

Firestore Schema

Collections:

1. users (Collection):

- **Document (Individual User) (User's ID generated by Firebase on Account Creation):**

- `uid` (String): Unique user identifier (Firebase Authentication).
- `username` (String): Username of the user.
- `name` (String): Name of the user.
- `about` (String): About/bio of the user.
- `created_at` (Timestamp): Time of profile creation/ Registration Time
- `email` (String): Email of the user.
- `is_online` (Bool): Whether user is currently online or not.
- `push_token` (String): Token of the device generated by the Firebase Messaging.
- `user_image` (String) (Optional): URL of the user's profile picture.
- `last_active` (Timestamp) (Optional): Timestamp of the user's last activity.

2. chats (Collection):

- **Document (Chat) (Hash generated using both the user uids sorted):**

- `chat_id` (String): Unique Chat Id generated using sorting the UID of both the users and then hashing them.
- `type` (String): Type of chat ("individual" or "group"). Currently only individual is supported.
- `participants` (Array of Strings): UIDs of all participants in the chat.

- **Subcollection (messages):**

- **Document (Message) (TimeStamp ID):**

- `message_id` (String): Unique identifier for the message TimeStamp in epoch.
- `sender_id` (String): UID of the message sender.
- `content` (String): Text content of the message.
- `sent_at` (Timestamp): Timestamp of the message sent.
- `type` (String) (Optional): Type of message (e.g., "text", "image", "file").
- `seen` (Boolean) (Optional): Flag indicating if the message has been seen by recipients.
- `edited_at` (Timestamp) (Optional): If the message has been edited then its value will change from null to Timestamp

3. recent_chats (Collection):

- **Document (Recent Chat) (Uses user's uid):**

- `to_uid` (String): Array of the Maps (matches Users collection document ID).
 - It will be the array of maps, where each map will have the main key as UID of the connected user and then the value of it will be another map which will have last message.

4. user_names (Collection):

- `Username` (String): Every time when new user registered, then their entered username will be added to the collection.