

Near ME

Database Design Project



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CSC8490

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1. **REQUIREMENTS**:

This classifieds system is available for three different locations/residential community. So, every user who registers themselves within this app should be connected to one of the three locations. Every **location** has one Admin who manages the ads in the classifieds system, this way, every user in a location is supervised by Admin in that location. An admin can add/remove users from the application. An **Admin** has an adminID which is unique, adminFN, adminLN, address, phoneNumber.

Every **user** must be either a buyer or a seller. Every user has a unique userID, userFN, userLN, email, aptNo, phoneNo. A user can only be registered under one location. A user can buy or sell an item.

A user can view **ads**. Every ad has a unique adID , a description, a location, contactDetails and a datePosted. A user may post multiple ads but an ad is always related to one specific user.

Every ad is about a **product** which is identified by a unique productID, has a productName, datePurchased, originalPrice, sellingPrice, usedTime, productQuantity.

A user can then book the ad if they have decided to buy the item after confirming with the seller over the chat. An **order** will be placed, which has the orderID, orderDate, sellingPrice, quantity. A user may have multiple orders linked to their account.

Products sold by the sellers fall under different **categories**. A user can surf through the categories to search for a product. A category has a category ID, categoryName. Every product is related to a category but there may be categories that do not currently have any ads posted under them.

It is assumed that a buyer may meet the seller in person and make the payment or make through but payments are not handled by this classifieds management system.

1. **ER MODEL:**

Attaching .dia file as the size of the diagram is too compressed.

1. **RELATIONAL SCHEMA NOTATION:**

**1N: No repeating groups**

Location(locationName, zipCode, adminID)

user(userID, userLN, userFN, phone, password, aptNo, locationName, adminID, wishlistID)

admin(adminID, adminFN, adminLN, phone)

ad(adID, description, datePosted, contactDetails, userID, productID)

product(productID, productName, usedTime, originalPrice, sellingPrice , categoryID)

order(orderID, orderDate, price, quantity, status, userID, productID)

wishlistDetails(wishlistID, adID)

category(categoryID, categoryName)

wishlist(wishlistID, userID)

**2N: Full functional dependency**

Location(locationName, zipCode, adminID)

user(userID, userLN, userFN, phone, password, aptNo, locationName, adminID)

admin(adminID, adminFN, adminLN, phone, locationName)

ad(adID, description, datePosted, contactDetails, userID, productID)

product(productID, productName, usedTime, originalPrice, sellingPrice , categoryID)

order(orderID, orderDate, price, quantity, status, userID, productID)

wishlistDetails(wishlistID, adID)

wishlist(wishlistID, userID)

category(categoryID, categoryName)

**3N: Transitive dependency**

user(userID, userLN, userFN, phone, password, aptNo, locationName) [since adminID is determined by locationName]

admin(adminID, adminFN, adminLN, phone, locationName)

ad(adID, description, datePosted, contactDetails, userID, productID)

product(productID, productName, usedTime, originalPrice, sellingPrice , categoryID)

order(orderID, orderDate, price, quantity, status, userID, productID)

wishlistDetails(wishlistID, adID, date)

wishlist(wishlistID, userID)

category(categoryID, categoryName)

1. **DATA DICTIONARY:**

There are 9 tables in this database system.

1. mylocation
2. myadmin
3. myuser
4. myproduct
5. myad
6. mycategory
7. mywishlist
8. wishlistdetails
9. myorder
10. **mylocation**: Users can belong to only these specific locations if they are to use the NearMe application. This table gives information about the locations.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Description** | **Datatype** | **Domain** | **Nullable** | **PK** | **FK** |
| locationName | Name of the residential community | varchar2(20) | All | No | Yes | No |
| zipCode | Zipcode of the location | char(5) | 19000-19999 | Yes | No | No |
| adminID | Unique ID for Admin | char(6) | AN0001-AN9999 | No | No | Yes |

