Data Model

Entities

User

Attributes:
- id (String): Unique identifier for the user.
- name (String): Full name of the user.
- email (String): Email address of the user.
- phone (String): Phone number of the user.
- password (String): Encrypted password for user authentication.
- profilePhoto (String): URL to the user's profile photo.
- followers (Array of String): List of user IDs following this user.
- following (Array of String): List of user IDs this user is following.
- posts (Array of String): List of post IDs created by the user.
- comments (Array of String): List of comment IDs made by the user.
- reviews (Array of String): List of review IDs made by the user.
- communities (Array of String): List of community IDs the user belongs to.

Store

Attributes:
- id (String): Unique identifier for the store.
- name (String): Name of the store.
- description (String): Description of the store.
- logo (String): URL to the store's logo.
- category (String): Category of the store (e.g., electronics, clothing).
- product (Array of String): List of product IDs offered by the store.
- rating (Float): Average rating of the store.
- orders (Array of String): List of order IDs associated with the store.
- reviewsAndRatings (Array of String): List of review IDs and ratings for the store.
- communityId (String): ID of the community the store belongs to.

- storeTelephoneNumber (String): Contact number for the store.
- email (String): Email address of the store.
- openHours (String): Store opening hours.
- deliveryOptions (Array of String): Delivery options (e.g., free, paid, recommended agents).

Product

Attributes:
- id (String): Unique identifier for the product.
- name (String): Name of the product.
- description (String): Description of the product.
- price (Float): Price of the product.
- primaryImage (String): URL to the primary image of the product.
- secondaryImages (Array of String): URLs to secondary images of the product.
- category (String): Category of the product.
- reviewsAndRatings (Array of String): List of review IDs and ratings for the product.
- storeId (String): ID of the store selling the product.

Community

Attributes:
- id (String): Unique identifier for the community.
- name (String): Name of the community.
- description (String): Description of the community.
- stores (Array of String): List of store IDs in the community.
- users (Array of String): List of user IDs in the community.
- posts (Array of String): List of post IDs in the community.

Comment

Attributes:
- id (String): Unique identifier for the comment.
- postId (String): ID of the post the comment belongs to.
- userId (String): ID of the user who made the comment.
- content (String): Text content of the comment.
- timestamp (DateTime): Time the comment was made.
- likesCount (Integer): Number of likes the comment has received.

Review

Attributes:
- id (String): Unique identifier for the review.
- userId (String): ID of the user who made the review.
- content (String): Text content of the review.
- rating (Float): Rating given by the user.
- timestamp (DateTime): Time the review was made.
- replies (Array of String): List of reply IDs to the review.

Chat

Attributes:
- id (String): Unique identifier for the chat.
- messages (Array of String): List of message IDs in the chat.
- participantsId (Array of String): List of user IDs participating in the chat.

Message

Attributes:
- id (String): Unique identifier for the message.
- content (String): Text content of the message.
- timestamp (DateTime): Time the message was sent.
- chatId (String): ID of the chat the message belongs to.

Post

Attributes:
- id (String): Unique identifier for the post.
- userId (String): ID of the user who created the post.
- media (Array of String): URLs to media files in the post.
- caption (String): Caption for the post.
- likesCount (Integer): Number of likes the post has received.
- timestamp (DateTime): Time the post was created.
- tags (Array of String): List of tags associated with the post.
- commentsCount (Integer): Number of comments on the post.
- comments (Array of String): List of comment IDs on the post.
- communityIds (Array of String): List of community IDs the post belongs to.

Order

Attributes:
- orderId (String): Unique identifier for the order.
- userId (String): ID of the user who placed the order.
- recipientId (String): ID of the recipient of the order.
- rating (String): Rating given for the order (e.g., good, bad).

Notification

Attributes:
- id (String): Unique identifier for the notification.
- payload (String): Content of the notification.

Relationships

- A community can have multiple users; a user can belong to multiple communities.
- A community can have multiple stores; a store can belong to only one community.
- A store can have many products; a product can belong to only one store.
- A community can have many posts; a post can belong to multiple communities.
- A store can have many orders; an order can belong to only one store.
- A post can have multiple comments; a comment can belong to only one post.
- A user can have many comments; a comment can belong to only one user.
- A product or store can have multiple reviews; a review can belong to only one store or product.
- A user can have multiple chats.
- A chat can have multiple messages; a message can belong to only one chat.

Methods

User

- signUp(userData): Registers a new user.
- signIn(credentials): Authenticates a user.
- updateProfile(userId, updatedData): Updates user profile information.
- delete(userId): Deletes a user account.
- getOne(userId): Retrieves details of a specific user.
- getAll(): Retrieves details of all users.
- getUsername(userId): Retrieves the username of a specific user.

- getUserCommunity(userId): Retrieves the communities a user belongs to.
- getUserPosts(userId): Retrieves the posts created by a user.

Posts

- create(postData): Creates a new post.
- read(postId): Retrieves details of a specific post.
- update(postId, updatedData): Updates a post.
- delete(postId): Deletes a post.
- getAll(): Retrieves all posts.
- getComments(postId): Retrieves comments on a specific post.
- getPostCommunity(postId): Retrieves the communities a post belongs to.

Comment

- create(commentData): Creates a new comment.
- read(commentId): Retrieves details of a specific comment.
- update(commentId, updatedData): Updates a comment.
- delete(commentId): Deletes a comment.
- getAll(postId): Retrieves all comments on a specific post.
- getReplies(commentId): Retrieves replies to a specific comment.

Review

- create(reviewData): Creates a new review.
- read(reviewId): Retrieves details of a specific review.
- update(reviewId, updatedData): Updates a review.
- delete(reviewId): Deletes a review.
- getAll(productId): Retrieves all reviews for a specific product.
- getReplies(reviewId): Retrieves replies to a specific review.

Store

- create(storeData): Creates a new store.
- read(storeId): Retrieves details of a specific store.
- update(storeId, updatedData): Updates a store.
- delete(storeId): Deletes a store.
- getAll(): Retrieves all stores.

- getStoreCommunity(storeId): Retrieves the community a store belongs to.

Products

- create(productData): Creates a new product.
- read(productId): Retrieves details of a specific product.
- update(productId, updatedData): Updates a product.
- delete(productId): Deletes a product.
- incrementCount(productId): Increases the count of a product.
- decrementCount(productId): Decreases the count of a product.
- getStoreId(productId): Retrieves the store ID of a product.
- getByName(productName): Retrieves products by name.
- getAll(): Retrieves all products.

Community

- create(communityData): Creates a new community.
- read(communityId): Retrieves details of a specific community.
- update(communityId, updatedData): Updates a community.
- delete(communityId): Deletes a community.
- getAll(): Retrieves all communities.

Chat

- create(chatData): Creates a new chat.
- read(chatId): Retrieves details of a specific chat.
- update(chatId, updatedData): Updates a chat.
- delete(chatId): Deletes a chat.

Message

- create(messageData): Creates a new message.
- read(messageId): Retrieves details of a specific message.
- update(messageId, updatedData): Updates a message.
- delete(messageId): Deletes a message.
- sendMessage(chatId, messageData): Sends a message in a chat.
- receiveMessage(chatId): Retrieves received messages in a chat.