Retrospective Report:
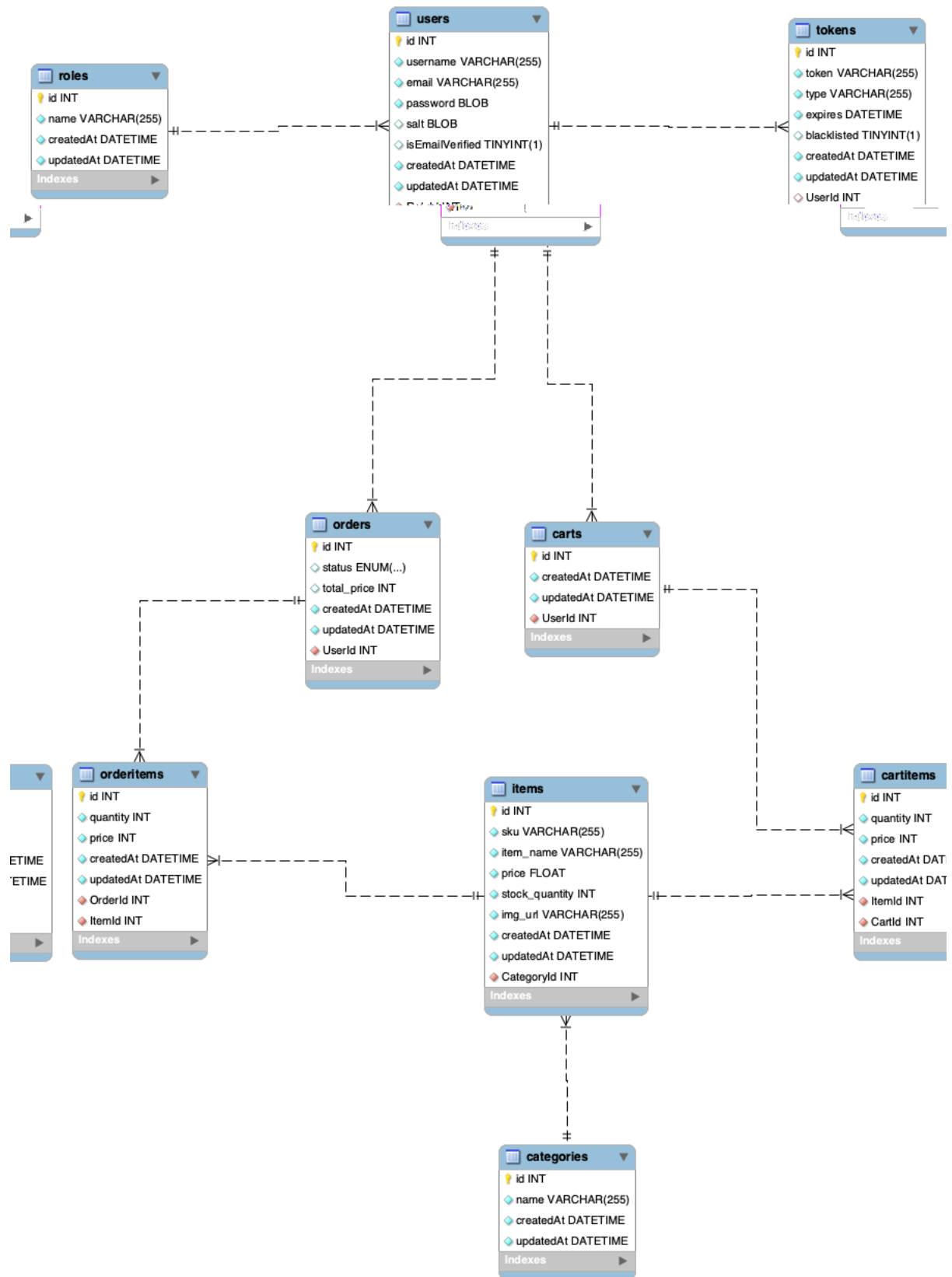
1. Database ERD:

2. Table Relationships:

User Model:

User belongs to a Role: This is a one-to-one relationship. Each user is associated with one role, indicating that a user can have only one role.

User has one Cart: This is a one-to-one relationship. Each user is associated with one cart, indicating that a user can have only one cart.

User has many Orders: This is a one-to-many relationship. Each user can have multiple orders, but each order belongs to only one user.

User has many Tokens: This is a one-to-many relationship. Each user can have multiple tokens, but each token belongs to only one user.

Token Model:

Token belongs to a User: This is a one-to-one relationship. Each token is associated with one user, indicating that a token can only belong to one user.

OrderItem Model:

OrderItem belongs to an Order: This is a one-to-one relationship. Each order item belongs to one order, indicating that an order item can only be associated with one order.