1. **myadmin**: Contains information about admins. There is one admin per location and this table gives information about each admin.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Description** | **Datatype** | **Domain** | **Nullable** | **PK** | **FK** |
| adminID | Unique ID for Admin | char(6) | AN0001-AN9999 | No | Yes | No |
| adminFN | Admin First Name | varchar2(20) | All | No | No | No |
| adminLN | Admin Last Name | varchar2(20) | All | Yes | No | No |
| adminPh | Admin Phone Number | char(10) | 0000000000-9999999999 | Yes | No | No |

1. myuser: Contains information about users using the NearBy portal, all the users are only from the allowed locations. This table excludes admins.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Description** | **Datatype** | **Domain** | **Nullable** | **PK** | **FK** |
| userID | Unique ID for User | char(6) | UR0001-UR9999 | No | Yes | No |
| userFN | User First Name | varchar2(20) | All | No | No | No |
| userLN | User Last Name | varchar2(20) | All | Yes | No | No |
| userPh | User's phone number | char(10) | 0000000000-9999999999 | Yes | No | No |
| aptNo | User's residential apt no | varchar2(10) | all | Yes | No | No |
| locationName | Name of the community where the user resides | varchar2(20) | All | No | No | Yes |

1. myproduct: This table gives information about a product that is linked to an ad posted.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Description** | **Datatype** | **Domain** | **Nullable** | **PK** | **FK** |
| productID | Unique ID for a product | char(6) | PR0001-PR9999 | No | Yes | No |
| productName | Name of the product being sold | varchar2(100) | All | No | No | No |
| usedTime | period of time for which the product was used | char(10) | < 3 years | Yes | No | No |
| orginalPrice | Original price for which the product on sale was bought | number(6,2) | < 9999 | Yes | No | No |
| sellingPrice | Price at which the product is being sold | number(6,2) | < 1000 | Yes | No | No |
| categoryID | Unique ID for a category | char(6) | CA0001-CA9999 | No | No | Yes |
| productQuantity | Number of products being sold | number(2) | <50 | No | No | No |

1. myad: Every user can post ads on the nearMe. This table gives information about the ad. Every ad has a product related to it.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Description** | **Datatype** | **Domain** | **Nullable** | **PK** | **FK** |
| adID | Unique ID for an Ad | char(6) | AD0001-AD9999 | No | Yes | No |
| adDescription | Description for an ad | varchar2(300) | All | No | No | No |
| adDateposted | Date when the ad was posted | date | >1-SEP-2020 | No | No | No |
| adStatus | Status of the ad posted | varchar2(20) | pending, active, soldout | No | No | No |
| contactDetails | Contact details of the seller | varchar2(100) | All | Yes | No | No |
| userID | Unique ID for a user | char(6) | UR0001-UR9999 | No | No | Yes |
| productID |  | char(6) | PR0001-PR9999 | No | No | Yes |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Description** | **Datatype** | **Domain** | **Nullable** | **PK** | **FK** |
| categoryID | Category unique ID | char(6) | CR0001-CR9999 | No | Yes | No |
| categoryName | Name of the product category | varchar2(20) | All | No | No | No |

1. mycategory: This table gives details of the categories available for different products being sold. Every product is related to a category.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Description** | **Datatype** | **Domain** | **Nullable** | **PK** | **FK** |
| wishlistID | Unique ID for a wishlist | char(6) | WL0001-WL9999 | No | Yes | No |
| userID | User unique ID | char(6) | UR0001-UR9999 | No | No | Yes |

1. mywishlist: Every registered user has a wishlist, this table gives information about each wishlist linked to a user.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Description** | **Datatype** | **Domain** | **Nullable** | **PK** | **FK** |
| wishlistID | Unique ID for a wishlist | char(6) | WL0001-WL9999 | No | Yes | Yes |
| adID | Unique ID for an Ad | char(6) | AD0001-AD9999 | No | Yes | Yes |

