

# Mentora App Database Schema & Report

## Project Stage 01

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### Database Schema Overview

The Mentora app's database schema is made to underpin an interactive educational app, having five essential entities: **Users**, **Posts**, **Comments**, **Courses**, and **Study\_Sessions**. The Study Sessions feature is optional right now. I am currently considering integrating it into the main functionality, but I might drop it later. This schema facilitates a technically sound app, which is crucial for the app's educational objectives.

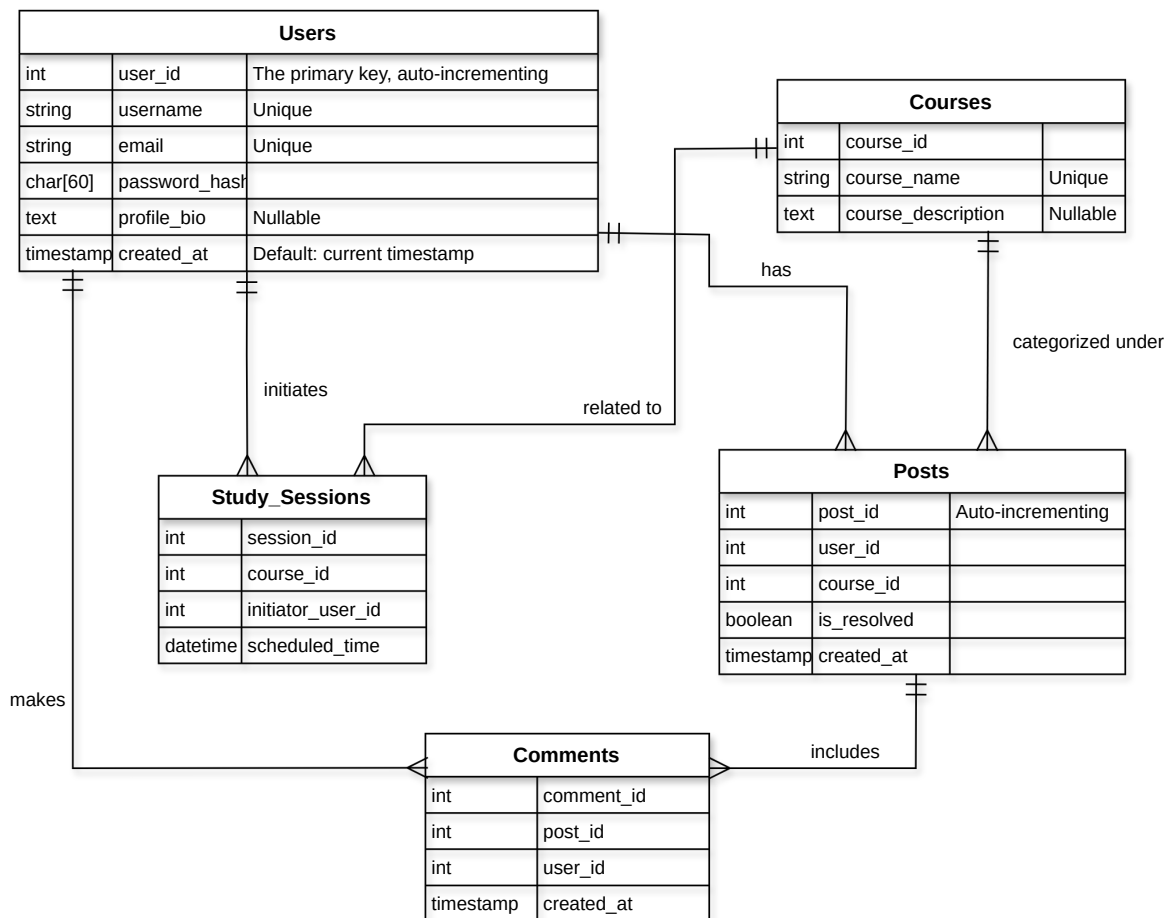


Figure 1: Database ERD Diagram

# Detailed Entity Descriptions

## Users Table

- `user_id`: Auto-incrementing primary key, ensuring unique identification.
- `username` and `email`: Enforced uniqueness supports authentication and user interaction.
- `password_hash`: Secure storage of user credentials using bcrypt.
- `profile_bio`: Optional bio, enhancing user profile customization.
- `created_at`: Records the time of account creation, defaulting to the current timestamp.

## Posts Table

- `post_id`: Primary key, auto-incrementing for unique identification.
- `user_id` and `course_id`: Foreign keys that link posts to users and specific courses, fostering content organization and user interaction.
- `is_resolved`: Facilitates the tracking and filtering of queries or discussions based on their resolution status.
- `created_at`: Essential for organizing posts chronologically.

## Comments Table

- `comment_id`: Primary key for unique comment identification.
- `post_id` and `user_id`: Establish connections between comments, posts, and users, enriching the interactive experience.
- `created_at`: Timestamp for tracking comment chronology.

## Courses Table

- `course_id`: Unique identifier for courses, serving as a primary key.
- `course_name`: Unique naming facilitates course identification and organization.
- `course_description`: Offers additional insights into the course content, optional for flexibility.

## Study Sessions Table

- `session_id`: Primary key for session identification.
- `course_id` and `initiator_user_id`: Link sessions to specific courses and users, supporting structured study engagements.
- `scheduled_time`: Specifies when study sessions occur, crucial for planning and attendance.

*Please keep in mind that the database layout outlined here is preliminary and may undergo changes as the Mentora app development progress. As I develop the app further, adjustments to the database design may be needed to better accommodate user needs and new features. Think of this schema as a flexible foundation that I'll refine as I progress.*