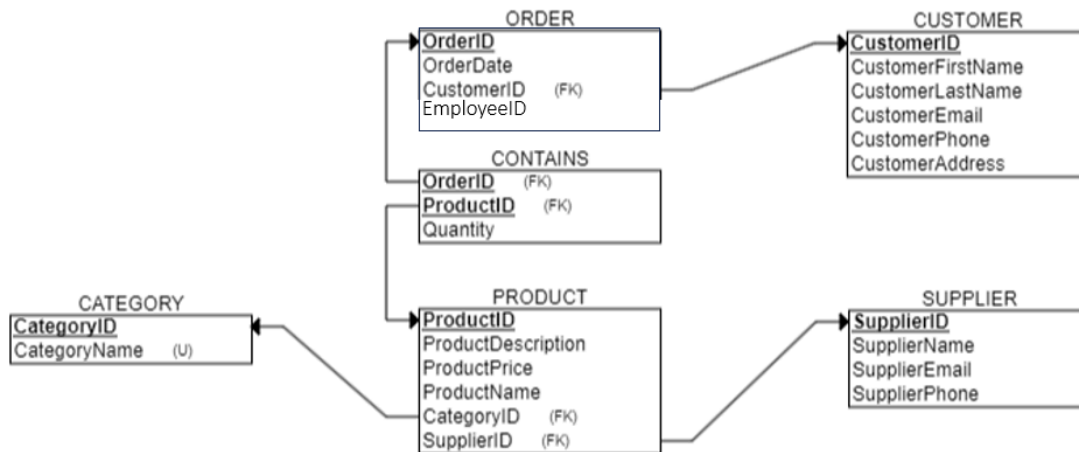## Project phase 3

Jens Henttinen, Ayşe Pekdiker, Ojaswi Tyagi, Venla Komu, Darren Chow, Onni Kiviluoto

Source 1

We used the database from phases 1 & 2 for Source 1. We added the EmployeeID column into the Order table and added the corresponding data into each row. All of the data is included in the Access database, but we also provided screenshots of each in this file.

Schema:

Data:

Order

OrderID	OrderDate	CustomerID	EmployeeID
1	01/08/2023	6	4
2	03/08/2023	4	3
3	05/08/2023	2	1
4	07/08/2023	1	2
5	18/08/2023	3	5
6	24/08/2023	5	1
7	04/08/2023	2	1
8	02/08/2023	6	4

Customer

CustomerID	CustomerFName	CustomerLName	CustomerEmail	CustomerPhone	CustomerAddress
1	Darren	Chow	darren.chow@examp	+358 40 111 1111	Otakaari 18, 02510, ESPOO
2	Ojaswi	Tyagi	ojaswi.tyagi@exampl	+358 40 111 1112	Otaroad 69, 00280, ESPOO
3	Onni	Kiviluoto	onni.kiviluoto@exam	+358 40 111 1113	Otabeach 420, 00420, TUUSULA
4	Venla	Komu	venla.komu@exampl	+358 40 111 1114	Otaranta 123, 00001, HELSINKI
5	Ayse	Pekdiker	ayse.pekdiker@exam	+358 40 111 1115	Jameraroad 46, 83134, ESPOO
6	Jens	Henttinen	jens.henttinen@exar	+358 40 111 1116	Monkhillroad 123, 69696, HELSINKI

Contains

Quantity	OrderID	ProductID
4	1	2
2	1	6
8	1	7
8	2	2
1	2	7
48	3	1
2	3	2
5	4	3
2	4	15
7	5	11
1	5	14
1	6	1
1	7	10
2	7	13
20	8	5
14	8	9

Product

ProductID	ProductPric	ProductName	ProductDescription	CategoryID	SupplierID
1	1.09	Beer	Alcoholic malt beverag	5	1
2	1.89	Cola	Carbonated beverage	5	4
3	0.89	Skimmed Milk	Fat free white beverag	1	1
4	1.02	Cream	Creamy goodness	1	5
5	0.3	Carrot	Carb bomb	2	3
6	0.56	Onion	Layered root	2	1
7	6.89	Eggs	12-pack	3	2
8	4.09	Chicken Nuggets	Orange slime nuggets	3	3
9	0.99	Ice	Frozen water	4	4
10	1.76	Beans	With tomato sauce	6	4
11	0.72	Spaghetti	Without eggs	7	2
12	2.09	Cookies	Chocolate chip cookies	7	2
13	2	Croissant	French goodness	8	5
14	5.45	Frozen shimps	Sea food flavoured	4	2
15	1.89	Potato chips	Salt & vinegar	7	3

Category

CategoryID	CategoryName
1	Dairy
2	Fresh produce
3	Poultry
4	Frozen foods
5	Beverages
6	Canned foods
7	Dry foods
8	Bakery products

Supplier

SupplierID	SupplierName	SupplierEmail	SupplierPhone
1	Pirkka	customerservice@pirkkastore.	+358 74 123 1123
2	Xtra	customerservice@xtra.com	+48 74 123 1124
3	Rainbow	s-kauppa@rainbow.com	+358 40 113 1891
4	EuroShopper	ES@euroshopper.com	+44 56 123 1128
5	Arla	milk@arla.com	+45 66 666 6666

