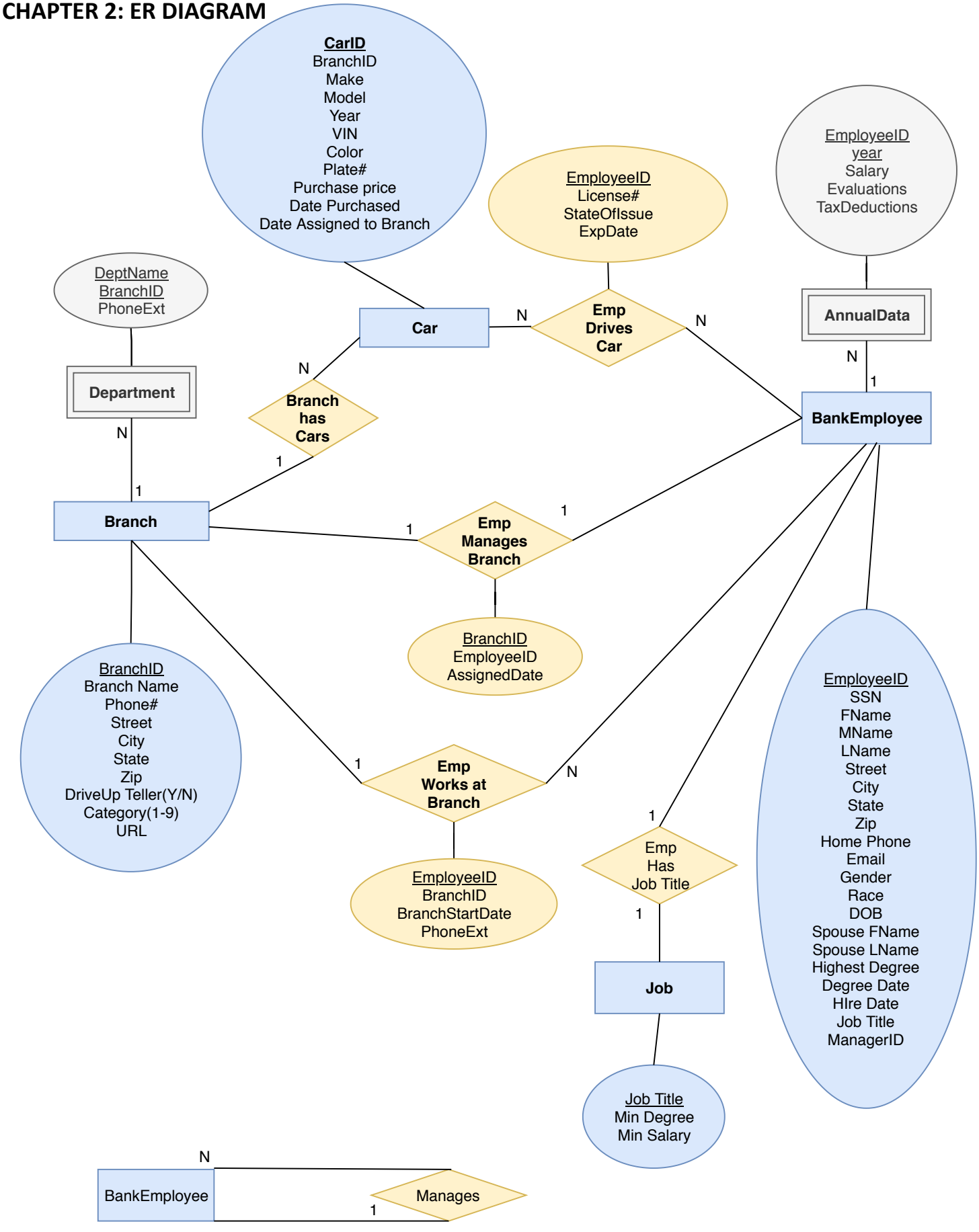
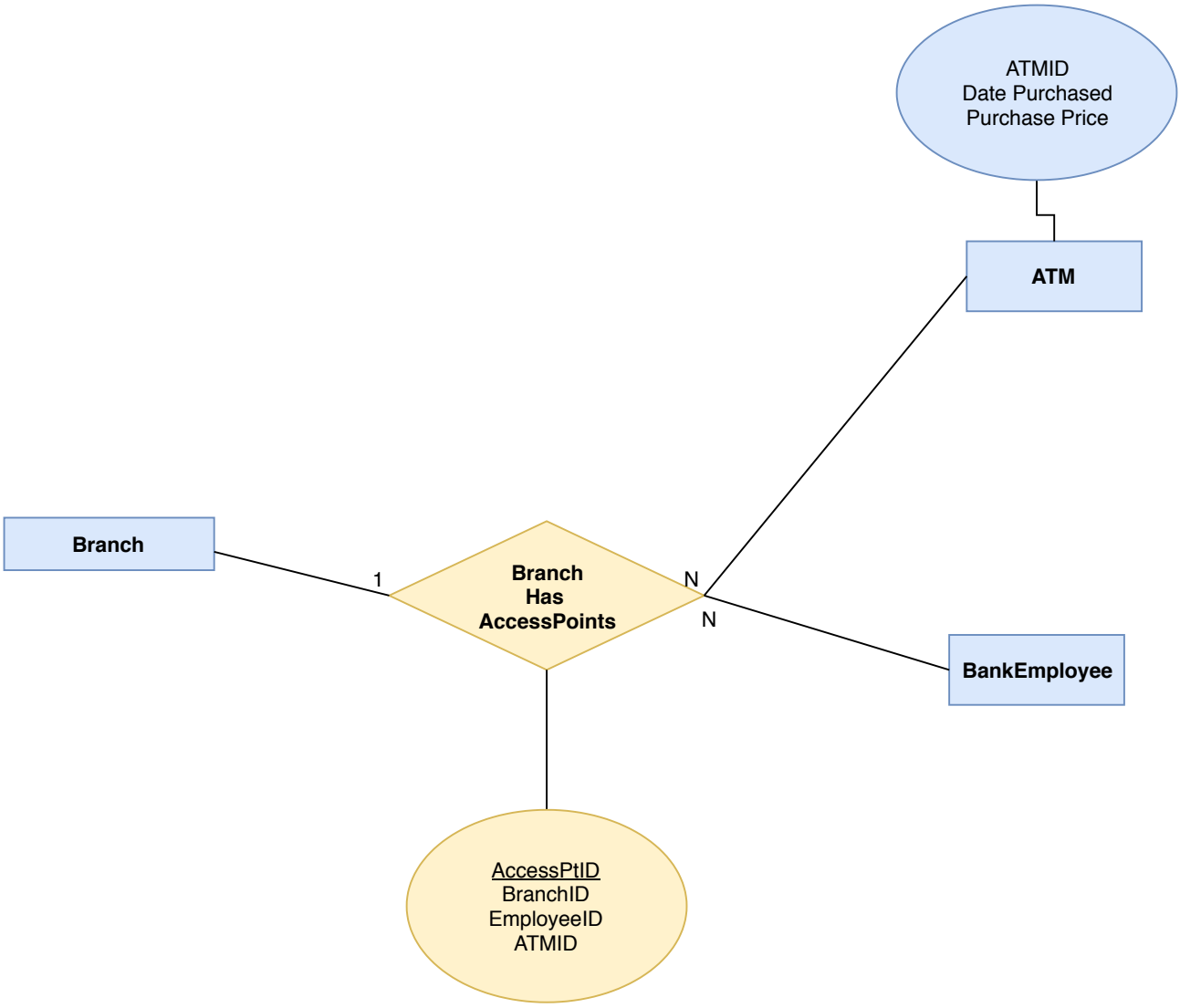
