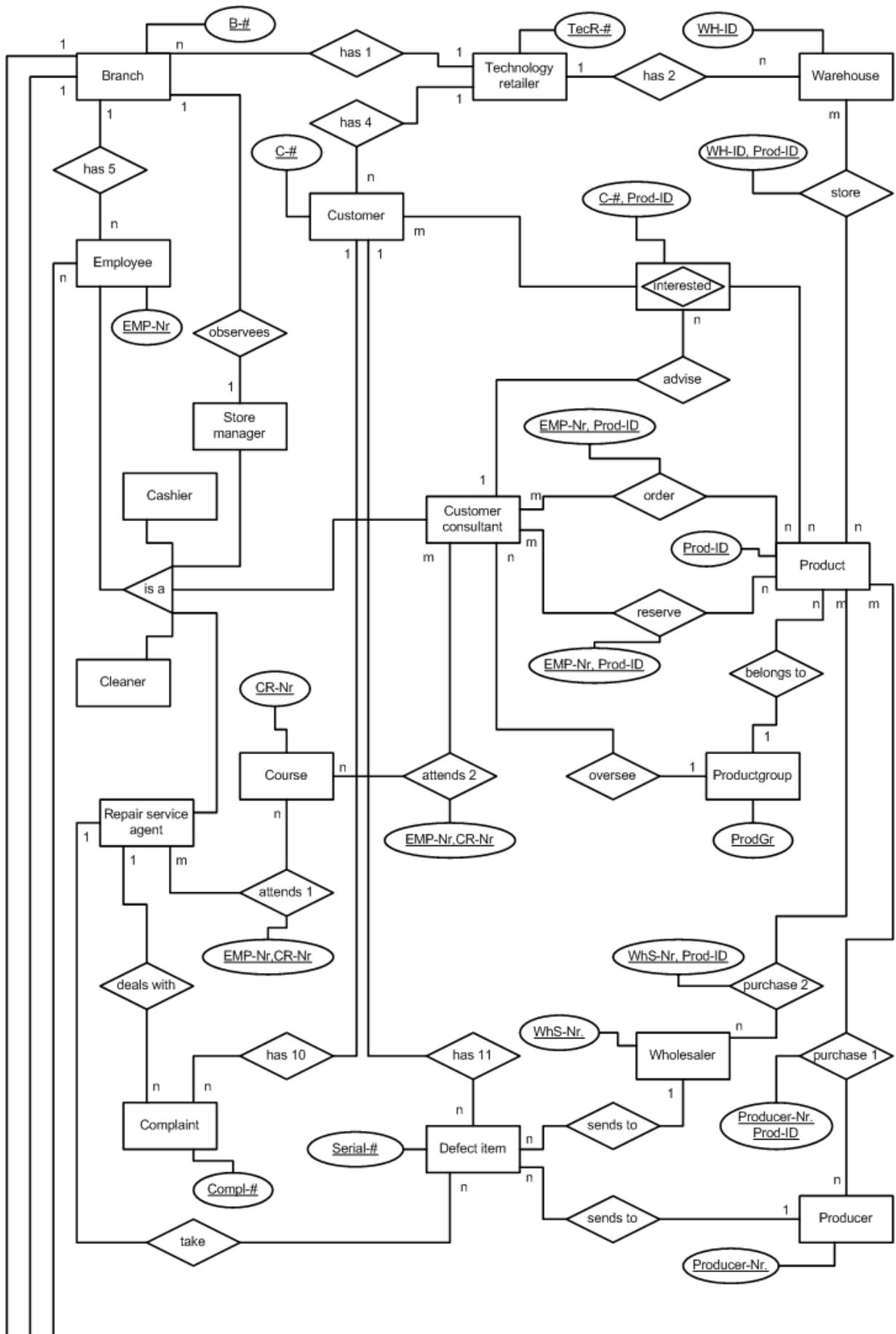


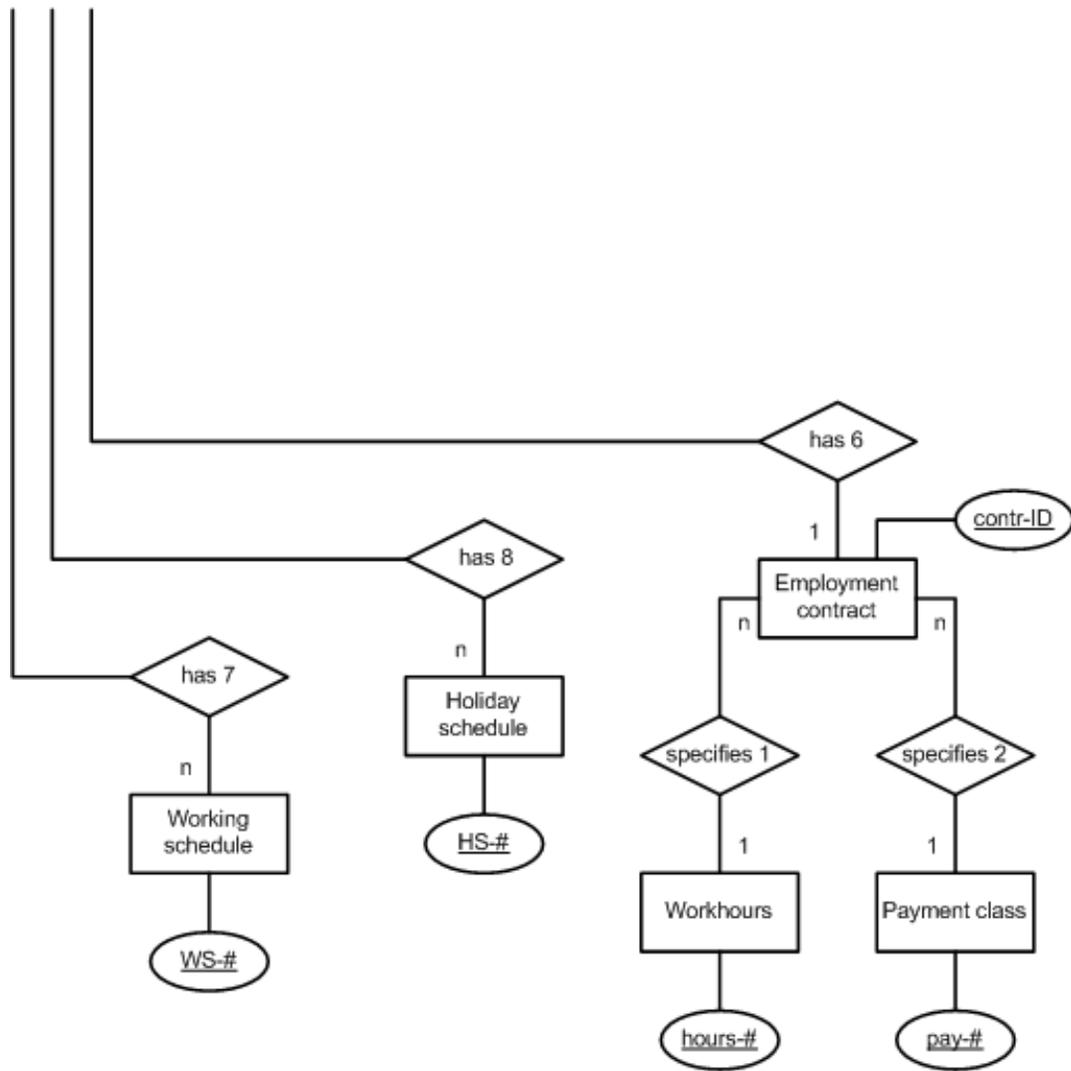
Technology retailer

Source: designed by Gerhard Pokorny

Transfer the following verbal description into an ERM:

- a) The technology retailer (TecR-#) has central warehouses (WH-ID) and many branches (B-#). The products (Prod-ID) are stored in the central warehouses.
- b) The products are placed into different product groups (ProdGr); each product belongs to one group. The products are purchased through wholesalers (WhS-Nr.) or from the producer (Producer-Nr.) directly.
- c) The company has a lot of customers (C-#), which are interested in the different products.
- d) In every branch, there are several employees (EMP-Nr.) but these employees work only for a particular branch. Each employee has a special employment contract (contr-ID) which specifies the work hours (hours-#) and the payment class (pay-#).
- e) Each branch has specific working schedules (WS-#) and holiday schedules (HS-#).
- f) The employees have different job functions: store manager, cashier, cleaner, customer consultant and repair service agent.
- g) Each branch has a manager who oversees the running of the store.
- h) Each customer consultant oversees only one product group based on their knowledge. They advise customers that are interested in the products and also reserve and order products.
