# **ERD**

User

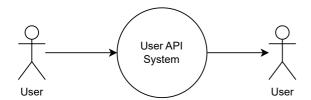
Id (PK)

name
email

role
password
created\_at
updated\_at
deleted\_at

## **DFD**

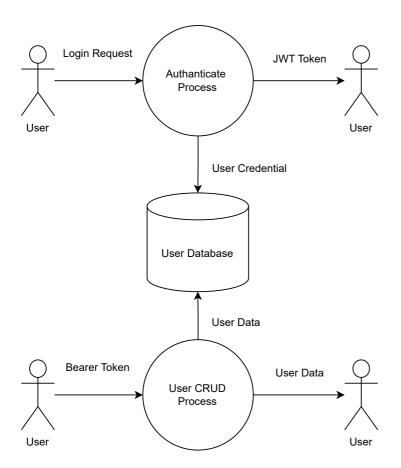
## Level 0



#### Flow

- 1. User -> System: Request (login, CRUD operations)
- 2. System -> User: Response (token, user data)

## Level 1

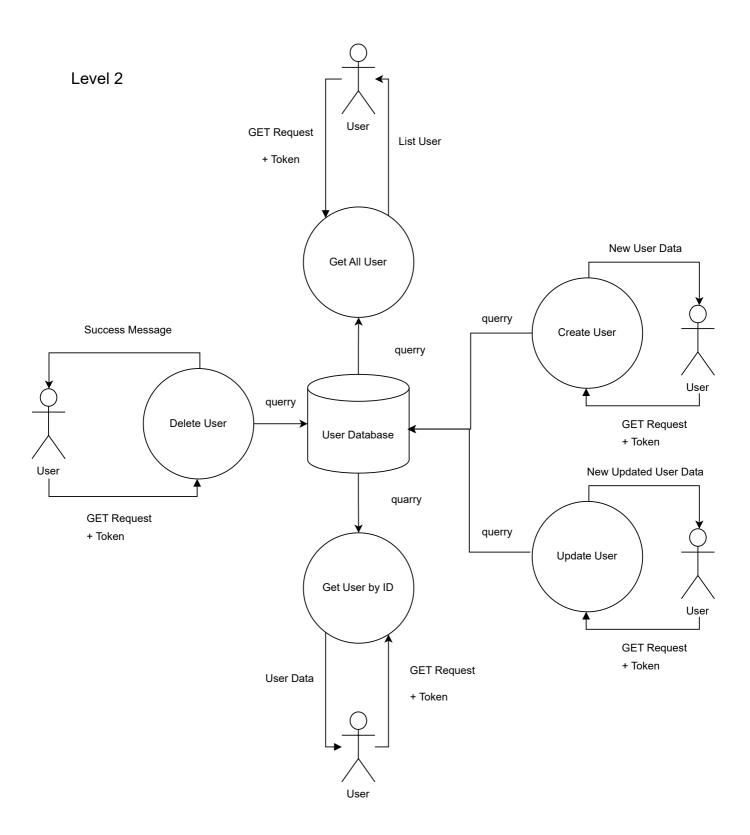


## **Authentication Process**

 $\text{User} \rightarrow \text{Authentication Process} \rightarrow \text{User Database} \rightarrow \text{Authentication Process} \rightarrow \text{User (Login Request} \rightarrow \text{Verify Credentials} \rightarrow \text{User Data} \rightarrow \text{Generate Token} \rightarrow \text{JWT Token)}$ 

## **User CRUD Process**

 $\mbox{User} \rightarrow \mbox{User CRUD Process} \rightarrow \mbox{User Database} \rightarrow \mbox{User CRUD Process} \rightarrow \mbox{User (Request with Token} \rightarrow \mbox{Process CRUD Operation} \rightarrow \mbox{Read/Write Data} \rightarrow \mbox{Process Response} \rightarrow \mbox{Response Data})$ 



#### **Get All Users Process**

 $\mbox{User} \rightarrow \mbox{Get All Users Process} \rightarrow \mbox{User Database} \rightarrow \mbox{Get All Users Process} \rightarrow \mbox{User (GET Request with Token} \rightarrow \mbox{Query All Users} \rightarrow \mbox{Users List} \rightarrow \mbox{Format Response} \rightarrow \mbox{JSON Users List})$ 

## **Get User by ID Process**

 $\mbox{User} \rightarrow \mbox{Get User by ID Process} \rightarrow \mbox{User Database} \rightarrow \mbox{Get User by ID Process} \rightarrow \mbox{User (GET Request with Token and ID} \rightarrow \mbox{Query User by ID} \rightarrow \mbox{User Details} \rightarrow \mbox{Format Response} \rightarrow \mbox{JSON User Details})$ 

#### **Create User Process**

User  $\to$  Create User Process  $\to$  User Database  $\to$  Create User Process  $\to$  User (POST Request with Token and User Data  $\to$  Validate and Store New User  $\to$  New User Data  $\to$  Format Response  $\to$  JSON New User Data)

### **Update User Process**

User  $\to$  Update User Process  $\to$  User Database  $\to$  Update User Process  $\to$  User (PUT Request with Token, ID and Updated Data  $\to$  Find User and Updated User Data  $\to$  Format Response  $\to$  JSON Updated User Data)

#### **Delete User Process**

 $User \to Delete\ User\ Process \to User\ Database \to Delete\ User\ Process \to User\ (DELETE\ Request\ with\ Token\ and\ ID \to Find\ and\ Soft\ Delete\ User \to Operation\ Status \to Format\ Response \to JSON\ Success\ Message)$