**Mihail Stoev**

**TODO-List Database**

Our database represents a TODO-List system that allows users to create and manage tasks. It contains the following main tables:

1. **users (Users)**

**Stores information about the users who use the system.  
📌 Main columns:**

* **id – Unique identifier of the user.**
* **username – Username.**
* **email – User's email.**
* **password – Password.**
* **created\_at – Registration date.**

1. **tasks (Tasks)**

Stores information about the tasks created by users.  
📌 **Main columns:**

* **id** – Unique task identifier.
* **title** – Task title.
* **description** – Task description.
* **status** – Task status (pending, in\_progress, completed).
* **due\_date** – Deadline for completion.
* **created\_at** – Creation date.
* **user\_id** – Associated user (foreign key to users).

🔗 **Relation:** Each task belongs to a user (**user\_id**).

1. **tags (Tags)**

Stores tags (labels) that can be associated with tasks.  
📌 **Main columns:**

* **id** – Unique tag identifier.
* **name** – Tag name.

1. **task\_tags (Task-Tag Relationship)**

A many-to-many relationship table between tasks and tags.  
📌 **Main columns:**

* **task\_id** – Task identifier (**tasks.id**).
* **tag\_id** – Tag identifier (**tags.id**).

🔗 **Relation:** Allows a single task to have multiple tags and a single tag to be used for many tasks.

**🛠 How does the database work?**

* **A user (users) can create tasks (tasks).**
* **Each task can have one or more tags (task\_tags).**
* **Tags (tags) help with better task organization.**

ЗАЯВКИ:

1. Картина, която съдържа текст, екранна снимка, софтуер, Компютърна икона

   Описанието е генерирано автоматичноRetrieve all tasks for a given user.

Картина, която съдържа текст, екранна снимка, софтуер, Компютърна икона

Описанието е генерирано автоматично

1. Calculate the number of tasks created in the last month.

Картина, която съдържа екранна снимка, текст, софтуер, Компютърна икона

Описанието е генерирано автоматично

1. Retrieve users who have more than one task

A screenshot of a computer

Description automatically generated

1. A screenshot of a computer

   Description automatically generatedList all tasks with status 'pending'.
2. Retrieve all users who use Gmail for their email.

A screenshot of a computer

Description automatically generated

1. Retrieve tasks that are in progress or completed.

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

1. Delete (cancel) a task.

A screenshot of a computer

Description automatically generated

1. Add a new tag to a task.

A screenshot of a computer

Description automatically generated

1. Retrieve the top 5 users with the most created tasks.

A screenshot of a computer

Description automatically generated

1. Retrieve all tasks with their tags.

A screenshot of a computer

Description automatically generated

