

# **CSC 675 - Project Design Report**

## **Online Store**

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### **Database Description:**

An online store that shows the relationship between products and customers as well as how that relationship associates with the store and employee relationship.

The Product has a productID of VARCHAR(50) PRIMARY KEY, stock of VARCHAR(50), name of VARCHAR(50), and a price of DECIMAL(10,2).

The employee has employeeID of VARCHAR(50) PRIMARY KEY, ssn of VARCHAR(50), name of VARCHAR(50), and wage of DECIMAL(50).

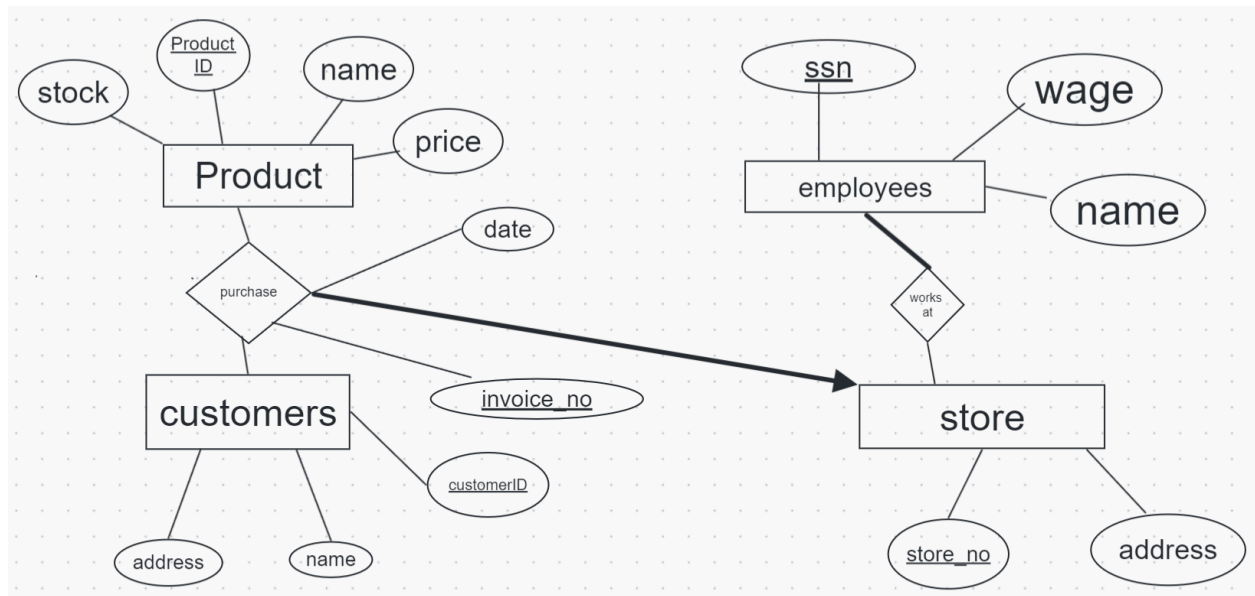
The customers have customerID of VARCHAR(50) PRIMARY KEY, invoice\_no of VARCHAR(50), address of VARCHAR(50), and wage of VARCHAR(50).

The store has store\_no of INT PRIMARY KEY and an address of VARCHAR(50).

The purchases has productID VARCHAR(50), customerID VARCHAR(50), quantity VARCHAR(50), PRIMARY KEY (productID, customerID).

The worksAt has employeeID VARCHAR(50), storeNo INT, PRIMARY KEY (employeeID, storeNo).

### **ER Diagram:**



### **Relational Schemas:**

```
CREATE TABLE customers (  
    customerID VARCHAR(50) PRIMARY KEY,  
    name VARCHAR(50),  
    address VARCHAR(50)  
);
```

```
CREATE TABLE employees (  
    ssn VARCHAR(50) PRIMARY KEY,  
    name VARCHAR(50),  
    wage DECIMAL(10,2),  
    email VARCHAR(50)  
);
```

```
CREATE TABLE products (  
    productID VARCHAR(50) PRIMARY KEY,  
    stock VARCHAR(50),  
    name VARCHAR(50),  
    price DECIMAL(10,2)  
);
```

```
CREATE TABLE purchases (  
    productID VARCHAR(50),  
    customerID VARCHAR(50),
```

```

quantity VARCHAR(50),
PRIMARY KEY (productID, customerID),
FOREIGN KEY (productID) REFERENCES products (productID),
FOREIGN KEY (customerID) REFERENCES customers (customerID)
);