1. wishlistDetails: Every user has a wishlist and this table gives information about all the wishlisted ads inside a user's wishlist.
2. myorder: Gives details of the orders made by a user. An order is made when the user books an ad and is approved by the seller who posted the ad.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Description** | **Datatype** | **Domain** | **Nullable** | **PK** | **FK** |
| orderID | Unique Order ID | char(6) | OR0001-OR9999 | No | Yes | No |
| orderDate | Date on which a order was made | date | >1-SEP-2020 | No | No | No |
| quantity | the quantity selected for the order | Number(2) | <50 | No | No | No |
| status | status of the order | varchar2(20) | cancelled, completed, pending | No | No | No |
| userId | Unique ID for User | char(6) | AN0001-AN9999 | No | No | Yes |
| productId | Unique ID for a product | char(6) | PR0001-PR9999 | No | No | Yes |

1. **DDL:**

**CREATE TABLE MYADMIN(**

**adminID char(6) CONSTRAINT myadmin\_pk PRIMARY KEY,**

**adminFN varchar2(20) CONSTRAINT myadmin\_nn\_adminFN NOT NULL,**

**adminLN varchar2(20),**

**adminPh char(10)**

**)**

**CREATE TABLE MYLOCATION(**

**locationName varchar2(20) CONSTRAINT mylocation\_pk PRIMARY KEY,**

**zipCode char(5),**

**adminID char(6)CONSTRAINT mylocation\_nn\_adminID NOT NULL**

**CONSTRAINT mylocation\_fk\_admin REFERENCES MYADMIN(adminID) ON DELETE CASCADE**

**)**

**CREATE TABLE MYUSER(**

**userID char(6) CONSTRAINT myuser\_pk PRIMARY KEY,**

**userFN varchar2(20) CONSTRAINT myuser\_nn\_userFN NOT NULL,**

**userLN varchar2(20),**

**userPh char(10),**

**aptNo varchar2(10),**

**locationName varchar2(20) CONSTRAINT myuser\_nn\_locationName NOT NULL**

**CONSTRAINT myuser\_fk\_mylocation REFERENCES MYLOCATION(locationName) ON DELETE CASCADE**

**)**

**CREATE TABLE MYWISHLIST(**

**wishlistID char(6) CONSTRAINT mywishlist\_pk PRIMARY KEY,**

**userID char(6) CONSTRAINT mywishlist\_nn\_userID NOT NULL**

**CONSTRAINT mywishlist\_fk\_myuser REFERENCES MYUSER(userID)ON DELETE CASCADE**

**)**

**CREATE TABLE myAd(**

**adID char(6) CONSTRAINT myAd\_pk PRIMARY KEY,**

**adDescription varchar2(300) CONSTRAINT myad\_nn\_adDescription NOT NULL,**

**adDateposted date,**

**adStatus varchar2(20) CONSTRAINT myad\_nn\_adStatus NOT NULL,**

**contactDetails varchar2(100), /\* either email or phonenumber\*/**

**userID char(6) CONSTRAINT myAd\_nn\_userID NOT NULL**

**CONSTRAINT myAd\_fk\_myuser REFERENCES MYUSER(userID),**

**productID char(6) CONSTRAINT myAd\_nn\_productID NOT NULL**

**CONSTRAINT myAd\_fk\_myproduct REFERENCES MYPRODUCT(productID)ON DELETE CASCADE**

**)**

**CREATE TABLE myproduct(**

**productID char(6) CONSTRAINT myproduct\_pk PRIMARY KEY,**

**productName varchar2(100) CONSTRAINT myproduct\_nn\_productName