Source 2

For source 2, we created a table of employee information. EmployeeID combines source 1 to source 2. This would be a table for the HR function, which will be kept separate from the sales and procurement database.
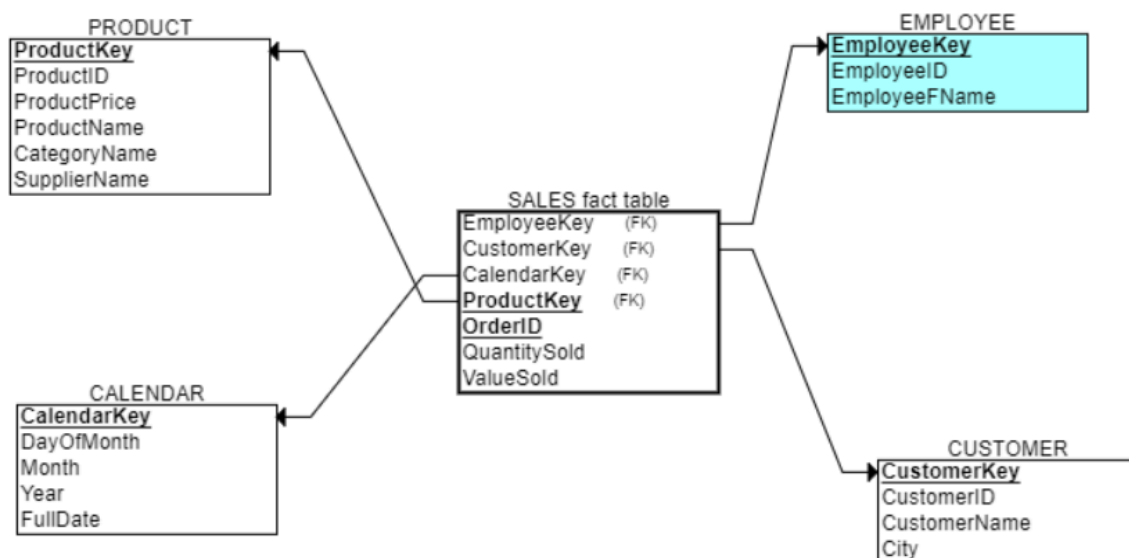
Data:

EmployeeID ▽	Address ▽	PhoneNumber ▽	EmployeeName ▽
1	Otakaari 2, 02123 ESPOO	+358 44 583 5599	Jouko
2	Otarinne 4, 02459 ESPOO	+358 45 223 4990	Touko
3	Otaranta 123, 02201 ESPOO	+358 44 123 2244	Helga
4	Tietokantojentie 99, 02450 HELSINKI	+258 44 131 2589	Taru
5	Toukopoukontie 1, 00330 HELSINKI	+358 40 790 1411	Davide

Star Schema

ProductKey and OrderID make each row in the sales fact table unique. Sales can be analyzed based on employee, product, date and customer.

Schema:

Product dimension table:

ProductKey	ProductID	ProductPric	ProductNan	CategoryName	SupplierNar
1	1	1.09	Beer	Beverages	Pirkka
2	2	1.89	Cola	Beverages	EuroShopper
3	3	0.89	Skimmed Milk	Dairy	Pirkka
4	4	1.02	Cream	Dairy	Arla
5	5	0.3	Carrot	Fresh produce	Rainbow
6	6	0.56	Onion	Fresh produce	Pirkka
7	7	6.89	Eggs	Poultry	Xtra
8	8	4.09	Chicken Nugge	Poultry	Rainbow
9	9	0.99	Ice	Frozen foods	EuroShopper
10	10	1.76	Beans	Canned foods	EuroShopper
11	11	0.72	Spaghetti	Dry foods	Xtra
12	12	2.09	Cookies	Dry foods	Xtra
13	13	2	Croissant	Bakery products	Arla
14	14	5.45	Frozen shimps	Frozen foods	Xtra
15	15	1.89	Potato chips	Dry foods	Rainbow

Employee dimension table:

EmployeeKey	EmployeeID	EmployeeName
1	1	Jouko
2	2	Touko
3	3	Helga
4	4	Taru
5	5	Davide

Calendar dimension table:

CalendarKey	Year	DayOfMonth	Month	FullDate
1	2023	1	8	1.8.2023
2	2023	3	8	3.8.2023
3	2023	5	8	5.8.2023
4	2023	7	8	7.8.2023
5	2023	18	8	18.8.2023
6	2023	24	8	24.8.2023
7	2023	4	8	4.8.2023
8	2023	8	8	2.8.2023

Customer dimension table:

CustomerKey	CustomerID	CustomerName	City
1	1	Darren Chow	ESPOO
2	2	Ojaswi Tyagi	ESPOO
3	3	Onni Kiviluoto	TUUSULA
4	4	Venla Komu	HELSINKI
5	5	Ayse Pekdiker	ESPOO
6	6	Jens Henttinen	HELSINKI

Sales fact table:

EmployeeKey	ProductKey	OrderID	CustomerKey	CalendarKey	QuantitySold	ValueSold
1	1	3	2	3	48	52,32
1	1	6	5	6	1	1,09
4	2	1	6	1	4	7,56
3	2	2	4	2	8	15,12
1	2	3	2	3	2	3,78
2	3	4	1	4	5	4,45
4	5	8	6	8	20	6
4	6	1	6	1	2	1,12
4	7	1	6	1	8	55,12
3	7	2	4	2	1	6,89
4	9	8	6	8	14	13,86
1	10	7	2	7	1	1,76
5	11	5	3	5	7	5,04
1	13	7	2	7	2	4
5	14	5	3	5	1	5,45
2	15	4	1	4	2	3,78

Full database in the attached Access database.
Dimension tables are named "Tablename"dimension, and the fact table is named SALES fact.