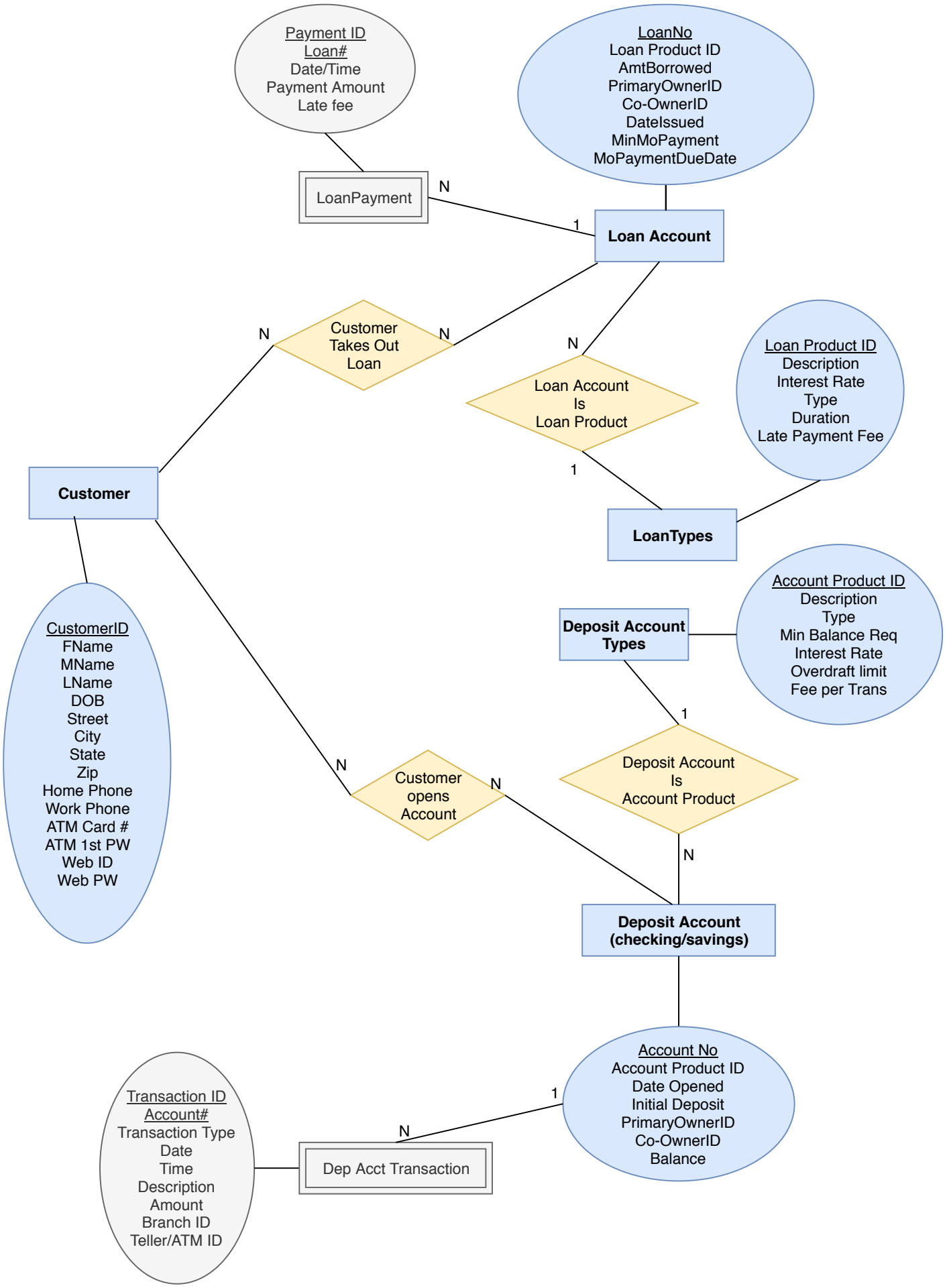