OrderItem belongs to an Item: This is a one-to-one relationship. Each order item belongs to one item, indicating that an order item can only be associated with one item.

Order Model:

Order belongs to a User: This is a one-to-one relationship. Each order is associated with one user, indicating that an order can only belong to one user.

Order belongs to many Items through the OrderItem model: This is a many-to-many relationship. An order can be associated with multiple items, and each item can be associated with multiple orders through the OrderItem model.

Item Model:

Item belongs to a Category: This is a one-to-one relationship. Each item is associated with one category, indicating that an item can only belong to one category.

Item belongs to many Carts through the CartItem model: This is a many-to-many relationship. An item can be associated with multiple carts, and each cart can be associated with multiple items through the CartItem model.

CartItem Model:

CartItem belongs to a Cart: This is a one-to-one relationship. Each cart item belongs to one cart, indicating that a cart item can only be associated with one cart.

CartItem belongs to an Item: This is a one-to-one relationship. Each cart item belongs to one item, indicating that a cart item can only be associated with one item.

Cart Model:

Cart belongs to a User: This is a one-to-one relationship. Each cart is associated with one user, indicating that a cart can only belong to one user.

Cart belongs to many Items through the CartItem model: This is a many-to-many relationship. A cart can be associated with multiple items, and each item can be associated with multiple carts through the CartItem model.

3. **Jira Roadmap:**
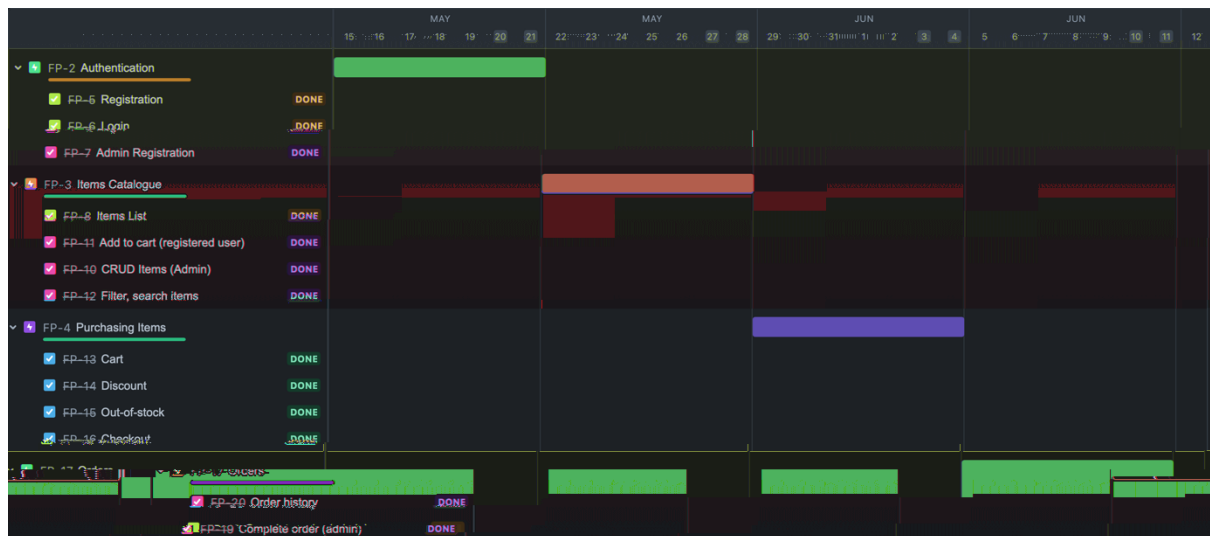
4. **Project Retrospective**

The project kicked off with an initial meeting to outline the project's scope and objectives. As a team member, I was actively involved in the progression of the project, from its conception to execution.

The project was strategically planned in weekly sprints, focusing on different aspects of the project at each phase. The timeline we adopted included four crucial stages: project initialization and planning, database design, API development, and testing.

Challenges and Lessons Learned

The journey wasn't without its challenges. The most considerable challenge that I encountered was related to SQL database systems. The complexities of SQL databases, particularly during the design phase, slowed down the development process and presented technical challenges during the API development stage.

However, I recognized this as a significant learning opportunity. For future projects, I aim to invest more time in understanding and designing SQL systems to avoid similar issues. I also plan to enhance my skills in this area or seek expert advice in the early stages of the project.

Utilizing Jira and Slack for task tracking and communication was effective, but I realized the need for a more flexible approach to handle unexpected changes in project requirements or timeline.

In conclusion, while the project concluded successfully, it came with several valuable lessons, especially concerning SQL databases and project management. These insights will undoubtedly prove beneficial for my future endeavors.

Postman Documentation:

https://documenter.getpostman.com/view/23032598/2s93sc5tGF