NOT NULL,**

**usedTime char(10),**

**orginalPrice number(6,2),**

**sellingPrice number(5,2),**

**categoryID CONSTRAINT myproduct\_nn\_categoryID NOT NULL**

**CONSTRAINT myproduct\_fk\_categoryID REFERENCES mycategory(categoryID)ON DELETE CASCADE**

**productQuantity number(2) default 1**

**)**

**CREATE TABLE MYORDER(**

**orderID char(6) CONSTRAINT myorder\_pk PRIMARY KEY,**

**orderDate date CONSTRAINT myorder\_nn\_orderDate NOT NULL,**

**quantity number(2) DEFAULT 1,**

**status varchar2(20) CONSTRAINT myorder\_nn\_status NOT NULL,**

**userID char(6) CONSTRAINT myorder\_nn\_uerID REFERENCES myuser(userID) ON DELETE CASCADE,**

**productID char(6)CONSTRAINT ad\_nn\_productID NOT NULL**

**CONSTRAINT myorder\_fk\_myproduct REFERENCES MYPRODUCT(productID)ON DELETE CASCADE**

**)**

**CREATE TABLE wishlistDetails(**

**wishlistID char(6)**

**CONSTRAINT wishlistdetails\_fk\_wishlist REFERENCES mywishlist(wishlistID) ON DELETE CASCADE,**

**adID char(6) CONSTRAINT wishlistdetails\_fk\_ad REFERENCES myad(adID) ON DELETE CASCADE,**

**CONSTRAINT wishlistDetails\_pk PRIMARY KEY(wishlistId,adID)**

**)**

**CREATE TABLE mycategory(**

**categoryID char(6) constraint mycategory\_pk PRIMARY KEY,**

**categoryName varchar2(20) constraint mycategory\_nn\_categoryname NOT NULL**

**)**

1. **DML:**

**INSERT INTO MYADMIN**

**VALUES('AD0001','steve','smith','6104852173');**

**INSERT INTO MYADMIN**

**VALUES('AD0002','Robin','Walter','4847903474');**

**INSERT INTO MYADMIN**

**VALUES('AD0003','Jessica','Bing','9135904598');**

**/\* phone numbers or two admins cannot be the same\*/**

**ALTER TABLE MYADMIN**

**ADD CONSTRAINT myadmin\_uq\_adminPh UNIQUE (adminPh);**

**/\*Admin might want to update their phone number\*/**

**update myadmin**

**set adminPh='6105362255'**

**where adminID='AD0002';**

**/\*cannot delete admin as there is exactly one admin at a time for one location\*/**

**--------------------------------------------------------------------------------------------------------------------------------------**

**INSERT INTO MYLOCATION**

**VALUES('StoneGateAtDevon','19333','AD0001');**

**INSERT INTO MYLOCATION**

**VALUES('LaMaison','19087','AD0002');**

**INSERT INTO MYLOCATION**

**VALUES('DevonPark','19333','AD0003');**

**/\* every location has a unique admin, one admin cannot supervise two locations\*/**

**ALTER TABLE MYLOCATION**

**ADD CONSTRAINT mylocation\_uq\_adminID UNIQUE (adminID);**

**/\*Admin might want to update the name of the apartments\*/**

**UPDATE MYLOCATION**

**SET locationName ='DevonParkApartments'**

**WHERE locationName = 'DevonPark';**

**--------------------------------------------------------------------------------------------------------------------------------------**