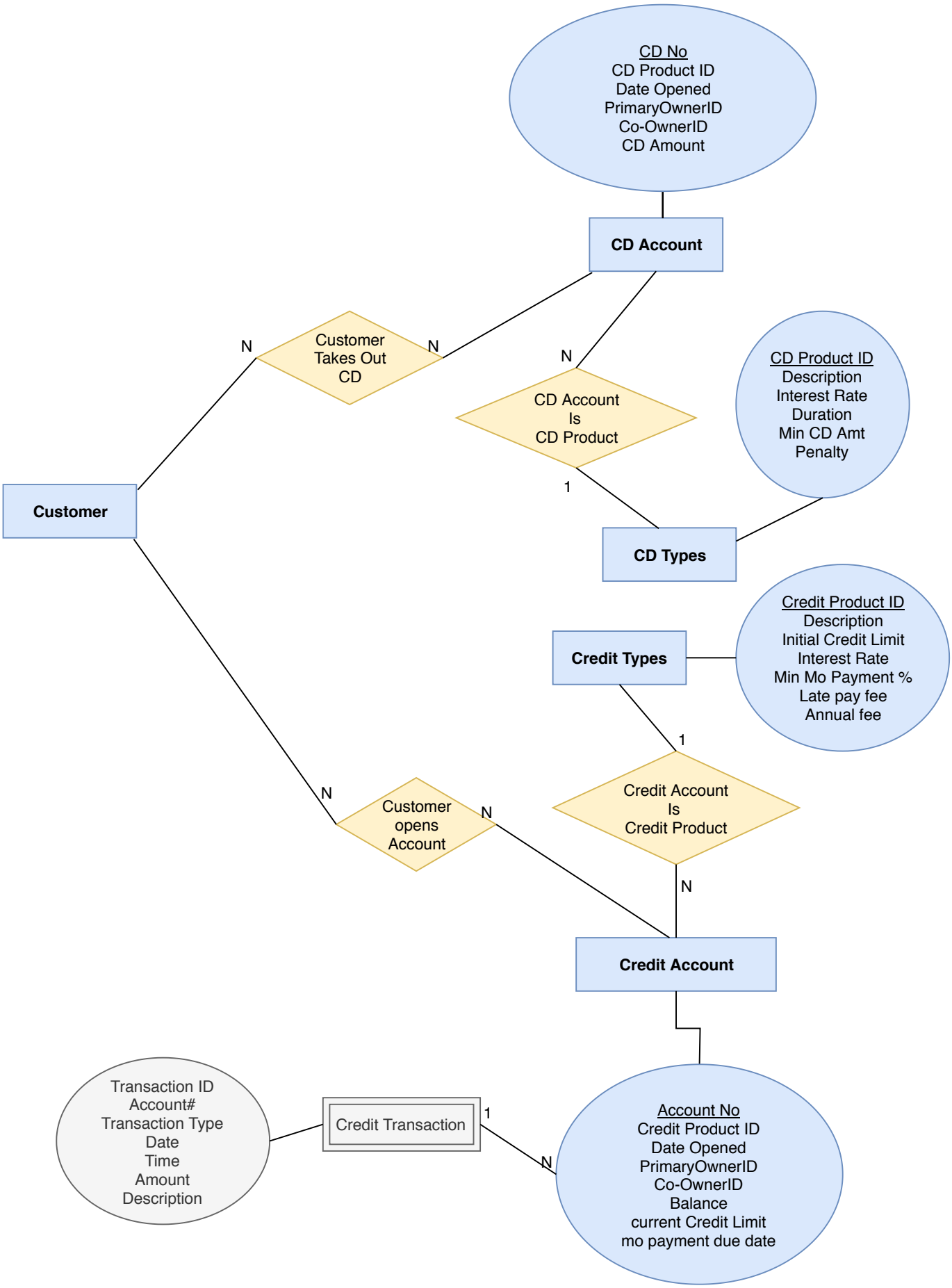
CHAPTER 2: ER DIAGRAM




