COMP 3311: Database Management Systems

Tutorial 2 Relational Model and Relational Database Design

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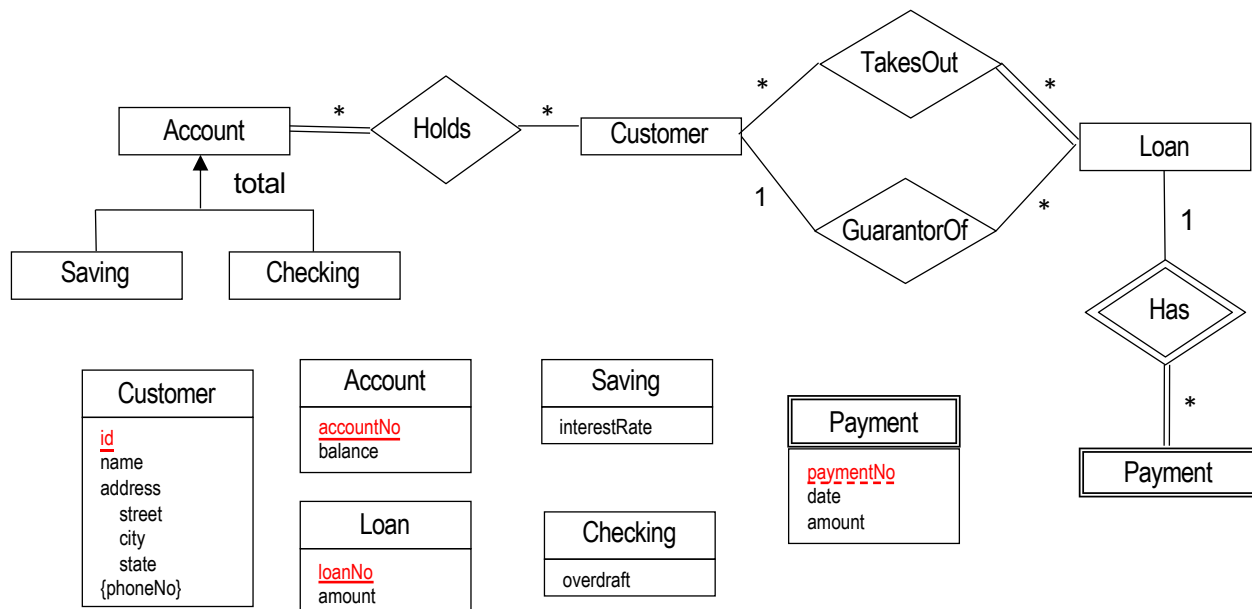Last/Family (PRINT) Given/First (PRINT)

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Submission: Upload this exercise worksheet by <u>11.59pm Friday (25 Feb)</u> (Only one student needs to upload)

Exercise 1: Reduce the bank E-R schema to a relational schema. Specify all referential integrity constraints and actions. ***Where possible use schema combination to reduce relationships.***

Customer(<u>id</u>, name, street, city, state)

CustomerPhone(<u>id, phoneNo</u>)

Account(<u>accountNo</u>, balance)

Loan(<u>loanNo</u>, amount, id)
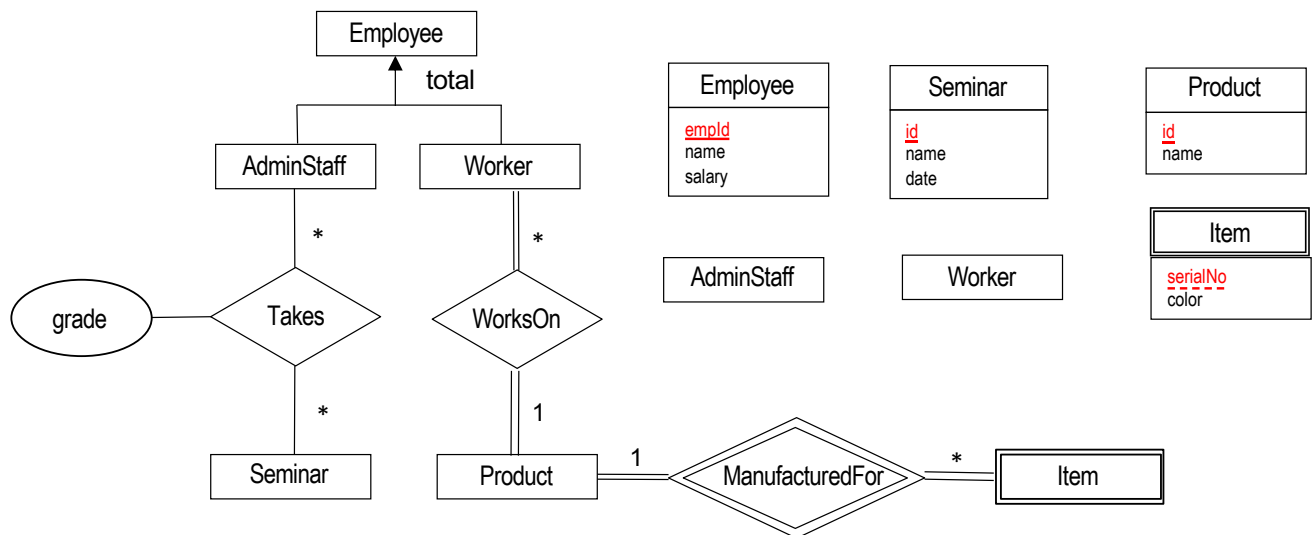
Saving(<u>accountNo</u>, interesRate)

Checking(<u>accountNo</u>, overdraft)

Payment(<u>paymentNo,, loanNo</u>, date, amount)

TakesOut(<u>loanNo, id</u>)

Holds(<u>accountNo, id</u>)

Exercise 2: Reduce the factory E-R schema to a relational schema. Specify all referential integrity constraints and actions. *Where possible use schema combination to reduce relationships.*

Employee(empId, name, salary)

AdminStaff(empId, name, salary)

Worker(empId, name, salary, ProductId)

Seminar(id, name, date)

Product(id, name)

Item(ProductId, serialNo, color)

Takes(empId, id, grade)