# Database Schema Design for Business Managing Project

### 1. Users Table

Field Name	Data Type	Constraints	
user_id	INT	PRIMARY KEY,	
		AUTO_INCREMENT	
email	VARCHAR (255)	UNIQUE, NOT NULL	
password	VARCHAR (255)	NOT NULL	
full_name	VARCHAR (255)	NOT NULL	
role	ENUM	NOT NULL	
Created-at	DATETIME	DEFAULT	
		CURRENT_TIMESTAMP	
updated_at	DATETIME	ON UPDATE	
		CURRENT_TIMESTAMP	

Purpose: It handles sign-up, sign-in, and forgot/reset password functionality.

## 2. Organizations Table

Field Name	Data Type	Constraints
org_id	INT	PRIMARY KEY, AUTO_INCREMENT
name	VARCHAR (100)	NOT NULL
super_admin_id	INT	FOREIGN KEY (Users.user_id), NOT
		NULL
created_at	DATETIME	DEFAULT CURRENT_TIMESTAMP
updated_at	DATETIME	ON UPDATE CURRENT_TIMESTAMP

**Relationships**: super\_admin\_id references Users(user\_id) (One super admin per organization).

## 3. Organization\_Members Table

Field Name	Data types	Constraints
org_member_id	INT	PRIMARY KEY, AUTO_INCREMENT
org_id	INT	FOREIGN KEY (Organizations.org_id), NOT NULL
user_id	INT	FOREIGN KEY (Users.user_id), NOT NULL
role	ENUM	NOT NULL
joined_at	DATETIME	DEFAULT CURRENT_TIMESTAMP

### Relationships:

- org\_id references Organizations(org\_id).
- user\_id references Users(user\_id).

### 4. Teams Table

Field Name	Data Types	Constraints
team_id	INT	PRIMARY KEY, AUTO_INCREMENT
org_id	INT	FOREIGN KEY (Organizations.org_id), NOT NULL
name	VARCHAR (100)	NOT NULL
created_at	TIMEDATE	DEFAULT CURRENT_TIMESTAMP

### Relationships:

• org\_id references Organizations(org\_id).

## 5. Team\_Members Table

Field Name	Data Type	Constraints
team_member_id	INT	PRIMARY KEY, AUTO_INCREMENT
team_id	INT	FOREIGN KEY (Teams.team_id), NOT
		NULL
user_id	INT	FOREIGN KEY (Users.user_id), NOT NULL
role	ENUM	NOT NULL
joined_at	TIMEDATE	DEFAULT CURRENT_TIMESTAMP

#### **Relationships:**

- team\_id references Teams(team\_id).
- user\_id references Users(user\_id).

## 6. Projects Table

Field Name	Data Type	Constraints
project_id		
org_id		
team_id		
created_by		
name		
description		
created_at		
updated_at		

#### Relationships:

- org\_id references Organizations(org\_id).
- team\_id references Teams(team\_id).
- created\_by references Users(user\_id).

### 7. Milestones Table

Field Name	Data Type	Constraints
milestone_id	INT	PRIMARY KEY, AUTO_INCREMENT
project_id	INT	FOREIGN KEY (Projects.project_id),
		NOT NULL
name	VARCHAR (100)	NOT NULL
description	TEXT	NULL
status	ENUM	DEFAULT 'pending'
due_date	NULL	NULL
created_at	DEFAULT CURRENT_TIMESTAMP	DEFAULT CURRENT_TIMESTAMP

#### Relationships:

• project\_id references Projects(project\_id).

### 8. Chats Table

Field Name	Data Type	Constraints
chat_id	INT	PRIMARY KEY, AUTO_INCREMENT
sender_id	INT	FOREIGN KEY (Users.user_id), NOT
		NULL
receiver_id	INT	FOREIGN KEY (Users.user_id), NULL
team_id	INT	FOREIGN KEY (Teams.team_id), NULL
message	TEXT	NOT NULL
sent_at	DATETIME	DEFAULT CURRENT_TIMESTAMP

#### **Relationships:**

- sender\_id references Users(user\_id).
- receiver\_id references Users(user\_id) (this is for 1:1 chat).
- team\_id references Teams(team\_id) (for group chats).