

Database Schema Documentation

The MongoDB database consists of a single collection named "User" based on the provided schema. The schema defines the structure and relationships of the documents within the "User" collection.

1. User Collection

The "**User**" collection stores information about **users and their associated tasks**. Each document in the collection represents a user and contains the following fields:

- **`_id`** (ObjectId): The unique identifier for the user document, automatically generated by MongoDB.
- **`name`** (String, required): The name of the user.
- **`email`** (String, required, unique, indexed): The email address of the user, which must be unique across all users in the collection. An index is created on this field for efficient querying.
- **`password`** (String, required, minlength: 8): The password of the user, which is hashed using bcrypt before being stored in the database. The minimum length of the password is 8 characters.
- **`tasks`** (Array): An array of tasks associated with the user. Each task is represented as an embedded document within the user document.

1.1 Task Embedded Document

Each task embedded document within the ``tasks`` array has the following fields:

- **`subject`** (String): The subject or title of the task.
- **`lastDateToComplete`** (Date): The last date by which the task should be completed.
- **`status`** (String, enum: ['pending', 'in-progress', 'completed']): The status of the task, which can be one of the following values: 'pending', 'in-progress', or 'completed'.
- **`isDeleted`** (Boolean, default: false): Indicates whether the task has been deleted or not. By default, it is set to ``false``.

- **`subtasks` (Array)**: An array of subtasks associated with the task. Each subtask is represented as an embedded document within the task document.

1.2 Subtask Embedded Document

Each subtask embedded document within the **`subtasks`** array has the following fields:

- **`subject` (String)**: The subject or title of the subtask.
- **`lastDateToComplete` (Date)**: The last date by which the subtask should be completed.
- **`status` (String, enum: ['pending', 'in-progress', 'completed'])**: The status of the subtask, which can be one of the following values: 'pending', 'in-progress', or 'completed'.
- **`isDeleted` (Boolean, default: false)**: Indicates whether the subtask has been deleted or not. By default, it is set to `false`.

User Task Management System