**INSERT INTO MYUSER**

**VALUES('UR0001','Isabel','Stuart','4379934453','C95','StoneGateAtDevon');**

**INSERT INTO MYUSER**

**VALUES('UR0002','Ronny','Kapoor','9248623451','K193','LaMaison');**

**INSERT INTO MYUSER**

**VALUES('UR0003','Shweta','Tiwari','6103847392','F144','StoneGateAtDevon');**

**INSERT INTO MYUSER**

**VALUES('UR0004','Rob','Martin','4847756910','561B','DevonParkApartments');**

**INSERT INTO MYUSER**

**VALUES('UR0005','Stacy','Chu','9140233654','A70','StoneGateAtDevon');**

**INSERT INTO MYUSER**

**VALUES('UR0006','Owen','Hunt','8257249077','444E','DevonParkApartments');**

**INSERT INTO MYUSER**

**VALUES('UR0007','Derek','Sheperd','4843445766','F196','StoneGateAtDevon');**

**INSERT INTO MYUSER**

**VALUES('UR0008','Meredith','Grey','4346673322','F194','StoneGateAtDevon');**

**INSERT INTO MYUSER**

**VALUES('UR0009','Christina','Yang','2125576081','F194','StoneGateAtDevon');**

**INSERT INTO MYUSER**

**VALUES('UR0010','George','Omalley','6061227764','B128','LaMaison');**

**INSERT INTO MYUSER**

**VALUES('UR0011','Mark','Sloan','4327598091','D312','LaMaison');**

**INSERT INTO MYUSER**

**VALUES('UR0012','Adison','Montgomery','814371993**

**3','G408','LaMaison');**

**INSERT INTO MYUSER**

**VALUES('UR0013','Jackson','Avery','5708832190','221A','DevonParkApartments');**

**INSERT INTO MYUSER**

**VALUES('UR0014','April','Kepner','2673245678','194H','DevonParkApartments');**

**/\*A user might change his apartment to a different community among the available communities**

**then, both his apartment no and location name will change\*/**

**update myuser**

**set aptNo= 'L373',**

**locationName = 'LaMaison'**

**where userFN = 'Shweta'**

**and userLN='Tiwari';**

**/\* A user might be deleted if he no longer wants to be a part of the application\*/**

**delete from myuser**

**where userID = 'UR0005';**

**--------------------------------------------------------------------------------------------------------------------------------------**

**INSERT INTO MYWISHLIST**

**VALUES('WL0001','UR0001');**

**INSERT INTO MYWISHLIST**

**VALUES('WL0002','UR0002');**

**INSERT INTO MYWISHLIST**

**VALUES('WL0003','UR0003');**

**INSERT INTO MYWISHLIST**

**VALUES('WL0004','UR0004');**

**INSERT INTO MYWISHLIST**

**VALUES('WL0005','UR0005');**

**INSERT INTO MYWISHLIST**

**VALUES('WL0006','UR0006');**

**INSERT INTO MYWISHLIST**

**VALUES('WL0007','UR0007');**

**INSERT INTO MYWISHLIST**

**VALUES('WL0008','UR0008');**

**INSERT INTO MYWISHLIST**

**VALUES('WL0009','UR0009');**

**INSERT INTO MYWISHLIST**

**VALUES('WL0010','UR0010');**

**INSERT INTO MYWISHLIST**

**VALUES('WL0011','UR0011');**

**INSERT INTO MYWISHLIST**

**VALUES('WL0012','UR0012');**

**INSERT INTO MYWISHLIST**

**VALUES('WL0013','UR0013');**

**INSERT INTO MYWISHLIST**

**VALUES('WL0014','UR0014');**

**/\* If a user is deleted from the system then according to 'on delete cascade'**

**the corresponding row in mywishlist table is also deleted\*/**

**DELETE FROM MYUSER**

**WHERE USERID = 'UR0001';**

**/\* no other activities on mywishlist table\*/**

**--------------------------------------------------------------------------------------------------------------------------------------**

**INSERT INTO MYCATEGORY**

**VALUES ('CA0001', 'ELECTRONICS');**

**INSERT INTO MYCATEGORY**

**VALUES ('CA0002', 'BOOKS');**

**INSERT INTO MYCATEGORY**

**VALUES ('CA0003', 'FURNITURE');**

**INSERT INTO MYCATEGORY**

**VALUES ('CA0004', 'KITCHEN');**

**INSERT INTO MYCATEGORY**

**VALUES ('CA0005', 'CLOTHING');**

**INSERT INTO MYCATEGORY**

**VALUES ('CA0006', 'AUTO-MOBILE');**

**INSERT INTO MYCATEGORY**

**VALUES ('CA0007', 'KIDS');**

**INSERT INTO MYCATEGORY**

**VALUES ('CA0008', 'STATIONARY');**

**INSERT INTO MYCATEGORY**

**VALUES ('CA0009', 'GARDEN');**

**INSERT INTO MYCATEGORY**

**VALUES ('CA0010', 'INSTRUMENTS');**

**INSERT INTO MYCATEGORY**

**VALUES ('CA0011', 'JEWELLERY');**

**INSERT INTO MYCATEGORY**

**VALUES ('CA0012', 'MISCALLANEOUS');**

**INSERT INTO MYCATEGORY**

**VALUES ('CA0013', 'FOOD');**

**/\* admin might want to change the category name\*/**

**UPDATE MYCATEGORY**

**SET categoryName ='MUSICAL INSTRUMENTS'**

**WHERE categoryname = 'INSTRUMENTS';**

**/\* categoryname cannot be repeated\*/**

**alter table mycategory**

**add constraint mycategory\_uq\_categoryname unique(categoryName);**

**/\* admin might want to delete a category \*/**

**DELETE FROM mycategory**

**WHERE categoryname = 'FOOD';**

**--------------------------------------------------------------------------------------------------------------------------------------**

