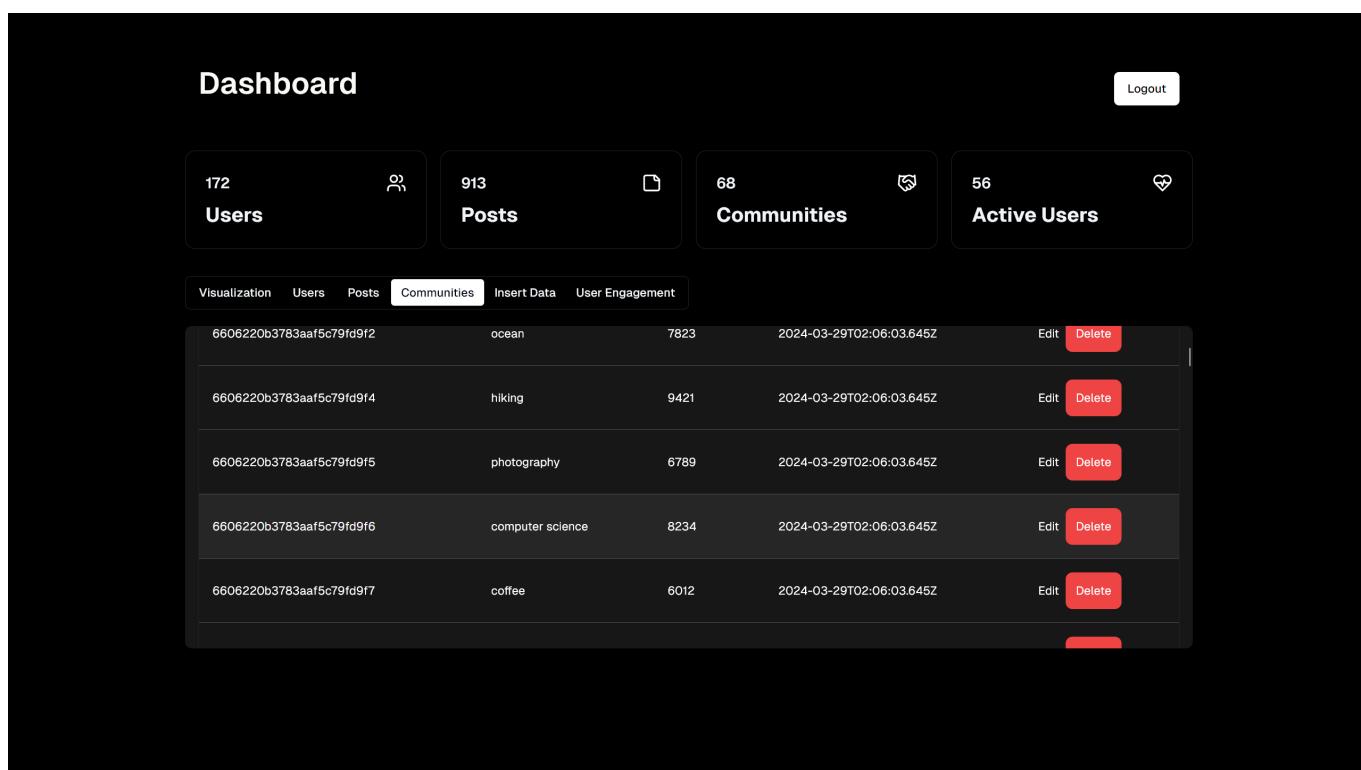
Connexion News

- Connexion introduces new feature to schedule posts in advance
- The battle for AI talent blows up
- McKinsey ramps up promotion stress
- Connexion updates privacy settings for better user control



The Connexion interface features a dark-themed header with navigation links: Home, Community, Create, and Profile. A Logout button is located in the top right corner. On the left, a sidebar contains links for Advertise, Help, Blog, Careers, Press, Content Policy, Privacy Policy, and User Agreement. A copyright notice at the bottom left states: Connexion, Inc. © 2024. All rights reserved.

The main content area is titled "Create post or community" and includes two buttons: "Create Post" and "Create Community". Below this is a section titled "Create a Post" with a dropdown menu for "Choose a community". There are input fields for "Title" and "Enter Image URL", followed by a text area labeled "Enter Text". A "Post" button is located at the bottom of the form. To the right, a "Connexion News" sidebar lists four bullet points: Connexion introduces new feature to schedule posts in advance, The battle for AI talent blows up, McKinsey ramps up promotion stress, and Connexion updates privacy settings for better user control.



The Connexion Dashboard has a dark-themed header with a Logout button in the top right corner. It features four summary cards: "Users" (172), "Posts" (913), "Communities" (68), and "Active Users" (56). Below these cards is a table with columns: ID, Name, Posts, Date Created, Edit, and Delete. The table lists five communities with their respective details and action buttons.

ID	Name	Posts	Date Created	Edit	Delete
6606220b3783aaaf5c79fd9f2	ocean	7823	2024-03-29T02:06:03.645Z	Edit	Delete
6606220b3783aaaf5c79fd9f4	hiking	9421	2024-03-29T02:06:03.645Z	Edit	Delete
6606220b3783aaaf5c79fd9f5	photography	6789	2024-03-29T02:06:03.645Z	Edit	Delete
6606220b3783aaaf5c79fd9f6	computer science	8234	2024-03-29T02:06:03.645Z	Edit	Delete
6606220b3783aaaf5c79fd9f7	coffee	6012	2024-03-29T02:06:03.645Z	Edit	Delete

The screenshot shows the Connexion Settings page. At the top, there's a navigation bar with links for Home, Community, Create, Profile, and Logout. On the left, a sidebar lists Advertise, Help, Blog, Careers, Press, Content Policy, Privacy Policy, and User Agreement. A copyright notice at the bottom of the sidebar states: "Connexion, Inc. © 2024. All rights reserved." The main content area has a title "Settings" and a subtitle "Manage your account settings". It features three tabs: Profile (selected), Account, and Activity. The Profile section contains fields for Name (Anitha Raj), Username (anithaj77), and Email (anitha.james@gmail.com). Below the email field, a note says "You can manage verified email addresses in your email settings." A red "Delete Account" button is located at the bottom of this section. To the right, a "Connexion News" sidebar lists four bullet points: "Connexion introduces new feature to schedule posts in advance", "The battle for AI talent blows up", "McKinsey ramps up promotion stress", and "Connexion updates privacy settings for better user control".

Connexion

Home Community Create Profile Logout

Advertiser Help Blog Careers Press

Content Policy Privacy Policy User Agreement

Connexion, Inc. © 2024. All rights reserved.

Settings

Manage your account settings

Profile Account Activity

Profile

This is how others will see you on the site.

Name
Anitha Raj

Username
anithaj77

This is your public display name. It can be your real name or a pseudonym.

Email
anitha.james@gmail.com

You can manage verified email addresses in your email settings.

Delete Account

Connexion News

- Connexion introduces new feature to schedule posts in advance
- The battle for AI talent blows up
- McKinsey ramps up promotion stress
- Connexion updates privacy settings for better user control