```

```

CREATE TABLE storeNo (
    storeNo INT PRIMARY KEY,
    name VARCHAR(50)
);

```

```

CREATE TABLE worksAt (
    employeeID VARCHAR(50),
    storeNo INT,
    PRIMARY KEY (employeeID, storeNo),
    FOREIGN KEY (employeeID) REFERENCES employees (ssn),
    FOREIGN KEY (storeNo) REFERENCES storeNo (storeNo)
);

```

Data:

```

insert into customers (customerID, name, address) values ('3587002417051704', 'Valentijn Gook', '426 Anzinger Plaza');
insert into customers (customerID, name, address) values ('3541223908182015', 'Helge Walsham', '55770 Mallory Trail');
insert into customers (customerID, name, address) values ('4844971046627489', 'Cecilio Vardon', '05491 Sullivan Terrace');
insert into customers (customerID, name, address) values ('676392989094613004', 'Venita Oglesbee', '072 Spenser Trail');
insert into customers (customerID, name, address) values ('3586116589321405', 'Kinsley Hagger', '01377 Grim Hill');
insert into customers (customerID, name, address) values ('5415846572514143', 'Stinky Pritchitt', '4 Welch Terrace');
insert into customers (customerID, name, address) values ('3561087932555081', 'Chev Pigott', '33976 Ridge Oak Alley');
insert into customers (customerID, name, address) values ('3540956828776470', 'Anselma Croser', '38 Novick Hill');
insert into customers (customerID, name, address) values ('3538960882451933', 'Hernando Mordey', '150 Kim Alley');
insert into customers (customerID, name, address) values ('3567092163438886', 'Janot Catto', '2898 Lindbergh Place');
insert into customers (customerID, name, address) values ('0604558303655336116', 'Stanford Glavias', '7287 Merry Road');
insert into customers (customerID, name, address) values ('3532682757062571', 'Gael Dulany', '207 Tony Parkway');
insert into customers (customerID, name, address) values ('3573462241589582', 'Stanislaus Traill', '4 Grayhawk Road');
insert into customers (customerID, name, address) values ('3558718102553887', 'Caspar Emanson', '52111 International Way');
insert into customers (customerID, name, address) values ('5242702413264670', 'Taddeo Milch', '9 Menomonie Crossing');
insert into customers (customerID, name, address) values ('3550055614320416', 'Lawrence McCoy', '79058 Sachtjen Plaza');
insert into customers (customerID, name, address) values ('3589953960166950', 'Tyrus Basnett', '93105 Buell Crossing');
insert into customers (customerID, name, address) values ('201539668752797', 'Shawnee Kilcoyne', '1 Esch Avenue');
insert into customers (customerID, name, address) values ('6709948065015340407', 'Wendel Glanvill', '98201 Lakewood Gardens Road');
insert into customers (customerID, name, address) values ('30259630151195', 'Pancho Densell', '3559 Hovde Road');
insert into customers (customerID, name, address) values ('3565197778000997', 'Kamilah Blewmen', '30 Russell Street');
insert into customers (customerID, name, address) values ('3536268865186654', 'Renault Sleightholme', '30504 Fallview Lane');
insert into customers (customerID, name, address) values ('5602223387989787114', 'Josiah Parkhouse', '9 Waubesa Place');
insert into customers (customerID, name, address) values ('3563844845774300', 'Alonzo Grishaev', '0 Weeping Birch Point');
insert into customers (customerID, name, address) values ('30145982388735', 'Dav Wigglesworth', '6 Packers Pass');
insert into customers (customerID, name, address) values ('3529347426338100', 'Dorthy Bartoletti', '4044 Westend Road');
insert into customers (customerID, name, address) values ('374622225804789', 'Cherlyn Neate', '5802 Jay Terrace');
insert into customers (customerID, name, address) values ('4905148673521320468', 'Carlos Kehri', '02884 Manufacturers Place');
insert into customers (customerID, name, address) values ('3581933271249495', 'Reid Harland', '53617 Bowman Point');
insert into customers (customerID, name, address) values ('201824169704996', 'Hedvige Saladine', '1 Eastwood Plaza');
insert into customers (customerID, name, address) values ('3582985637147754', 'Tabbitha Sprouls', '95524 New Castle Junction');
insert into customers (customerID, name, address) values ('374283505867598', 'Albertine Maryin', '5274 Sommers Terrace');
insert into customers (customerID, name, address) values ('3536673866358824', 'Derk Sharply', '5661 Ridgeview Circle');
insert into customers (customerID, name, address) values ('372301649294149', 'Amity Dohr', '811 Burrows Plaza');
insert into customers (customerID, name, address) values ('3531412024977810', 'Hurlee Blowers', '2 Thackeray Lane');
insert into customers (customerID, name, address) values ('5118528799999584', 'Margaretta Deery', '42018 Hagan Street');
insert into customers (customerID, name, address) values ('3539775866816771', 'Vassily Rodolphe', '1796 Holmberg Parkway');