**INSERT INTO MYPRODUCT (productID, productName, usedTime, originalPrice, sellingPrice , categoryID, productQuantity)**

**VALUES ('PR0001', 'Study Table','1 year',60,20,'CA0003',1);**

**INSERT INTO MYPRODUCT(productID, productName,usedTime, originalPrice, sellingPrice , categoryID, productQuantity)**

**VALUES ('PR0002', 'Kohls Blender','2 MONTHS',25,10,'CA0004',1);**

**INSERT INTO MYPRODUCT(productID, productName, usedTime, originalPrice, sellingPrice , categoryID, productQuantity)**

**VALUES ('PR0003', 'Office chair','8 months',80,50,'CA0003',1);**

**INSERT INTO MYPRODUCT(productID, productName, usedTime, originalPrice, sellingPrice , categoryID, productQuantity)**

**VALUES ('PR0004', 'Patio chairs','6 months',50,20,'CA0003',2);**

**INSERT INTO MYPRODUCT(productID, productName, usedTime, originalPrice, sellingPrice , categoryID, productQuantity)**

**VALUES ('PR0005', 'Roku smart LED HD TV','10 months',80,40,'CA0001',1);**

**INSERT INTO MYPRODUCT(productID, productName, usedTime, originalPrice, sellingPrice , categoryID, productQuantity)**

**VALUES ('PR0006', 'Queen size bed frame','1.5 years',220,150,'CA0003',1);**

**/\* A user would want to update the name of a product\*/**

**select \* from myproduct;**

**UPDATE myproduct**

**SET**

**productName = 'Blue Patio Chairs'**

**WHERE**

**productId =** **'PR0004';**

**--------------------------------------------------------------------------------------------------------------------------------------**

**/\*Adding not null constraint as the adDatePosted cannot be null and need to be**

**displayed to the users\*/**

**ALTER TABLE myAd**

**MODIFY( adDatePosted constraint myad\_nn\_adDatePosted NOT NULL);**

**INSERT INTO myad(adId, adDescription,adDatePosted,adStatus, contactDetails, userID, productID)**

**VALUES ('AD0001','Wooden study table', '12-SEP-20','active','email me at xyz@gmail.com or contact at 9248623451','UR0002','PR0001');**

**INSERT INTO myad(adId, adDescription,adDatePosted,adStatus, contactDetails, userID, productID)**

**VALUES ('AD0002','Kohls blender new excellent condition','12-SEP-20','active','email me at insertrandomid@gmail.com or contact at 6103847392','UR0003','PR0002');**

**INSERT INTO myad(adId, adDescription,adDatePosted,adStatus, contactDetails, userID, productID)**

**VALUES ('AD0003','Office chair with adjustable seat reach out to me for more info', '29-SEP-20','active','contact at 4847756910','UR0004','PR0003');**

**INSERT INTO myad(adId, adDescription,adDatePosted,adStatus, contactDetails, userID, productID)**

**VALUES ('AD0004','Two patio chairs', '01-OCT-20','active','contact at 8257249077','UR0006','PR0004');**

**INSERT INTO myad(adId, adDescription,adDatePosted,adStatus, contactDetails, userID, productID)**

**VALUES ('AD0005','Roku smart tv available for sale 40 inches', '03-OCT-20','active','email me at noideawhat23@gmail.com or contact at 4843445766','UR0007','PR0005');**

**INSERT INTO myad(adId, adDescription,adDatePosted,adStatus, contactDetails, userID, productID)**

**VALUES ('AD0006','Queen size bed frame excellent condition', '09-OCT-20','active','email at random235@gmail.com or contact at 4346673322','UR0008','PR0006');**

