

Modern Application Development II

Vue Router

Vue Store

Session Storage

- `sessionStorage.getItem(key)`
- `sessionStorage.setItem(key, value)`

Local Storage

- `localStorage.getItem(key)`
- `localStorage.setItem(key, value)`

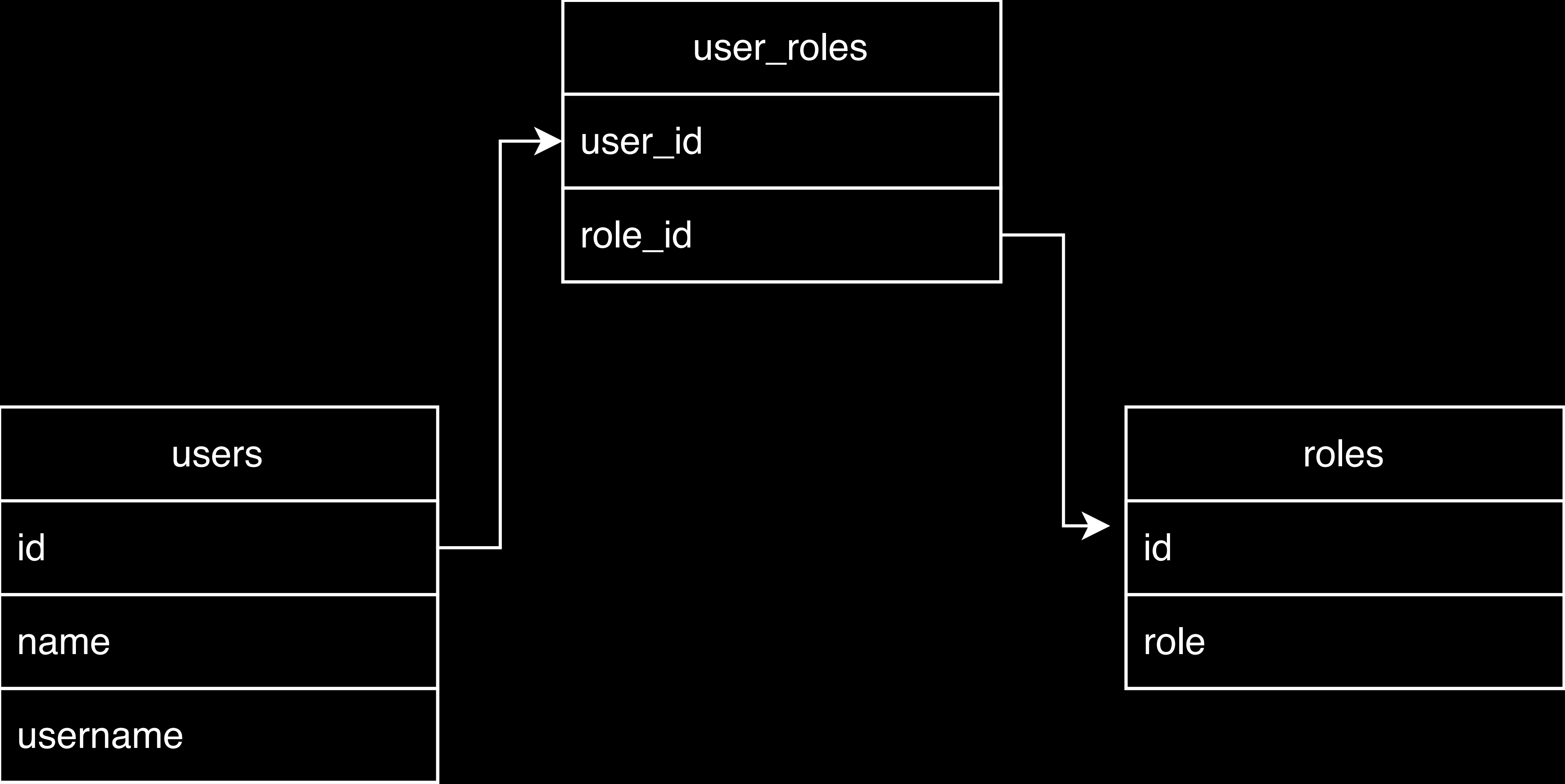
Database

id	username	name	role
1	Alice	Alice	Admin
2	Bob	Bob	User
3	Charlie	Charlie	User

id	username	name	role
1	Alice	Alice	Admin, User
2	Bob	Bob	User
3	Charlie	Charlie	User

id	username	name
1	Alice	Alice
2	Bob	Bob
3	Charlie	Charlie

id	Role
1	Product manager
2	Financial manger



user_id	role_id
1	1
1	2
2	2
3	2

SELECT

```
SELECT users.id, users.name, users.username, roles.role FROM users  
JOIN user_roles ON users.id=user_roles.user_id  
JOIN roles ON user_roles.role_id=roles.id;
```

Or

```
SELECT users.id, users.name, users.username, roles.role  
FROM users, roles, user_roles  
WHERE users.id=user_roles.user_id and roles.id=user_roles.role_id;
```

Or

```
db.query(Users, Roles, UserRoles).filter(User.id==UserRoles.user_id,  
Roles.id==UserRoles.role_id).all()
```

id	username	name	role_id
1	Alice	Alice	1
1	Alice	Alice	2
2	Bob	Bob	2
3	Charlie	Charlie	2

id	username	name	role
1	Alice	Alice	Admin
1	Alice	Alice	User
2	Bob	Bob	User
3	Charlie	Charlie	User