DATABASE DESIGN

**Table 1: roles**

| Serial No | Field Name | Key Constraints | Datatype (Size) | Description |
| --- | --- | --- | --- | --- |
| 1 | roleId | PRIMARY KEY, AUTO\_INCREMENT | int | Unique identifier for the role |
| 2 | roleName | NOT NULL, UNIQUE | varchar(50) | Name of the role (e.g., admin, customer) |
| 3 | status | varchar(50) |  | Status of the role (e.g., active, inactive) |
| 4 | createdAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the role was created |
| 5 | updatedAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the role was last updated |

## **Table 2: users**

| Serial No | Field Name | Key Constraints | Datatype (Size) | Description |
| --- | --- | --- | --- | --- |
| 1 | userId | PRIMARY KEY, DEFAULT: uuid\_generate\_v4() | uuid | Unique identifier for the user |
| 2 | email | NOT NULL, UNIQUE | varchar(255) | User's email address |
| 3 | passwordHash | NOT NULL | varchar(255) | Hashed password for the user |
| 4 | roleId | FOREIGN KEY REFERENCES roles(roleId), NOT NULL | int | User's assigned role ID (references roles) |
| 5 | googleAuthId | varchar(255) |  | Google authentication ID (if applicable) |
| 6 | status | varchar(50) |  | Status of the user (e.g., active, inactive) |
| 7 | createdAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the user was created |
| 8 | updatedAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the user was last updated |

## **Table 3: stores**

| Serial No | Field Name | Key Constraints | Datatype (Size) | Description |
| --- | --- | --- | --- | --- |
| 1 | storeId | PRIMARY KEY, AUTO\_INCREMENT | int | Unique identifier for the store |
| 2 | userId | FOREIGN KEY REFERENCES users(userId), NOT NULL | uuid | User ID who owns the store (references users) |
| 3 | storeName | NOT NULL, UNIQUE | varchar(255) | Name of the store |
| 4 | storeDesc | text |  | Description of the store |
| 5 | status | varchar(50) |  | Status of the store (e.g., active, inactive) |
| 6 | totalOrders | DEFAULT: 0 | int | Total number of orders placed for the store |
| 7 | totalProducts | DEFAULT: 0 | int | Total number of products in the store |
| 8 | createdAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the store was created |
| 9 | updatedAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the store was last updated |
| 10 | store\_img | Varchar (255) |  | URL or path to the store image |

## **Table 4: products**

| Serial No | Field Name | Key Constraints | Datatype (Size) | Description |
| --- | --- | --- | --- | --- |
| 1 | prodId | PRIMARY KEY, AUTO\_INCREMENT | int | Unique identifier for the product |
| 2 | storeId | FOREIGN KEY REFERENCES stores(storeId), NOT NULL | int | Store ID where the product belongs (references stores) |
| 3 | prodName | NOT NULL, UNIQUE | varchar(255) | Name of the product |
| 4 | prodDesc | text |  | Description of the product |
| 5 | prodPrice | NOT NULL | decimal(10, 2) | Price of the product |
| 6 | status | varchar(50) |  | Status of the product (e.g., active, inactive) |
| 7 | prod\_img | varchar(255) |  | URL or path to the product image |
| 8 | prod\_qnty | NOT NULL | int | Quantity of the product in stock |
| 9 | prod\_add\_date | NOT NULL | date | Date the product was added to the store |
| 10 | refill\_date | varchar(50) |  | Date the product needs to be restocked (optional) |

**Table 5: orderItems**

| Serial No | Field Name | Key Constraints | Datatype (Size) | Description |
| --- | --- | --- | --- | --- |
| 1 | orderId | FOREIGN KEY REFERENCES orders(orderId), NOT NULL | int | Order ID the item belongs to (references orders) |
| 2 | prodId | FOREIGN KEY REFERENCES products(prodId), NOT NULL | int | Product ID of the ordered item (references products) |
| 3 | quantity | NOT NULL | int | Quantity of the product ordered |
| 4 | price | NOT NULL | decimal(10, 2) | Price of the ordered product |

**Table 6: orders**

| Serial No | Field Name | Key Constraints | Datatype (Size) | Description |
| --- | --- | --- | --- | --- |
| 1 | orderId | PRIMARY KEY, AUTO\_INCREMENT | int | Unique identifier for the order |
| 2 | custId | FOREIGN KEY REFERENCES customers(custId), NOT NULL | int | Customer ID who placed the order (references customers) |
| 3 | storeId | FOREIGN KEY REFERENCES stores(storeId), NOT NULL | int | Store ID from where the order was placed (references stores) |
| 4 | status | varchar(50) |  | Status of the order (e.g., pending, processing, shipped) |
| 5 | createdAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the order was created |
| 6 | updatedAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the order was last updated |

**Table 7: courses**

| Serial No | Field Name | Key Constraints | Datatype (Size) | Description |
| --- | --- | --- | --- | --- |
| 1 | coId | PRIMARY KEY, AUTO\_INCREMENT | int | Unique identifier for the course |
| 2 | instId | FOREIGN KEY REFERENCES instructors(instId), NOT NULL | int | Instructor ID who created the course (references instructors) |
| 3 | coTitle | NOT NULL, UNIQUE | varchar(255) | Title of the course |
| 4 | coDesc | text |  | Description of the course |
| 5 | status | varchar(50) |  | Status of the course (e.g., active, inactive) |
| 6 | createdAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the course was created |
| 7 | updatedAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the course was last updated |
| 8 | co\_mat | text |  | Course material (e.g., PDFs, videos) |