- i) Customers have complaints (Compl-#) and defective items (Serial-#). The repair service agent deals with complaints (Compl-#) and takes defective items (Serial-#) from the customers. The defective products are sent to the wholesaler or producer to be exchanged or repaired.
- j) In order to provide a better service, the customer consultants and the repair service agents attend courses (CR-Nr.) about the products.





Technology retailer

<u>TecR-#</u>	...

Warehouse

<u>WH-ID</u>	<u>TecR-#</u>	...

Branch

<u>B-#</u>	<u>TecR-#</u>	<u>EMP-Nr</u>	...

Customer

<u>C-#</u>	<u>TecR-#</u>	...

interested

<u>C-#</u>	<u>Prod-ID</u>	<u>EMP-Nr</u>	...

Prodcutgroup

<u>ProdGr</u>	...

Product

<u>Prod-ID</u>	<u>ProdGr</u>	...

store

<u>WH-ID</u>	<u>Prod-ID</u>	...

order

<u>EMP-Nr</u>	<u>Prod-ID</u>	...

Employee

<u>EMP-Nr</u>	<u>Type</u>	<u>contr-ID</u>	<u>ProdGr</u>	...

Course

<u>CR-Nr</u>	...

Wholesaler

<u>WhS-Nr</u>	...

reserve

<u>EMP-Nr</u>	<u>Prod-ID</u>	...

attends 2

<u>EMP-Nr.</u>	<u>CR-Nr</u>	...

purchase 2

<u>WhS-Nr</u>	<u>Prod-ID</u>	...

purchase 1

<u>Producer-Nr</u>	<u>Prod-ID</u>	...

Producer

<u>Producer-Nr</u>	...

attends 1

<u>EMP-Nr</u>	<u>CR-Nr</u>	...

Defect Item

<u>Serial-#</u>	<u>C-#</u>	<u>EMP-Nr</u>	<u>WhS-Nr</u>	<u>Producer-Nr</u>	...

Complaint

<u>Comp-#</u>	<u>C-#</u>	<u>EMP-Nr</u>	...

Employment contract

<u>contr-ID</u>	<u>hours-#</u>	<u>pay-#</u>	...

Workhours

<u>hours-#</u>	...

Payment class

<u>pay-#</u>	...

Working schedule

<u>WS-#</u>	<u>B-#</u>	...

Holiday schedule

<u>HS-#</u>	<u>B-#</u>	...