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insert into customers (customerID, name, address) values ('3551449501590323', 'Efren Mendes', '5224 Dapin Trail');  
 insert into customers (customerID, name, address) values ('5100144572185985', 'Bernadette Stollwerck', '99167 Warrior Road');  
 insert into customers (customerID, name, address) values ('4917268199845584', 'Chiara Kelloway', '2637 Judy Circle');  
 insert into customers (customerID, name, address) values ('561063445282273020', 'Araldo Curragh', '3 Ludington Plaza');  
 insert into customers (customerID, name, address) values ('3559609868541118', 'Haslett Danielian', '57 Susan Point');  
 insert into customers (customerID, name, address) values ('3569491962813471', 'Barrett Axworthy', '3 Waxwing Alley');  
 insert into customers (customerID, name, address) values ('3534642309166500', 'Richy Boycott', '9963 Kensington Parkway');  
 insert into customers (customerID, name, address) values ('6382317486895678', 'Shaw Garvie', '01 Kings Center');  
 insert into customers (customerID, name, address) values ('3585504582177786', 'Kerstin Ragborne', '3219 Portage Place');  
 insert into customers (customerID, name, address) values ('3566320315231169', 'Toby Gully', '3305 Mcguire Terrace');  
 insert into customers (customerID, name, address) values ('3554377542139437', 'Tarrance Charlon', '0500 Maryland Center');  
 insert into customers (customerID, name, address) values ('5137872708985319', 'Vern Manilo', '0286 East Plaza');  
 insert into customers (customerID, name, address) values ('4508052764328027', 'Gifford Dowding', '00579 Shoshone Junction');

INSERT INTO public.employees (ssn, name, wage) VALUES ('347-08-9955', 'Karil Coaten', '\$47.58');  
 INSERT INTO public.employees (ssn, name, wage) VALUES ('406-78-3269', 'Janel Cackett', '\$15.33');  
 INSERT INTO public.employees (ssn, name, wage) VALUES ('891-68-7071', 'Nero Harbour', '\$47.57');  
 INSERT INTO public.employees (ssn, name, wage) VALUES ('165-48-0090', 'Randall Degg', '\$20.66');  
 INSERT INTO public.employees (ssn, name, wage) VALUES ('180-49-5934', 'Winslow Sharpus', '\$24.86');  
 INSERT INTO public.employees (ssn, name, wage) VALUES ('128-48-9952', 'Melisa Burchard', '\$24.66');  
 INSERT INTO public.employees (ssn, name, wage) VALUES ('709-23-6304', 'Thaddus Giral', '\$32.88');  
 INSERT INTO public.employees (ssn, name, wage) VALUES ('501-12-9044', 'Horatio Lever', '\$25.08');  
 INSERT INTO public.employees (ssn, name, wage) VALUES ('274-29-1858', 'Irv Clewer', '\$23.06');  
 INSERT INTO public.employees (ssn, name, wage) VALUES ('341-29-1620', 'Melosa Rosenshine', '\$34.35');  
 INSERT INTO public.employees (ssn, name, wage) VALUES ('349-55-8285', 'Ximenes Brockherst', '\$44.90');  
 INSERT INTO public.employees (ssn, name, wage) VALUES ('844-29-8634', 'Englebert Joynt', '\$44.26');  
 INSERT INTO public.employees (ssn, name, wage) VALUES ('439-99-2097', 'Korrie Neads', '\$41.27');  
 INSERT INTO public.employees (ssn, name, wage) VALUES ('828-98-8187', 'Remington Wickwar', '\$37.44');  
 INSERT INTO public.employees (ssn, name, wage) VALUES ('205-46-8932', 'Raynell Salvador', '\$37.96');

insert into Product (productID, stock, name, price) values ('5100170325573631', '457', 'Chicken - White Meat With Tender', '\$14.79');  
 insert into Product (productID, stock, name, price) values ('5324420881298960', '926', 'Crab - Soft Shell', '\$133.11');  
 insert into Product (productID, stock, name, price) values ('3568371157669352', '419', 'Fennel - Seeds', '\$24.04');  
 insert into Product (productID, stock, name, price) values ('6379231204919394', '674', 'Scallops - 10/20', '\$92.31');  
 insert into Product (productID, stock, name, price) values ('3582109162283062', '005', 'Juice - Orange, Concentrate', '\$42.21');  
 insert into Product (productID, stock, name, price) values ('30148381182642', '224', 'Wiberg Cure', '\$46.08');  
 insert into Product (productID, stock, name, price) values ('4913638902394092', '415', 'Rabbit - Saddles', '\$68.83');  
 insert into Product (productID, stock, name, price) values ('5403404429071083', '003', 'Ice Cream - Vanilla', '\$131.12');  
 insert into Product (productID, stock, name, price) values ('36158339489043', '536', 'Cumin - Ground', '\$50.78');  
 insert into Product (productID, stock, name, price) values ('5602255756408994', '937', 'Coffee - Hazelnut Cream', '\$4.71');  
 insert into Product (productID, stock, name, price) values ('4844141966958468', '766', 'Chicken - Base', '\$0.10');  
 insert into Product (productID, stock, name, price) values ('06040089126860370', '529', 'Beef Ground Medium', '\$154.03');  
 insert into Product (productID, stock, name, price) values ('3578058337942746', '765', 'Wine - Red, Lurton Merlot De', '\$109.80');  
 insert into Product (productID, stock, name, price) values ('5602255756408994', '067', 'Cranberries - Dry', '\$90.24');  
