DYLAN BEARMAN

FINAL PROJECT

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COMPIB-Y

[COMP6041\_26212 Introduction to Databases](https://cit.instructure.com/courses/18259)

IT Management (BSc Honours) (Level 8)

I declare that all the work completed in this project was done by myself and myself only.

QUESTIONS 1

ENTITIES:

1.Customer

2.Purchase Order

3.Products for sale

4.Order Status

ATTRIBUTES:

1.CUSTOMER:

|customerno|fname|lname|telno|address1|address2|country|postcode|

2.PURCHASE ORDER:

|oderid|customerid|productno|quantity|totalamount|

3.PRODUCTS FOR SALE:

|productno|qtyinstock|description|

4.ODER STATUS

|oderid|delivery\collection|status|

RELATIONSHIPS:

Customer ‘orders’ Purchases Relationship = orders

Order Status ‘of’ Purchases Relationship = of

Products for Sale ‘in’ Purchases Relationship = in

MULTIPLICITIES:

Purchases (1..\*)-------(1..1) Customer

Q. How many purchases are associated with a customer?

A. A customer can’t have 0 purchases but there is also no restriction

Q. How many customers are associated with a purchase?

A. You can’t have 0 customer in an order but you can’t have more than 1

Purchases (1..1)-------(1..1) Order Status

Q. How many purchases are associated with an order status?

A. A purchase is relating to one order status, not less or more

Q. How many order status’s are associated with a purchase?

A. An order status is relating to one purchase, not less or more

Purchases (1..\*)-------(1..\*) Products for sale

Q. How many purchases are associated with a product?

A. More than one customer can order a product

Q. How many products are associated with a purchase?

A. You can order more then one product

QUESTIONS 2

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Description automatically generated

QUESTIONS 3

CREATE TABLE Customer

(customerno VARCHAR(10) NOT NULL,

fName VARCHAR(25),

lName VARCHAR(25),

telno VARCHAR(16),

address1 VARCHAR(255),

address2 VARCHAR(255),

country VARCHAR(20),

PostalCode VARCHAR(10),

PRIMARY KEY (customerno));

CREATE TABLE OrderStatus

(orderid VARCHAR(10) NOT NULL,

delivery\_collection VARCHAR(1),

PriceEach Decimal(13,2),

PRIMARY KEY (orderid));

CREATE TABLE Productforsale

(productno VARCHAR(10) NOT NULL,

Name\_Product VARCHAR(25) NOT NULL,

Descriptions VARCHAR(255),

Price Decimal(13,2),

PRIMARY KEY (productno,Name\_Product));

CREATE TABLE Purchases

(orderid VARCHAR(10) NOT NULL,

customerno VARCHAR(10),

productno VARCHAR(10),

Oty VARCHAR(25),

amount Decimal(13,2),

PRIMARY KEY (orderid));

Commit;

QUESTIONS 4

INSERT INTO Purchases VALUES('J28469', 'J976', 'M384739', '3', '2699.97');

INSERT INTO Purchases VALUES('P02189', 'J455', 'D938490', '6', '479.94');

INSERT INTO Purchases VALUES('N98774', 'J976', 'N938474', '2', '1399.98');

INSERT INTO Purchases VALUES('J34646', 'J820', 'D938490', '1', '79.99');

INSERT INTO Purchases VALUES('P77798', 'K366', 'P847493', '1', '85.00');

INSERT INTO Purchases VALUES('K54357', 'P866', 'K038473', '2', '80.00');

INSERT INTO Purchases VALUES('Q15323', 'J820', 'J027493', '3', '450.00');

INSERT INTO Purchases VALUES('J98875', 'K975', 'J027493', '2', '150.00');

INSERT INTO Customer VALUES('J820', 'Dylan', 'Bearman', '0894891313', '14 Cul na Greine', 'Co. Cork', 'Ireland', 'T12 R26E');

INSERT INTO Customer VALUES('J455', 'Arran', 'Bearman', '0838937493', '15 Cul na Greine', 'Co. Cork', 'Ireland', 'T12 R27E');

INSERT INTO Customer VALUES('K975', 'Julie', 'Shiely', '0877841172', '22 Ballyville', 'Co. Offaly', 'Ireland', 'J54 N38D');

INSERT INTO Customer VALUES('K366', 'Paul', 'Murphy', '0867228377', '76 Balane', 'Co. Wexford', 'Ireland', 'B25 V95S');

INSERT INTO Customer VALUES('J976', 'Anna', 'Cahalane', '0872639629', '14 Cil Crusa', 'Co. Limerick', 'Ireland', 'L98 M11Y');

