

## Physical Database Design

```
CREATE DATABASE nordstromsystem;
CREATE TABLE CUSTOMER
(CustomerID INT(20) NOT NULL,
CustomerName VARCHAR(25),
CustomerPhoneNumber VARCHAR(30),
CustomerStreet VARCHAR(20),
CustomerCity VARCHAR(20),
CustomerState CHAR(2),
CustomerZipCode VARCHAR(20),
CustomerEmail VARCHAR(30),
CONSTRAINT Customer_PK PRIMARY KEY (CustomerID));
```

```
CREATE TABLE ACCOUNT
(AccountID int(20) NOT NULL,
CustomerID int(20),
Username varchar(30),
AccountPassword varchar(30),
CONSTRAINT Account_PK PRIMARY KEY (AccountID),
CONSTRAINT Account_FK FOREIGN KEY (CustomerID) REFERENCES
CUSTOMER(CustomerID));
```

```
CREATE TABLE EMPLOYEE
(EmployeeID int(20) NOT NULL,
EmployeeName varchar(30),
EmployeePhoneNum varchar(20),
CONSTRAINT Employee_PK PRIMARY KEY (EmployeeID));
```

```
CREATE TABLE ORDER_T
(OrderID int(20) NOT NULL,
OrderDate datetime,
OrderStatus ENUM('Placed', 'In progress', 'Shipped', 'Delivered'),
OrderOption ENUM('Shipping', 'OrderPickup') NOT NULL,
CustomerID int(20),
EmployeeID int(20),
CONSTRAINT Order_PK PRIMARY KEY (OrderID),
CONSTRAINT Order_FK1 FOREIGN KEY (CustomerID) REFERENCES
CUSTOMER(CustomerID),
CONSTRAINT Order_FK2 FOREIGN KEY (EmployeeID) REFERENCES
EMPLOYEE(EmployeeID));
```

```
CREATE TABLE SHIPPING
(OrderID int(20) NOT NULL,
```

ShiptoName varchar(20),  
ShippingStreet VARCHAR(20),  
ShippingCity VARCHAR(20),  
ShippingState CHAR(2),  
ShippingZipCode VARCHAR(20),  
ShippingDate date,  
CONSTRAINT Shipping\_PK PRIMARY KEY (OrderID),  
CONSTRAINT Shipping\_FK FOREIGN KEY (OrderID) REFERENCES  
ORDER\_T(OrderID));

CREATE TABLE ORDERPICKUP  
(OrderID int(20) NOT NULL,  
StoreAddress varchar(40),  
PickupfromName varchar(30),  
CONSTRAINT Orderpickup\_PK PRIMARY KEY (OrderID),  
CONSTRAINT Orderpickup\_FK FOREIGN KEY (OrderID) REFERENCES  
ORDER\_T(OrderID));

CREATE TABLE PAYMENT  
( PaymentID int (20) NOT NULL,  
OrderID int(20),  
CardNumber char(16),  
SecurityCode char(3),  
ExpirationDate varchar(20),  
BillingAddress varchar(40),  
CardHolderName varchar(30),  
CONSTRAINT Payment\_PK PRIMARY KEY (PaymentID),  
CONSTRAINT Payment\_FK FOREIGN KEY (OrderID) REFERENCES  
ORDER\_T(OrderID));

CREATE TABLE PRODUCT  
( ProductID int (20) NOT NULL,  
ProductName varchar(20),  
UnitPrice decimal(6,2),  
CONSTRAINT Product\_PK PRIMARY KEY (ProductID));

CREATE TABLE ORDERDETAIL  
(OrderID int(20) NOT NULL,  
ProductID int (20) NOT NULL,  
Quantity varchar(10),  
DiscountCode varchar(10),  
TotalPrice decimal(20,2),  
SizeOrdered varchar(10),  
CONSTRAINT Orderdetail\_PK PRIMARY KEY( OrderID, ProductID),

