**E-commerce:**

Controller

REST PLUGINS

M

RDBMS

O

Website

HTML / APK

Dynamic

JS

D

E

L

**REMOTE SYSTEM:**

* JAVA EE platform
* RDBMS support

**DBMS:**

**User:**

|  |  |  |  |
| --- | --- | --- | --- |
| Index Character | CHAR(1) | NOT NULL | Give the first letter of Email |
| First Name | Varchar2(50) | NOT NULL |  |
| Last Name | Varchar2(50) | NOT NULL |  |
| Mobile Number | Number | UNIQUE |  |
| Email Address | Email | UNIQUE/NOT NULL - **Primary Key** |  |
| User Type | Varcher2(10) | NOT NULL | **Admin/Customer/Merchants** |

**Product:**

|  |  |  |  |
| --- | --- | --- | --- |
| Product Id | Varchar2(6) | **Primary Key** |  |
| Name | Varchar2(50) | NOT NULL / UNIQUE |  |
| Type | Varchar2(50) | NOT NULL |  |
| Subtype | Varchar2(50) |  |  |
| Price | Varchar2(50) | NOT NULL |  |
| Company | Varchar2(50) | NOT NULL |  |
| Discount | Number |  |  |
| Rating | Number |  |  |
| Warranty | Number |  |  |
| Stock | Number |  | Availability |
| Delivery Time | Number |  |  |
| Color | Varchar2(10) |  |  |
| PackOf |  |  | Sold in bunches |
| Material |  |  |  |

**Product Specification:**

|  |  |  |  |
| --- | --- | --- | --- |
| ProductId | VARCHAR2(6) | NOT NULL (Foreign Key) |  |
| Specification Heading | VARCHAR2(20) |  | E.g: Video Features, Audio Features, Connectivity, etc. |
| Specification Key | VARCHAR2(20) | NOT NULL | E.g: Camera, screen size, battery capacity, etc. |
| Specification Value | VARCHAR2(20) | NOT NULL |  |

**Merchant Item:**

|  |  |  |  |
| --- | --- | --- | --- |
| Merchant Name | VARCHAR2(50) | NOT NULL |  |
| ProductId | VARCHAR2(6) | NOT NULL |  |

**Order:**

|  |  |  |  |
| --- | --- | --- | --- |
| OrderId | VARCHAR2(6) | Primary Key |  |
| Date | Date | NOT NULL |  |
| Email | Email | NOT NULL (Foreign Key) |  |
| Status | VARCHAR2(15) | NOT NULL | Status of the order – placed/shipped/pod/cancelled |
| Price | NUMBER | NOT NULL |  |
| Items | VARCHAR2(500) | NOT NULL | Use **List<Product>** and add on database using key value pair |

**Cart:**

**[Need to be updated on over time in terms of stock, latest price]**

|  |  |  |  |
| --- | --- | --- | --- |
| Email | Email | Primary Key |  |
| Items | VARCHAR2(500) |  | Update List<Product> by latest status |
| Purchase Status |  |  |  |

**Functions:**

* **Common:**

1. Log in
2. View all products

* **Admin:**

1. Add a product
2. Remove a product
3. Update a product
4. Block a user
5. Add an order
6. Delete an order
7. Update an order
8. View all orders
9. Cancel all orders
10. Delete all products

* **Customer:**

1. User Registration
2. View all items.
3. Add items to cart
4. Purchase items from cart
5. Cancel order
6. View order
7. View Cart
8. Update personal info (without Email)

* **Merchants:**

1. View their own products

2. Update their own products

3. Add new product

4. Delete their own product

**Processes:**

1. Send SMS/Mail for placing a purchase
2. Change in status of the order
3. Implement logger for per day basis.

**ER Diagram:**