

Exercise 2 – ER Modelling

Sample Exercise for practice

Scania is a major Swedish manufacturer headquartered in Sodertalje, world-leading provider of transport solutions, for heavy transport applications combined with an extensive product-related service offering in more than 100 countries. The company owns a number of buses. Each bus is allocated to a particular route, although some routes may have several buses. Each route passes through a number of towns. One or more drivers are allocated to each stage of a route, which corresponds to a journey through some or all of the towns on a route. Some of the towns have a garage where buses are kept and each of the buses are identified by the registration number and can carry different numbers of passengers, since the vehicles vary in size and can be single or double-decked. Each route is identified by a route number and information available on the average number of passengers carried per day for each route. Drivers have an employee number, name, address and sometimes a telephone number.

Design ER diagram to model the scenario using Chen notation with the help of EdrawMax tool by identifying entity types, relationship types, cardinality constraints, key attributes, other relevant attributes (such as composite attributes, multivalued attributes).