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CONSTRAINT Orderdetail_FK1 FOREIGN KEY (OrderID) REFERENCES  
ORDER_T(OrderID),  
CONSTRAINT Orderdetail_FK2 FOREIGN KEY(ProductID) REFERENCES  
PRODUCT(ProductID));
```

```
CREATE TABLE RETURNREQUEST  
(ReturnID int(20) NOT NULL,  
OrderID int(20),  
ProductID int(20),  
ReturnOption ENUM('mail', 'dropoff', 'pickupreturn', 'pickupexchange'),  
ReturnReason varchar(60),  
ReturnDate date,  
RefundCardNum char(16),  
ReturnQuantity int(10),  
ReturnStatus ENUM('Placed', 'Inprocess', 'Completed'),  
CONSTRAINT Returnrequest_PK PRIMARY KEY (ReturnID),  
CONSTRAINT Returnrequest_FK1 FOREIGN KEY (OrderID) REFERENCES  
ORDER_T(OrderID),  
CONSTRAINT Returnrequest_FK2 FOREIGN KEY (ProductID) REFERENCES  
PRODUCT(ProductID));
```

```
CREATE TABLE MAIL  
( ReturnID int(20) NOT NULL,  
USPSAddress varchar(40),  
CONSTRAINT Mail_PK PRIMARY KEY (ReturnID),  
CONSTRAINT Mail_FK FOREIGN KEY (ReturnID) REFERENCES  
RETURNREQUEST(ReturnID));
```

```
CREATE TABLE DROPOFF  
( ReturnID int(20) NOT NULL,  
StoreAddress varchar(40),  
CONSTRAINT Dropoff_PK PRIMARY KEY (ReturnID),  
CONSTRAINT Dropoff_FK FOREIGN KEY (ReturnID) REFERENCES  
RETURNREQUEST(ReturnID));
```

```
CREATE TABLE PICKUPRETURN  
( ReturnID int(20) NOT NULL,  
PReturnAddress varchar(40),  
PReturnTime time,  
PReturnDate date,  
EmployeeID int(20),  
CONSTRAINT Pickupreturn_PK PRIMARY KEY (ReturnID),  
CONSTRAINT Pickupretun_FK1 FOREIGN KEY (ReturnID) REFERENCES  
RETURNREQUEST(ReturnID),
```

```
CONSTRAINT Pickupreturn_FK2 FOREIGN KEY (EmployeeID) REFERENCES  
EMPLOYEE(EmployeeID));
```

```
CREATE TABLE PICKUPEXCHANGE  
( ReturnID int(20) NOT NULL,  
NewRequestedSize varchar(10),  
PExchangeAddress varchar(40),  
PExchangeTime time,  
PExchangeDate date,  
EmployeeID int(20),  
CONSTRAINT Pickupexchange_PK PRIMARY KEY (ReturnID),  
CONSTRAINT Pickupexchange_FK1 FOREIGN KEY (ReturnID) REFERENCES  
RETURNREQUEST(ReturnID),  
CONSTRAINT Pickupexchange_FK2 FOREIGN KEY (EmployeeID) REFERENCES  
EMPLOYEE (EmployeeID));
```

### [Create Database](#)

```
INSERT INTO customer(CustomerID, CustomerName, CustomerPhoneNumber,  
CustomerStreet, CustomerCity, CustomerState, CustomerZipCode, CustomerEmail)  
VALUES
```

