

1. Users Table

This table stores user information.

Column Name	Data Type	Description
user_id	INT (Primary Key, Auto Increment)	Unique ID for each user.
username	VARCHAR(100)	Unique username for the user.
email	VARCHAR(255)	User's email address.
password_hash	VARCHAR(255)	Hashed password for security.
is_active	BOOLEAN	Indicates if the account is active.
created_at	DATETIME	Timestamp for when the user was created.
updated_at	DATETIME	Timestamp for the last update.

2. Roles Table

This table stores role definitions.

Column Name	Data Type	Description
role_id	INT (Primary Key, Auto Increment)	Unique ID for each role.
role_name	VARCHAR(100)	Name of the role (e.g., Admin, Editor, Viewer).
role_description	TEXT	Description of the role.

3. User_Roles Table

This table creates a many-to-many relationship between users and roles (a user can have multiple roles, and roles can be assigned to multiple users).

Column Name	Data Type	Description
user_role_id	INT (Primary Key, Auto Increment)	Unique ID for the user-role pair.
user_id	INT (Foreign Key -> Users.user_id)	User ID from the Users table.
role_id	INT (Foreign Key -> Roles.role_id)	Role ID from the Roles table.

4. Permissions Table

This table defines specific permissions for each role.

Column Name	Data Type	Description
permission_id	INT (Primary Key, Auto Increment)	Unique ID for each permission.
permission_name	VARCHAR(100)	Name of the permission (e.g., View, Edit, Delete).
permission_description	TEXT	Description of what the permission allows.

5. Role_Permissions Table

This table links roles with permissions.

Column Name	Data Type	Description
role_permission_id	INT (Primary Key, Auto Increment)	Unique ID for the role-permission pair.
role_id	INT (Foreign Key -> Roles.role_id)	Role ID from the Roles table.
permission_id	INT (Foreign Key -> Permissions.permission_id)	Permission ID from the Permissions table.