 insert into Product (productID, stock, name, price) values ('201411857175844', '990', 'Icecream - Dstk Cml And Fdg', '\$62.12');  
 insert into Product (productID, stock, name, price) values ('3551593369346581', '023', 'Snapple - Iced Tea Peach', '\$128.87');  
 insert into Product (productID, stock, name, price) values ('3536513493258130', '939', 'Apples - Sliced / Wedge', '\$21.21');  
 insert into Product (productID, stock, name, price) values ('3583241457637147', '727', 'Sole - Iqf', '\$20.76');  
 insert into Product (productID, stock, name, price) values ('30230098498238', '855', 'Lamb - Racks, Frenched', '\$85.75');  
 insert into Product (productID, stock, name, price) values ('3571905995380691', '493', 'Water Chestnut - Canned', '\$196.77');

INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('5100170325573631', '22', '2');  
 INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('5.32442E+15', '22', '3');  
 INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('3568371157669352', '15', '8');  
 INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('6379231204919394', '60', '5');  
 INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('3582109162283062', '68', '4');  
 INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('30148381182642', '22', '6');  
 INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('4913638902394092', '22', '2');  
 INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('5403404429071083', '15', '58');  
 INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('36158339489043', '60', '10');  
 INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('5602255756408994', '68', '5');  
 INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('4844141966958468', '22', '2');

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INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('6.04009E+15', '22', '11');
INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('3578058337942746', '15', '54');
INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('5100170325573631', '60', '2');
INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('5.32442E+15', '68', '5');
INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('3568371157669352', '60', '52');
INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('6379231204919394', '68', '5');
INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('3582109162283062', '22', '4');
INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('30148381182642', '22', '5');
INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('4913638902394092', '15', '2');
INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('5403404429071083', '60', '5');
INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('36158339489043', '68', '2');
INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('5602255756408994', '22', '8');
INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('4844141966958468', '22', '5');
INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('6.04009E+15', '15', '3');
INSERT INTO public.purchases ("productID", "customerID", quantity) VALUES ('3578058337942746', '22', '2');

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insert into storeNo (storeNo, name) values (22, '044 Independence Pass');
insert into storeNo (storeNo, name) values (22, '4 Swallow Junction');
insert into storeNo (storeNo, name) values (15, '8 Mayfield Court');
insert into storeNo (storeNo, name) values (60, '20 Brentwood Road');
insert into storeNo (storeNo, name) values (68, '432 Bowman Hill');

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INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('347-08-9955', '22');
INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('406-78-3269', '22');
INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('891-68-7071', '15');
INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('165-48-0090', '60');
INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('180-49-5934', '68');
INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('128-48-9952', '15');
INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('709-23-6304', '60');
INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('501-12-9044', '22');
INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('274-29-1858', '15');
INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('341-29-1620', '60');
INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('349-55-8285', '15');
INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('844-29-8634', '60');
INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('439-99-2097', '15');
INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('828-98-8187', '60');
INSERT INTO public."worksAt" ("employeeID", "storeNo") VALUES ('205-46-8932', '68');

```