```
(1,'John H','889-884-6473','683 Man St.','Chicago','IL','595033','ydhd@gmail.com'),  
(2,'Mark T','647-574-8282','9842 Kamm St.','Atlanta','GA','67467','ghgdeg@gmail.com'),  
(3,'Sam D','674-983-4829','7483 Lann St.','Denver','CO','784783','ehsdgad@gmail.com'),  
(4,'Mary R','929-362-1881','6478 Oks St.','Washington','DC','94983','hfhfuhf@gmail.com'),  
(5,'Clara P','467-849-7483','7367 Van St.','Dover','DE','78374','hfhfuhfsd@gmail.com'),  
(6,'Nes Y','673-818-8349','689 Lan St.','Albay','NY','78475','hfhufh@gmail.com'),  
(7,'Han O','147-893-4839','3564 Kta St.','Trento','NY','5783','adrsdgyg@gmail.com'),  
(8,'Ben P','181-483-8498','7348 Fan St.','Columbus','OH','8498','poreorpe@gmail.com'),  
(9,'Cann K','748-493-0838','646 Gan St.','Concord','NH','758475','gddljeffi@gamil.com'),  
(10,'Alice D','748-793-8392','859 Yell St.','Fago','ND','75845','jdijfh@gmail.com' ),  
(11,'Henry S','390-432-9493','5746 Fan St.','Fargo','ND','75745','hfhfgh@gamil.com'),  
(12,'Frank P','377-748-483','4950 Gag St','Lincoln','NE','89585','hfhfkfh@gmail.com'),  
(13,'Robert Y','748-993-893','858 Han St.','Helena','MT','8585','hfjhfrhf@gmail.com'),  
(14,'Emma S','940-073-3633','9504 Yass St.','Salem','OR','894894','hfjdhfs@gmail.com'),  
(15,'Ben A','123-574-8843','5748 Mann St.','Washington','DC','85985','hfudhf@gmail.com'),
```

(16,'Mark E','839-854-8474','9594 Pan St.','Omaha','NE','758554','fjfff@gmail.com'),  
 (17,'Can P','487-928-4378','809 Wenn St.','New York','NY','75875','dhhhd@gmail.com'),  
 (18,'William D','679-282-3729','737 Pan St.','Newark','NJ','7747','hfhfh@gmail.com'),  
 (19,'Ida P','783-838-7837','466 Olk St.','Washington','DC','58958','fhjao@gamil.com'),  
 (20,'Han W','893-939-2827','4747 Ipk St.','Richmond','VA','75889','hudhud@gmail.com');

INSERT INTO account(AccountID, CustomerID, Username, AccountPassword) VALUES

(1,1,'John','345nk. '), (2,2,'Mark','7umt4!'), (3,3,'Sam','9mf92%'), (4,4,'Mary','670nu\*'),  
 (5,5,'Clara','hru67#'), (6,6,'Nes','89jr44. '), (7,7,'Han','jrtu84'), (8,8,'Ben','4u8ujr'),  
 (9,9,'Cann','7434uj'),  
 (10,10,'Alice','fry789'), (11,11,'Henry','pi4994'), (12,12,'Frank','hfrue4'),  
 (13,13,'Robert','8943hd'),  
 (14,14,'Emma','8hr477'), (15,15,'Ben','46heis'), (16,16, 'Mark','7r4heh'), (17,17,'Can','48rjhf'),  
 (18,18,'William','67haud'), (19,19,'Ida','94hs5t'), (20,20,'Han','jru84j');

INSERT INTO payment

(PaymentID,OrderID,CardNumber,SecurityCode,ExpirationDate,BillingAddress,CardHolder Name) VALUES

(1,1,'4748374837493794','345','2029-04','843 Sun St. Chicago IL','Can K'),  
 (2,5,'7574857487537575','958','2025-05','7474 Old St. Washington DC', 'Nelli W'),  
 (3,4,'8574857487537575','778','2027-05', 'Ods St. Washington DC','John K'),  
