

## **INVENTORY MANAGEMENT SYSTEM (INTERMEDIATE-LEVEL)**

You can learn the concept of CRUD operations, joins and views in this level of project i.e. intermediate level of inventory management system.

### **User Table**

- **Insert (Create):**

```
INSERT INTO inventory.user (firstName, lastName, username, email, passwordHash)
VALUES ("John", "Doe", "johndoe", "john.doe@email.com", "hashed_password");
```

- **Update:**

```
UPDATE inventory.user
SET firstName = "Jane", email = "jane.doe@email.com"
WHERE id = 1;
```

- **Delete:**

```
DELETE FROM inventory.user
WHERE id = 2;
```

- **select:**

```
SELECT * FROM `inventory`.`user`;
```

- **Views(active user)**

```
CREATE VIEW `active_users` AS
SELECT * FROM `inventory`.`user`
WHERE `lastLogin` IS NOT NULL;
```

- **Joins(join with order)**

```
SELECT u.*, o.*
FROM `inventory`.`user` u
JOIN `inventory`.`order` o ON u.id = o.userId;
```

## PRODUCT TABLE:

- **Insert (Create):**

```
INSERT INTO `inventory`.`product` (`title`, `summary`, `type`, `createdAt`, `updatedAt`,  
`content`)
```

```
VALUES ('Product Title', 'Product summary.', 1, NOW(), NULL, 'Product content goes  
here.');
```

- **Select:**

```
SELECT * FROM `inventory`.`product`;
```

- **Update:**

```
UPDATE `inventory`.`product`
```

```
SET `title` = 'New Title'
```

```
WHERE `id` = 1;
```

- **Delete:**

```
DELETE FROM `inventory`.`product`
```

```
WHERE `id` = 1;
```

### VIEW (product by type)

```
CREATE VIEW `products_by_type` AS
```

```
SELECT * FROM `inventory`.`product`
```

```
WHERE `type` = 1;
```

### JOIN (join with product meta)

```
SELECT p.*, pm.*
```

```
FROM `inventory`.`product` p
```

```
JOIN `inventory`.`product_meta` pm ON p.id = pm.productId;
```

## PRODUCT META TABLE:

### Category tale

- **Insert (Create):**

```
INSERT INTO `inventory`.`category` (`parentId`, `title`, `metaTitle`, `slug`, `content`)
VALUES (NULL, 'Main Category', 'Main Category', 'main-category', 'Main category
description.');
```

- **Update:**

```
UPDATE `inventory`.`category`
SET `title` = 'New Title'
WHERE `id` = 1;
```

- **Delete:**

```
DELETE FROM `inventory`.`category`
WHERE `id` = 1;
```

- **select:**

```
SELECT * FROM `inventory`.`category`;
```

- **Joins(with product category)**

```
SELECT c.*, pc.*
FROM `inventory`.`category` c
JOIN `inventory`.`product_category` pc ON c.id = pc.categoryId;
```

## Product Category Table:

### **CRUD Operations:**

Same as the Category Table.

## Brand Table:

### CRUD Operations:

Same as the Product Table.

## ORDER TABLE:

- **Insert (Create):**

```
INSERT INTO `inventory`.`order` (`userId`, `type`, `status`, `subTotal`, `itemDiscount`,  
`tax`, `shipping`, `total`, `promo`, `discount`, `grandTotal`, `createdAt`, `updatedAt`,  
`content`)
```

```
VALUES (1, 1, 1, 100.00, 10.00, 5.00, 5.00, 110.00, 'PROMO123', 10.00, 100.00,  
NOW(), NULL, 'Order details.');
```

- **Update:**

```
UPDATE `inventory`.`order`
```

```
SET `status` = 2
```

```
WHERE `id` = 1;
```

- **Delete:**

```
DELETE FROM `inventory`.`order`
```

```
WHERE `id` = 1;
```

- **select:**

```
SELECT * FROM `inventory`.`order`;
```

- **Joins(with user)**

```
SELECT o.*, u.*
```

```
FROM `inventory`.`order` o
```

```
JOIN `inventory`.`user` u ON o.userId = u.id;
```

## **ADDRESS TABLE:**

### **CRUD Operations:**

Same as the User Table.

Views: None.

- **Joins(with orders)**

```
SELECT a.*, o.*
```

```
FROM `inventory`.`address` a
```

```
JOIN `inventory`.`order` o ON a.orderId = o.id;
```

## **ITEM TABLE:**

### **CRUD Operations:**

Same as the Product Table.

Views: None.

- **Joins(with product and brand)**

```
SELECT i.*, p.*, b.*
```

```
FROM `inventory`.`item` i
```

```
JOIN `inventory`.`product` p ON i.productId = p.id
```

```
JOIN `inventory`.`brand` b ON i.brandId = b.id;
```

## **ORDER ITEM TABLE:**

### **CRUD Operations:**

Same as the Product Table.

Views: None.

- **Joins(with product)**

```
SELECT oi.*, p.*  
FROM `inventory`.`order_item` oi  
JOIN `inventory`.`product` p ON oi.productId = p.id;
```

## **TRANSACTIONN TABLE:**

### **CRUD Operations:**

Same as the Product Table.

Views: None.

- **Joins(with order)**

```
SELECT t.*, o.*  
FROM `inventory`.`transaction` t  
JOIN `inventory`.`order` o ON t.orderId = o.id;
```