ATMID
Date Purchased
Purchase Price
ATM
Branch
1
Branch
Has
AccessPoints
N
N
BankEmployee
AccessPtID
BranchID
EmployeeID
ATMID


Payment ID
Loan#
Date/Time
Payment Amount
Late fee
LoanNo
Loan Product ID
AmtBorrowed
PrimaryOwnerID
Co-OwnerID
DateIssued
MinMoPayment
MoPaymentDueDate
LoanPayment
N
1
Loan Account
N
Customer
Takes Out
Loan
N
N
Loan Account
Is
Loan Product
Loan Product ID
Description
Interest Rate
Type
Duration
Late Payment Fee
1
Customer
LoanTypes
CustomerID
FName
MName
LName
DOB
Street
City
State
Zip
Home Phone
Work Phone
ATM Card #
ATM 1st PW
Web ID
Web PW
Deposit Account
Types
Account Product ID
Description
Type
Min Balance Req
Interest Rate
Overdraft limit
Fee per Trans
1
N
Customer
opens
Account
N
Deposit Account
Is
Account Product
N
Deposit Account
(checking/savings)
Account No
Account Product ID
Date Opened
Initial Deposit
PrimaryOwnerID
Co-OwnerID
Balance
1
N
Transaction ID
Account#
Transaction Type
Date
Time
Description
Amount
Branch ID
Teller/ATM ID
Dep Acct Transaction