 (4,2,'8498849849849284','899','2027-06','7857 Danny St. Austin TX','Han L'),  
 (5,3,'9498849849849284','568','2027-06', '4774 Fan St. Nashville TN','Illi O'),  
 (6,6,'8490849849849284','899','2028-06','754 San St. Cheyenne WY','Yann K'),  
 (7,7,'8496849849849284','245','2027-06','7583 Gagh St. Austin TX','Okss P'),  
 (8,8,'8496749849849284','123','2027-06','758 City St. Albany NY','Ran H'),  
 (9,9,'8497849849849284','899','2027-11','8956 Char St. Trenton NJ','Ben H'),  
 (10,10,'7698849849849284','659','2027-06','674 Pierre St. Trento NY','Ippi O'),  
 (11,11,'8898849849849284','856','2029-06','8747 Coll St. Concord NH','Kean K'),  
 (12,12,'8698849849849284','349','2029-06','759 Can St. Albany NY','Yabb O'),  
 (13,13,'4698849849849284','659','2028-12','757 Yell St. Fargo ND','Jonh O'),

(14,14,'8798849849849284','123','2030-08','8695 Pen St. Charlotte NC','Aaan A'),  
 (15,15,'3458849849849284','543','2030-06','875 Binn St. Newark NJ','Wenn O'),  
 (16,16,'1298849849849284','879','2027-06','232 Ink St. Bismarck ND','Penn V'),  
 (17,17,'4398849849849284','899','2027-11','789 Pinn St. Columbus OH','Rekk J'),  
 (18,18,'6798849849849284','456','2027-06','8282 Pork St. Denver CO','Illi O'),  
 (19,19,'7698849849849284','129','2029-06','435 Name St. Honolulu HI','Iuoo P'),  
 (20,20,'6868898909090909','346','2028-10','778 Name St. Honolulu HI','Oll Q');

INSERT INTO EMPLOYEE(EmployeeID, EmployeeName, EmployeePhoneNum)  
 VALUES

('1001', 'Nick', '212-784-5784'), ('1002', 'John', '202-784-5794'), ('1003', 'Rahul', '312-015-4530'),  
 ('1004', 'Abdullah', '213-657-8214'), ('1005', 'Gaurav', '212-845-0124'), ('1006', 'Khan', '202-451-3016'),  
 ('1007', 'Barry', '213-394-7537'), ('1008', 'Sam', '212-864-7323'), ('1009', 'Paul', '312-794-2648'),  
 ('1010', 'Raj', '404-524-4736'), ('1011', 'Jay', '617-736-1638'), ('1012', 'Harry', '404-163-5830'),  
 ('1013', 'Kanye', '212-784-2648'), ('1014', 'Mohammad', '385-183-4271'),  
 ('1015', 'Sultan', '202-139-5850'), ('1016', 'Shiv', '312-635-8154'), ('1017', 'Alex', '312-713-1235'),  
 ('1018', 'Zion', '617-740-2485'), ('1019', 'David', '617-375-1534'), ('1020', 'Daniel', '385-183-1830');

INSERT INTO product(ProductID, ProductName, UnitPrice) VALUES

(1, 'Floral Dress', 30), (2, 'Satin Shirt', 50), (3, 'Embellished Heels', 45.99), (4, 'Sequinned Top', 55),  
 (5, 'Sweater', 25), (6, 'Pink Heels', 35), (7, 'Scarf', 10), (8, 'Mom Fit Jeans', 30), (9, 'Shoes', 55),  
 (10, 'Long Coat', 112), (11, 'Biker Jacket', 55), (12, 'Jersey Top', 15), (13, 'Maxi Dress', 60),  
 (14, 'Nike Shoes', 200), (15, 'Watch', 100), (16, 'Printed Sweatshirt', 25), (17, 'Eyeshadow', 20),  
 (18, 'Handheld Bag', 40), (19, 'Belt', 15), (20, 'Regular Jeans', 25);