INSERT INTO Customer VALUES('P866', 'James', 'Daly', '08392589295', '35 Roselawn', 'Co. Galway', 'Ireland', 'P90 B38X');

INSERT INTO OrderStatus VALUES('J28469', 'D', '2699.97');

INSERT INTO OrderStatus VALUES('P02189', 'D', '479.94');

INSERT INTO OrderStatus VALUES('N98774', 'C', '1399.98');

INSERT INTO OrderStatus VALUES('J34646', 'D', '79.99');

INSERT INTO OrderStatus VALUES('P77798', 'C', '85.00');

INSERT INTO OrderStatus VALUES('K54357', 'C', '80.00');

INSERT INTO OrderStatus VALUES('Q15323', 'C', '450.00');

INSERT INTO OrderStatus VALUES('J98875', 'D', '150.00');

INSERT INTO ProductforSale VALUES('N848744', 'Sofa', 'Two seater Black', '75.99');

INSERT INTO ProductforSale VALUES('J027493', 'Couch', 'Four seater White', '150.00');

INSERT INTO ProductforSale VALUES('N938474', 'T.V', '72 Inch', '699.99');

INSERT INTO ProductforSale VALUES('M384739', 'Phone', 'IPhone X', '899.99');

INSERT INTO ProductforSale VALUES('D938490', 'Desk', '8feet x 3feet', '79.99');

INSERT INTO ProductforSale VALUES('P847493', 'Cutlery', '10xforks 10xspoons 10xknives', '85.00');

INSERT INTO ProductforSale VALUES('K038473', 'Jacket', 'XL Navy', '40.00');

Commit;

QUESTIONS 3+4

A picture containing scoreboard, text, sitting, table

Description automatically generatedCUSTOMER

A picture containing scoreboard, sitting, pizza, table

Description automatically generatedORDER STATUS PURCHASES

A screenshot of a cell phone

Description automatically generatedPRODUCT FOR SALE

A picture containing screen, pizza

Description automatically generated

QUESTIONS 5

QUERY ONE:

Select c.customerno, c.fname, c.PostalCode, o.PriceEach, p.Oty, s.Name\_Product

From Customer c, OrderStatus o, ProductforSale s, Purchases p

WHERE c.fname = 'Anna'

A close up of a sign

Description automatically generatedAND s.Name\_Product = 'Phone'

AND p.Oty > 3

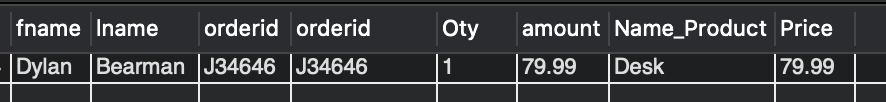
AND o.PriceEach > 1500

QUERY TWO:

Select c.fname,c.lname, o.orderid, p.orderid, p.Oty, p.amount,s.Name\_Product,s.Price

From Customer c, OrderStatus o, ProductforSale s, Purchases p

WHERE o.orderid = p.orderid

AND c.fname = 'Dylan'

AND s.Name\_Product = 'Desk'

AND p.amount < 80

QUERY THREE:

Select distinct c.fname, o.orderid, p.orderid, s.Name\_Product

From Customer c, OrderStatus o, ProductforSale s, Purchases p

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Description automatically generatedWHERE o.orderid = p.orderid

AND c.fname = 'Dylan'

AND s.Name\_Product = 'Desk'

AND o.orderid = 'J28469'

QUERY FOUR:

Select distinct c.PostalCode, o.orderid, o.delivery\_collection, p.customerno, s.Price

From Customer c, OrderStatus o, ProductforSale s, Purchases p

A picture containing player, ball, holding, white

Description automatically generatedWHERE s.Price = 79.99

AND c.PostalCode = 'T12 R26E'

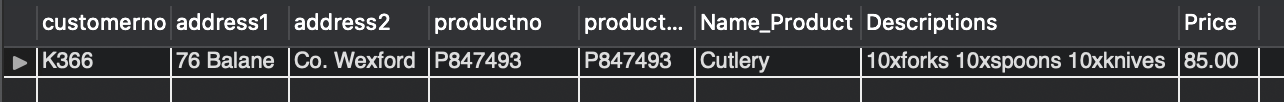
AND o.orderid = 'J34646'

AND p.customerno = 'J820'

QUERY FIVE:

Select distinct c.customerno, c.address1, c.address2, p.productno, s.productno, s.Name\_Product, s.Descriptions, s.Price

From Customer c, ProductforSale s, Purchases p

WHERE p.productno = 'P847493'

AND c.address1 = '76 Balane'

AND s.Name\_Product = 'Cutlery'