CD No
CD Product ID
Date Opened
PrimaryOwnerID
Co-OwnerID
CD Amount
CD Account
N
Customer
Takes Out
CD
N
N
CD Account
Is
CD Product
1
CD Product ID
Description
Interest Rate
Duration
Min CD Amt
Penalty
Customer
CD Types
Credit Product ID
Description
Initial Credit Limit
Interest Rate
Min Mo Payment %
Late pay fee
Annual fee
Credit Types
1
N
Customer
opens
Account
N
Credit Account
Is
Credit Product
N
Credit Account
Transaction ID
Account#
Transaction Type
Date
Time
Amount
Description
Credit Transaction
1
N
Account No
Credit Product ID
Date Opened
PrimaryOwnerID
Co-OwnerID
Balance
current Credit Limit
mo payment due date

CHAPTER 5: ORACLE TABLES

BRANCH

```
Name          Null?    Type
------------ -------- ------------
BRANCHID      NOT NULL NUMBER(4)
NAME          NOT NULL VARCHAR2(25)
PHONE                  CHAR(10)
STREET                 VARCHAR2(30)
CITY                   VARCHAR2(25)
STATE                  VARCHAR2(2)
ZIP                    VARCHAR2(10)
TELLERWINDOW           CHAR(1)
CATEGORY               NUMBER(1)
URL           NOT NULL VARCHAR2(50)
```

DEPARTMENT

```
Name     Null?    Type
-------- -------- ---------
DEPTNAME NOT NULL CHAR(10)
BRANCHID NOT NULL NUMBER(4)
PHONEEXT          CHAR(4)
```

CAR

```
Name     Null?    Type
-------- -------- ---------
DEPTNAME NOT NULL CHAR(10)
BRANCHID NOT NULL NUMBER(4)
PHONEEXT          CHAR(4)
Name             Null?    Type
---------------- -------- ------------
CARID            NOT NULL NUMBER(5)
BRANCHID                  NUMBER(4)
VIN              NOT NULL CHAR(17)
MAKE                      VARCHAR2(15)
MODEL                     VARCHAR2(15)
YEAR                      NUMBER(4)
COLOR                     VARCHAR2(12)
PLATENO                   VARCHAR2(10)
PURCHDATE                 DATE
PURCHPRICE                NUMBER(6)
BRANHASSIGNDATE           DATE
```