```
INSERT INTO ORDER_T (OrderID, OrderDate, OrderStatus, OrderOption, CustomerID ,
EmployeeID) VALUES
```

```
(1, '2021-01-22 08:10:00', 'Delivered', 'Shipping', 1, 1001),
(2, '2023-01-26 09:39:00', 'Delivered', 'Shipping', 2, 1001),
(3, '2023-03-24 11:48:00', 'Delivered', 'Shipping', 3, 1003),
(4, '2023-01-31 14:10:00', 'Delivered', 'Shipping', 4, 1001),
(5, '2023-02-03 22:43:00', 'Delivered', 'Shipping', 5, 1003),
(6, '2023-02-11 13:19:00', 'Delivered', 'Shipping', 6, 1002),
(7, '2023-02-13 19:26:00', 'Delivered', 'Shipping', 7, 1002),
(8, '2023-02-19 18:17:00', 'Delivered', 'Shipping', 8, 1001),
(9, '2023-02-22 16:10:00', NULL, 'OrderPickup',9, 1005),
(10, '2023-02-26 18:50:00', NULL, 'OrderPickup', 10, 1007),
(11, '2023-03-06 16:19:00', 'Delivered', 'Shipping', 11, 1003),
(12, '2023-03-07 20:22:00', NULL, 'OrderPickup', 12, 1004),
(13, '2023-03-10 11:14:00', 'Delivered', 'Shipping', 13, 1002),
(14, '2023-03-19 18:23:00', 'Delivered', 'Shipping', 14, 1001),
(15, '2023-03-24 16:56:00', NULL, 'OrderPickup', 15, 1014),
(16, '2023-03-30 14:37:00', NULL, 'OrderPickup', 16, 1015),
(17, '2023-04-03 19:47:00', 'Delivered', 'Shipping', 17, 1001),
(18, '2023-04-07 11:29:00', 'Delivered', 'Shipping', 18, 1003),
(19, '2023-04-15 13:44:00', 'Shipped', 'Shipping', 19, 1008),
(20, '2023-04-19 16:38:00', 'In Progress', 'Shipping', 20, 1008);
```

```
INSERT INTO shipping
```

```
(OrderID,ShiptoName,ShippingStreet,ShippingCity,ShippingState,ShippingZipCode,Shippin
gDate) VALUES
```

```
(1,'Sara K','778 Jann St.','Chicago','IL','595033','2023-04-19'),
(2,'Nes Y','674 Han St.','Atlanta','GA','67467','2023-05-27'),
(3,'Ali A','7483 Ben St.','Denver','CO','784783','2023-12-06'),
(4,'Mary R','6478 Oks St.','Washington','DC','94983','2022-07-19'),
```

(5,'Clara P','7367 Van St.', 'Dover','DE','78374','2023-05-07'),  
 (6,'Nes S','689 Lan St.','Albay','NY','78475','2023-02-05'),  
 (7,'Han O','3564 Kta St.', 'Trento','NY','5783','2023-06-06'),  
 (8,'Ben P','7348 Fan St.','Columbus','OH','8498','2023-08-09'),  
 (9,'Cann K','646 Gan St.','Concord','NH','758475','2023-04-03'),  
 (10,'Alice D','859 Yell St.','Fago','ND','75845','2022-11-04' );

INSERT INTO orderpickup(OrderID,StoreAddress,PickupfromName) VALUES  
 (12, '4742 Gunn St. Lincoln NE', 'John L'), (20,'647 Sun St. Richmond VA','Han W'),  
 (11,'5746 Fan St. Fargo ND','Henry S'), (13,'858 Han St. Helena MT','Robert Y'),  
 (14,'9504 Yass St. Salem OR','Emma S'), (15,'5748 Mann St. Washington DC','Ben A'),  
 (16,'9594 Pan St. Omaha NE','Mark E'), (17,'809 Wenn St. New York NY','Can P'),  
 (18,'737 Pan St. Newark NJ','William D'), (19,'466 Olk St.Washington DC','Ida P');

INSERT INTO orderdetail (OrderID, ProductID, Quantity,TotalPrice, SizeOrdered)  
 VALUES  
 (1, 1, 1, 75.99, 'S' ), (1, 3, 1,'75.99', null), (2, 12, 2,'30', 'M'), (3, 6, 1, '35', 'US 5'),  
 (4, 4, 1, '85', 'S' ), (4, 8, 1, '85', '28'), (5,4,2,'170','M'), (10,11,1,'60.45',null),  
 (16,2,2,'100.09','XL'), (12,3,5,'400.25',null), (10,1,1,'75.99','M'), (7,9,1,'50', 'US 6'),  
 (7,5,1,'50','US 8'), (6,20,3,'125',null), (8,11,1,'60.45',null), (8,4,1,'85','XL'), (20, 3, 1,'75.99',  
 null), (17,1,1,'75.99','S'), (17,2,1,'45',null);

INSERT INTO returnrequest (ReturnID, OrderID,ProductID, ReturnOption, ReturnReason,  
 ReturnDate, RefundCardNum,ReturnQuantity,ReturnStatus) VALUES  
 (1,1,1, 'pickupexchange',Null,'2023-07-05','8504838502580285',1,'Inprocess'),  
 (2,3,6,'pickupreturn',Null, '2023-04-05','8493493293843984',1,'Completed'),  
 (3,5,6,'dropoff',Null,'2023-11-19','3248448748787487',2,'Placed'),  
 (4,2,5,'mail',Null,'2023-06-24','4783472874287433',1,'Inprocess'),  
 (5,4,4,'pickupexchange','Wrong Size','2023-06-04','7483478274827485',1,'Placed'),  
 (6,6,20,'pickupreturn',Null,'2023-05-05','4847847827487784',4,'Inprocess'),  
 (7,10,1,'dropoff','Wrong Item','2023-04-08','8493848348849384',1,'Placed'),  
 (8,15,2,'pickupexchange',Null,'2023-03-17','2837387392739274',1,'Completed'),



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(9,11,9, 'pickupreturn',Null, '2023-03-17','1833836927392748', 1,'Inprocess'),
(10,10,11,'mail','damaged product','2023-08-07','9384938493893888',1,'Placed'),
(11,12,3,'dropoff',Null,'2023-04-16','7837837847387834',3,'Inprocess'),
(12,4,8,'pickupreturn',Null,'2023-11-22','7483748237492744',1,'Inprocess'),
(13,8,20,'pickupreturn',Null,'2022-11-24','6476423472347929',1,'Completed'),
(14,16,2,'pickupexchange',Null,'2022-12-23','8493849829384923',1,'Completed'),
(15,17,1,'mail','Wrong Item','2023-07-25','4374937497370384',1,'Inprocess'),
(16,17,2,'pickupexchange',Null,'2023-12-23','7878849829384923',1,'Placed');
```