**/\* A user would want to update the description of the ad\*/**

**UPDATE myad**

**SET**

**adDescription = 'sturdy wooden study table'**

**WHERE**

**adId ='AD0001';**

**/\* A user would want to delete a product, if a product is deleted, the change is reflected in the myad table\*/**

**delete from myproduct**

**where productID ='PR0003';**

**--------------------------------------------------------------------------------------------------------------------------------------**

**INSERT INTO MYORDER(orderId, orderDate, quantity, status, userId, productId)**

**VALUES('OR0001', '13-SEP-20',1, 'completed','UR0002','PR0001');**

**INSERT INTO MYORDER(orderId, orderDate, quantity, status, userId, productId)**

**VALUES('OR0002', '15-SEP-20',1, 'completed','UR0003','PR0002');**

**INSERT INTO MYORDER(orderId, orderDate, quantity, status, userId, productId)**

**VALUES('OR0003', '14-OCT-20',1, 'completed','UR0004','PR0005');**

**INSERT INTO MYORDER(orderId, orderDate, quantity, status, userId, productId)**

**VALUES('OR0004', '25-NOV-20',1, 'pending','UR0004','PR0006');**

**UPDATE**

**MYORDER**

**SET**

**STATUS ='completed'**

**WHERE**

**PRODUCTID = 'PR0006';**

**/\* If orders are made and marked as completed, then the corresponding ad is marked as ‘soldout’)**

**UPDATE**

**myad**

**SET**

**adstatus = 'soldout'**

**WHERE productID IN (select productID**

**FROM myorder**

**WHERE status='completed');**

**ALTER TABLE myOrder MODIFY ( quantity NOT NULL);**

**--------------------------------------------------------------------------------------------------------------------------------------**

**INSERT INTO wishlistDetails(wishlistID,adId)**

**VALUES('WL0002','AD0001');**

**INSERT INTO wishlistDetails(wishlistID,adId)**

**VALUES('WL0002','AD0003');**

**INSERT INTO wishlistDetails(wishlistID,adId)**

**VALUES('WL0003','AD0005');**

**INSERT INTO wishlistDetails(wishlistID,adId)**

**VALUES('WL0003','AD0002');**

**INSERT INTO wishlistDetails(wishlistID,adId)**

**VALUES('WL0004','AD0004');**

**INSERT INTO wishlistDetails(wishlistID,adId)**

**VALUES('WL0011','AD0004');**

**/\* A user might want to remove an ad from wishlist\*/**

**DELETE FROM WISHLISTDETAILS**

**WHERE adID= 'AD0002' AND wishlistID ='WL0003';**

**/\*only adding and deleting in a wishlist\*/**

1. **Queries:**

**/\*VIew Order details for each user\*/**

**CREATE OR REPLACE VIEW order\_details AS**

**SELECT a.orderId, a.orderDate,b.productName, a.quantity, ( a.quantity\*b.sellingPrice) as totalAmount,**

**a.status, a.userID, a.productId**

**from myorder a**

**LEFT JOIN myproduct b on a.productID=b.productID;**

**select \* from order\_details;**

**--------------------------------------------------------------------------------------------------------------------------------------**

**/\* Get all active ad on the portal.**

**Business Value: This report is used to get the details of all active ads on the portal currently so a user can just see the active ads; few ads are marked soldout if the product is sold. \*/**

**SELECT adId, adDescription,adDatePosted, adStatus**

**FROM MYAD**

**WHERE adStatus= 'active'**

**ORDER BY (adDatePosted);**

**--------------------------------------------------------------------------------------------------------------------------------------**