DRIVER

```
Name          Null?    Type
------------ -------- ------------
EMPID         NOT NULL NUMBER(10)
LICENSENO     NOT NULL VARCHAR2(20)
STATEOFISSUE  NOT NULL CHAR(2)
EXPDATE       NOT NULL DATE
```

CUSTOMER

Name	Null?	Type
CUSTID	NOT NULL	NUMBER(10)
SSN		CHAR(9)
FNAME	NOT NULL	VARCHAR2(20)
MNAME		VARCHAR2(20)
LNAME	NOT NULL	VARCHAR2(25)
DOB	NOT NULL	DATE
STREET		VARCHAR2(30)
CITY		VARCHAR2(25)
STATE		VARCHAR2(2)
ZIP		VARCHAR2(10)
HOMEPHONE		CHAR(10)
WORKPHONE		CHAR(10)
ATMNO		CHAR(10)
ATMPW		VARCHAR2(30)
WEBID		VARCHAR2(20)
WEBPW		VARCHAR2(30)

BANK_EMPLOYEE

Name	Null?	Type
EMPID	NOT NULL	NUMBER(10)
SSN	NOT NULL	CHAR(9)
FNAME	NOT NULL	VARCHAR2(20)
MNAME		VARCHAR2(20)
LNAME	NOT NULL	VARCHAR2(25)
STREET	NOT NULL	VARCHAR2(30)
CITY	NOT NULL	VARCHAR2(25)
STATE	NOT NULL	VARCHAR2(2)
ZIP	NOT NULL	VARCHAR2(10)
HOMEPHONE		CHAR(10)
EMAIL		VARCHAR2(320)
GENDER		CHAR(1)
RACE		CHAR(2)
DOB	NOT NULL	DATE
SPOUSEFNAME		VARCHAR2(20)
SPOUSELNAME		VARCHAR2(20)
DEGREE		VARCHAR2(4)
DEGREEDATE		DATE
HIREDATE	NOT NULL	DATE
JOBTITLE	NOT NULL	VARCHAR2(20)
STAFFMANAGER		NUMBER(10)

JOB

Name	Null?	Type
JOBTITLE	NOT NULL	VARCHAR2(20)
MINDEGREE		VARCHAR2(5)
MINSALARY		NUMBER(10)

EMP_ANNUAL_DATA

Name	Null?	Type
EMPID	NOT NULL	NUMBER(10)
YEAR	NOT NULL	CHAR(4)
SALARY		NUMBER(7)
EVALUATION		NUMBER(2)
TAXDEDUCTION		NUMBER(2)

BRANCH_EMPLOYEE

Name	Null?	Type
EMPID	NOT NULL	NUMBER(10)
BRANCHID	NOT NULL	NUMBER(4)
BRANCHSTARTDATE		DATE
PHONEEXT		CHAR(4)

ATM

Name	Null?	Type
ATMID	NOT NULL	NUMBER(10)
PURCHDATE		DATE
PURCHPRICE		NUMBER(6)

BRANCH_ACCESS_POINTS

Name	Null?	Type
ACCESSPOINTID	NOT NULL	CHAR(7)
BRANCHID	NOT NULL	NUMBER(4)
TELLEREMPID		NUMBER(10)
ATMID		NUMBER(10)

BRANCH_MANAGER

Name	Null?	Type
BRANCHID	NOT NULL	NUMBER(4)
EMPID		NUMBER
ASSIGNDATE		DATE

LOAN

Name	Null?	Type
LOANNO	NOT NULL	CHAR(10)
LOANPRODID	NOT NULL	VARCHAR2(10)
AMTBORROWED	NOT NULL	NUMBER(8)
PRIMARY		NUMBER
COOWNER		NUMBER
DATEISSUED		DATE
MINMOPAY	NOT NULL	NUMBER(6,2)
MOPAYDUEDAY	NOT NULL	NUMBER(2)