INSERT INTO pickupexchange

(ReturnID,NewRequestedSize,PExchangeAddress,PExchangeTime,PExchangeDate,Employee ID) VALUES

```
(1,'M','683 Man St. Chicago IL 595033','08:30:00','2023-06-04',1001),
(5,'US 10','505 Ods St. Rockville MD','10:45:00','2023-03-24',1002),
(8,'26','748 Pall St New York NW','12:30:00','2023-06-07',1003),
(14,'L','437 Mall St. Richmond MD','09:15:00','2023-04-04',1008),
(16,Null,'843 King St. Washington DC','10:00:00','2023-06-08',1008);
```

INSERT INTO pickupreturn

(ReturnID,PReturnAddress,PReturnTime,PReturnDate,EmployeeID) VALUES

```
(2, '6478 Oks St. Washington DC 94983','10:20:00' ,'2023-03-29', 1002),
(6,'754 Son St. New York NY','12:00:00','2023-07-22',1001),
(9,'564 Spring St Atlanta GA','09:30:00','2023-05-15',1003),
(12,'124 Spring St Atlanta GA','10:00:00','2023-05-15',1003),
(13,'4898 Fan St. New York NY','10:00:00','2023-07-15',1001);
```

INSERT INTO dropoff (ReturnID,StoreAddress) VALUES

```
(3,'646 Kans St. Seattle WA'), (7,'7583 Gagh St. Austin TX'), (11,'478 Oks Washington DC');
```

INSERT INTO mail (ReturnID,USPSAddress) VALUES

```
(4,'467 Denny St. Proenix Az'), (10,'5937 Hank St. Denver CO'),
(15,'7489 Neen St. New York NY');
```