Computer Science
Semester 2 – Databases
Bent H. Pedersen

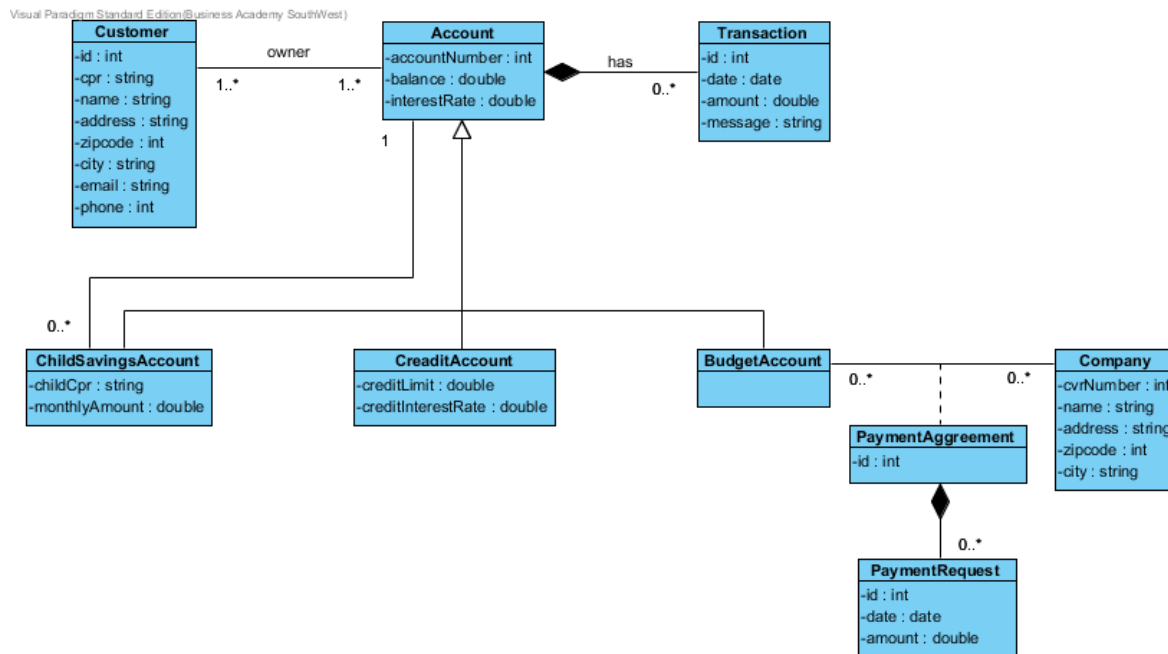ERHVERVS
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Assignment 3 – Consultative Solution

Exercise 1

Use the mapping rules to design a relational database diagram for the bank.

Customer(Id, Cpr, Name, Address, Zipcode, City, Email, Phone)

Account(AccountNumber, Balance, InterestRate)

Company(CvrNumber, Name, Address, Zipcode, City)

ChildSavingsAccount(AccountNumber, ChildCpr, MonthlyAmount, FromAccount)

CreditAccount(AccountNumber, CreditLimit, CreditInterestRate)

BudgetAccount(AccountNumber)

Transaction(AccountNumber, TransactionID, Date, Amount, Message)

PaymentAggreement(Id, BudgetAccountNumber, CvrNumber)

PaymentRequest(PaymentAggreementId, PaymentRequestId, Date, Amount)

CustomerAccount(CustomerId, AccountNumber)

Exercise 2

Database implemented in SQL Server:

ChildSavingsAccount

Column Name	Condensed Type	Nullable
AccountNumber	int	No
ChildCpr	nchar(10)	Yes
MonthlyAmount	float	Yes
ParentAccouint	int	Yes

CustomerAccount

Column Name	Condensed Type	Nullable
CustomerId	int	No
AccountNumber	int	No

Account

Column Name	Condensed Type	Nullable
AccountNumber	int	No
Balance	float	Yes
InterestRate	float	Yes

Transaction

Column Name	Condensed Type	Nullable
AccountNumber	int	No
TransactionId	int	No
Date	datetime	Yes
Amount	float	Yes
Message	nvarchar(50)	Yes

Customer

Column Name	Condensed Type	Nullable
Id	int	No
Name	nvarchar(50)	Yes
Address	nvarchar(50)	Yes
Zipcode	int	Yes
Email	nvarchar(50)	Yes
Phone	int	Yes
Phone2	int	Yes

BudgetAccount

Column Name	Condensed Type	Nullable
AccountNumber	int	No

CreditAccount

Column Name	Condensed Type	Nullable
AccountNumber	int	No
CreditLimit	float	Yes
CreditInterestRate	float	Yes

PaymentAggreement

Column Name	Condensed Type	Nullable
Id	int	No
BudgetAccount	int	Yes
CvrNumber	int	Yes

PaymentRequest

Column Name	Condensed Type	Nullable
PaymentAgreementId	int	No
RequestId	int	No
Date	date	Yes
Amount	float	Yes

Company

Column Name	Condensed Type	Nullable
CvrNumber	int	No
Name	nvarchar(50)	Yes
Addresss	nvarchar(50)	Yes
Zipcode	int	Yes