Schema diagram

task

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| taskId | taskName | dueDate | status | Priority |

users

|  |  |  |
| --- | --- | --- |
| username | email | password\_hash |

Database Schema (Tables and Fields):

1.Task Table

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Description** |
| taskId | INTEGER | Primary Key, Auto Increment |
| taskName | VARCHAR(255) | Name or description of the task |
| dueDate | DATE | Last date to complete the task |
| Status | VARCHAR(50) | Current status of the task (Pending, In Progress, Completed) |
| Priority | INTEGER | Priority level of the task (1 = Highest, 2 = Medium, 3 = Lowest) |

2.Users Table:

|  |  |  |
| --- | --- | --- |
| **Column Name** | **Data Type** | **Description** |
| username | VARCHAR(100) | Stores the unique **username** of the user. It’s a **string** and can be up to 100 characters long. |
| email | VARCHAR(255) | Stores the **email address** of the user. It’s a **string** and can be up to 255 characters long. |
| password\_hash | DATE | Stores the **hashed password** of the user for secure authentication. The **password is hashed** using algorithms like bcrypt. It’s a **string** and can be up to 255 characters long. |
| PRIMARY KEY | Composite key (username, password\_hash) | A combination of **username** and **password\_hash** to uniquely identify each user. Ensures that **each combination of username and password is unique**. |

**Query:**

CREATE DATABASE todolist;

USE todolist;

**task:**

CREATE TABLE task( taskId INTEGER PRIMARY KEY AUTOINCREMENT, taskName VARCHAR(255) NOT NULL, dueDate DATE, status VARCHAR(50) DEFAULT 'Pending', priority INTEGER DEFAULT 3 );

Inserting Table:

INSERT INTO task(taskName, dueDate, status, priority) VALUES ('Complete assignment', '2025-02-03', 'In Progress', 2);

**users:**

CREATE TABLE users ( user\_id INT AUTO\_INCREMENT PRIMARY KEY, username VARCHAR(100) UNIQUE NOT NULL, email VARCHAR(255) UNIQUE NOT NULL, password\_hash TEXT NOT NULL );

Inserting Table:

INSERT INTO users (username, email, password\_hash) VALUES ('user01', 'user01@example.com', 'Secure@123');