**Table 8: courseStudents**

| Serial No | Field Name | Key Constraints | Datatype (Size) | Description |
| --- | --- | --- | --- | --- |
| 1 | coId | FOREIGN KEY REFERENCES courses(coId), NOT NULL | int | Course ID that the student is enrolled in (references courses) |
| 2 | custId | FOREIGN KEY REFERENCES customers(custId), NOT NULL | int | Customer ID enrolled in the course (references customers) |

**Table 9: customers**

| Serial No | Field Name | Key Constraints | Datatype (Size) | Description |
| --- | --- | --- | --- | --- |
| 1 | custId | PRIMARY KEY, AUTO\_INCREMENT | int | Unique identifier for the customer |
| 2 | userId | FOREIGN KEY REFERENCES users(userId), NOT NULL | uuid | User ID associated with the customer (references users) |
| 3 | custHist | text |  | Customer's order history |
| 4 | wishlist | text |  | Customer's wishlist of products |
| 5 | custCo | text |  | Courses enrolled in by the customer |
| 6 | custAddr | varchar(255) |  | Customer's shipping address |
| 7 | status | varchar(50) |  | Status of the customer ( |

**Table 10: instructors**

| Serial No | Field Name | Key Constraints | Datatype (Size) | Description |
| --- | --- | --- | --- | --- |
| 1 | instId | PRIMARY KEY, AUTO\_INCREMENT | int | Unique identifier for the instructor |
| 2 | userId | FOREIGN KEY REFERENCES users(userId), NOT NULL | uuid | User ID associated with the instructor (references users) |
| 3 | instBio | text |  | Instructor's biography |
| 4 | instSpcl | text |  | Instructor's area of specialization |
| 5 | instCo | text |  | Courses created by the instructor |
| 6 | instAvail | varchar(50) |  | Instructor's availability (e.g., full-time, part-time) |
| 7 | status | varchar(50) |  | Status of the instructor (e.g., active, inactive) |
| 8 | createdAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the instructor was created |
| 9 | updatedAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the instructor was last updated |

**Table 11: payment**

| Serial No | Field Name | Key Constraints | Datatype (Size) | Description |
| --- | --- | --- | --- | --- |
| 1 | payId | PRIMARY KEY, AUTO\_INCREMENT | int | Unique identifier for the payment |
| 2 | orderId | FOREIGN KEY REFERENCES orders(orderId), NOT NULL | int | Order ID associated with the payment (references orders) |
| 3 | payAmnt | NOT NULL | decimal(10, 2) | Amount paid for the order |
| 4 | payStat | NOT NULL | varchar(50) | Payment status (e.g., pending, completed, failed) |
| 5 | payMethod | NOT NULL | varchar(50) | Payment method used (e.g., credit card, debit card) |
| 6 | payDate | NOT NULL | date | Date the payment was made |
| 7 | custBilling | varchar(255) |  | Customer's billing address |
| 8 | status | varchar(50) |  | Status of the payment (e.g., active, refunded) |
| 9 | createdAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the payment was created |
| 10 | updatedAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the payment was last updated |

**Table 12: feedback**

| Serial No | Field Name | Key Constraints | Datatype (Size) | Description |
| --- | --- | --- | --- | --- |
| 1 | feedId | PRIMARY KEY, AUTO\_INCREMENT | int | Unique identifier for the feedback |
| 2 | custId | FOREIGN KEY REFERENCES customers(custId), NOT NULL | int | Customer ID who submitted the feedback (references customers) |
| 3 | storeId | FOREIGN KEY REFERENCES stores(storeId), NOT NULL | int | Store ID the feedback is about (references stores) |
| 4 | relatedOrderId | FOREIGN KEY REFERENCES orders(orderId), NOT NULL | int | Order ID associated with the feedback (references orders) |
| 5 | feedType | NOT NULL | varchar(50) | Type of feedback (e.g., product review, service feedback) |
| 6 | feedCat | NOT NULL | varchar(50) | Category of feedback (e.g., positive, negative) |
| 7 | feedDesc | text |  | Description of the feedback |
| 8 | feedRat | int |  | Rating provided by the customer (optional) |
| 9 | feedStat | varchar(50) |  | Status of the feedback (e.g., pending, addressed) |

**Table 13: tutorials**

| Serial No | Field Name | Key Constraints | Datatype (Size) | Description |
| --- | --- | --- | --- | --- |
| 1 | tutorialId | PRIMARY KEY, AUTO\_INCREMENT | int | Unique identifier for the tutorial |
| 2 | title | NOT NULL | varchar(255) | Title of the tutorial |
| 3 | description | text |  | Description of the tutorial |
| 4 | content | text |  | Content of the tutorial (e.g., text, video) |
| 5 | status | varchar(50) |  | Status of the tutorial (e.g., draft, published) |
| 6 | createdAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the tutorial was created |
| 7 | updatedAt | NOT NULL, DEFAULT: CURRENT\_TIMESTAMP | timestamp | Date and time the tutorial was last updated |