**/\*avg item value for all the products in each category uploaded on the portal**

**and sort it by category name alphabeticaly.**

**Business Value: This is useful for the business to analyse the type of products being sold and at what price.**

**\*/**

**SELECT**

**a.categoryID,**

**a.categoryName,**

**avgSpPerCategory.avgSp as avgPerCat**

**FROM mycategory a,**

**(SELECT categoryId, avg(sellingPrice) as avgSp**

**FROM myproduct group by categoryid**

**)avgSpPerCategory**

**WHERE**

**a.categoryID = avgSpPerCategory.categoryID;**

**select \* from Average\_SellingPrice\_PerCategory;**

**--------------------------------------------------------------------------------------------------------------------------------------**

**/\*view all users per location.**

**Business Value: This is useful for an admin to view all users in his location.**

**\*/**

**SELECT**

**u.locationName,**

**u.userID**

**from myuser u**

**left join mylocation l on**

**u.locationName =l.locationName**

**order by u.locationName;**

**--------------------------------------------------------------------------------------------------------------------------------------**

**/\*get all wishlisted ads**

**Business Value: This report is useful for the business to analyse what type of product is most liked by the users. The most wishlisted ad is the most popular ad.**

**\*/**

**SELECT DISTINCT adId, wishlistID**

**from wishListDetails;**

**--------------------------------------------------------------------------------------------------------------------------------------**

**/\* See all sellers from all locations.**

**Business Value: This report helps the business in viewing**

**users who have been sellers atleast once in NearMe**

**\*/**

**select u.userID as seller, u.locationName, a.addescription**

**from myuser u**

**right join myad a on u.userId=a.userID;**

1. **STORED PROCEDURES:**

**CREATE OR REPLACE PROCEDURE show\_active\_ads\_with\_category**

**( c1 OUT SYS\_REFCURSOR)**

**AS**

**BEGIN**

**open c1 for**

**select a.adID, a.adDescription, ad\_cat.categoryname,a.productID**

**from myAd a,(select p.productID,p.categoryID, c.categoryname from myproduct p**

**left join mycategory c on p.categoryID=c.categoryid**

**) ad\_cat**

**where a.productID = ad\_cat.productID;**

**DBMS\_SQL.RETURN\_RESULT(c1);**

**EXCEPTION**

**WHEN OTHERS THEN**

**DBMS\_OUTPUT.PUT\_LINE(SQLERRM);**

**END show\_active\_ads\_with\_category;**

**EXEC show\_active\_ads\_with\_category(c1);**

**variable c1 refcursor;**

**exec show\_active\_ads\_with\_category( :c1 );**

**print c1;**

**--------------------------------------------------------------------------------------------------------------------------------------**

**CREATE or REPLACE PROCEDURE add\_new\_category(**

**p\_category\_id char,**

**p\_category\_name varchar2**

**) AS**

**BEGIN**

**INSERT INTO mycategory (categoryID, categoryName)**

**VALUES(p\_category\_id, p\_category\_name);**

**COMMIT;**

**EXCEPTION**

**WHEN OTHERS THEN**

**DBMS\_OUTPUT.PUT\_LINE(SQLERRM);**

**END add\_new\_category;**

**EXECUTE ADD\_NEW\_CATEGORY('CA0013','ART');**

**--------------------------------------------------------------------------------------------------------------------------------------**

1. **APPLICATION CODE:**

**a)** # run a SELECT and print results

for result in cursor.execute("select \* from myad"):

    print(result)

**b)** # calling a stored procedure

result = cursor.var(cx\_Oracle.CURSOR)

# executing the procedure

cursor.callproc("show\_active\_ads\_with\_category", [result])

for implicitCursor in cursor.getimplicitresults():

    for row in implicitCursor:

        print(row)

**c)** # insert some records

cursor.execute("insert into myuser (userID, userFN, userLN, userPH, aptNO, locationName) values (:1, :2, :3, :4, :5, :6)", ('UR0015','Rusty', 'Iron', '4567892233', 'E189', 'StoneGateAtDevon'))

cursor.execute("insert into myuser (userID, userFN, userLN, userPH, aptNO, locationName) values (:1, :2, :3, :4, :5, :6)", ('UR0016','Summer', 'Smith', '4848903344', 'E190', 'StoneGateAtDevon'))

for result in cursor.execute("select \* from myuser"):

    print(result)