April 30, 2020

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BCDE103

Design Assignment

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# Entities and Attributes

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My schema has the following Entities:

* Customer
* Account
* CustomerOrder
* Branch
* ItemBranch – bridging entity
* Item
* BranchEmployee – bridging entity
* Employee

## Design

I had to change the name of the ‘Order’ entity to ‘CustomerOrder’ because order is a reserved word in SQL server and I also added two bridging entities to resolve ‘many to many’ conflicts.

As far as attributes are concerned, I tried to make their names descriptive and unique to the entity that they belong to. Perhaps this made some attribute names too long (totalSalesAmountPerMonth) but I think that being exactly clear with the name of the attributes is good.

The attribute types are simple too, anything that is only ever going to be a number is an INT (primary keys, account balances ect), dates are DATE, everything else is a varchar. The primary keys are INT because they will start at 1 and increment by 1 with each new entry.

In hindsight there are attributes that I am not happy with, for instance the attribute ‘address’ in the Employee entity. This is a multi-valued attribute that I would have preferred to atomize into smaller components for the sake of clarity, like how I split ‘phoneNumber’ into ‘landlineNumber’ and ‘cellNumber’.