LOAN_PRODUCT

Name	Null?	Type
LOANPRODID	NOT NULL	VARCHAR2(10)
DESCRIP		VARCHAR2(50)
INTRATE	NOT NULL	NUMBER(5,2)
TYPE	NOT NULL	CHAR(1)
DURATION	NOT NULL	NUMBER(3)
LATEPAYFEE		NUMBER(38,2)
CATEGORY		VARCHAR2(10)

DEPOSIT_ACCT

Name	Null?	Type
ACCTNO	NOT NULL	CHAR(10)
ACCTPRODID	NOT NULL	VARCHAR2(10)
DATEOPENED	NOT NULL	DATE
INITDEPOSIT	NOT NULL	NUMBER(8)
PRIMARY	NOT NULL	NUMBER(10)
COOWNER		NUMBER(10)
BALANCE	NOT NULL	NUMBER(6,2)

DEPOSIT_ACCT_PRODUCT

Name	Null?	Type
ACCTPRODID	NOT NULL	VARCHAR2(10)
DESCRIP		VARCHAR2(50)
INTRATE	NOT NULL	NUMBER(5,2)
TYPE	NOT NULL	CHAR(1)
MINBALREQ		NUMBER(6)
OVERDRAFTLIMIT		NUMBER(6)
TRANSFEE		NUMBER(4,2)

CD_ACCOUNT

Name	Null?	Type
CDNO	NOT NULL	CHAR(10)
CDPRODID		VARCHAR2(10)
DATEOPENED		DATE
PRIMARY	NOT NULL	NUMBER(10)
COOWNER		NUMBER(10)
CDAMT	NOT NULL	NUMBER(6,2)

CD_PRODUCT

Name	Null?	Type
CDPRODID	NOT NULL	VARCHAR2(10)
DESCRIP		VARCHAR2(50)
INTRATE	NOT NULL	NUMBER(5,2)
DURATION		NUMBER(3)
MINCDAMT	NOT NULL	NUMBER(6)
PENALTYAMT		NUMBER(4,2)

CREDIT_ACCOUNT

Name	Null?	Type
CREDITACCTNO	NOT NULL	CHAR(10)
CREDITPRODID		VARCHAR2(10)
DATEOPENED		DATE
PRIMARY	NOT NULL	NUMBER(10)
COOWNER		NUMBER(10)
BALANCE	NOT NULL	NUMBER(8,2)
CURRENTLIMMIT	NOT NULL	NUMBER(10)
MOPAYDUEDAY	NOT NULL	NUMBER(2)

CREDIT_PRODUCT

Name	Null?	Type
CREDITPRODID	NOT NULL	VARCHAR2(10)
DESCRIP		VARCHAR2(50)
INTRATE	NOT NULL	NUMBER(5,2)
INITCREDITLIMIT	NOT NULL	NUMBER(6)
MINMOPAYPERCENT		NUMBER(3)
LATEFEE		NUMBER(4,2)
ANNUALFEE		NUMBER(4,2)

LOAN_PAYMENT

Name	Null?	Type
PAYMENTID	NOT NULL	NUMBER(10)
LOANNO	NOT NULL	CHAR(10)
TRANSDATETIME	NOT NULL	TIMESTAMP(6)
PAYAMT	NOT NULL	NUMBER(10,2)
LATECHARGE		NUMBER(4,2)

DEPOSIT_ACCT_TRANSACTION

Name	Null?	Type
TRANSID	NOT NULL	NUMBER(10)
ACCTNO	NOT NULL	CHAR(10)
TRANSTYPE	NOT NULL	VARCHAR2(8)
TRANSDATETIME	NOT NULL	TIMESTAMP(6)
AMOUNT	NOT NULL	NUMBER(10,2)
DESCRIPTION		VARCHAR2(50)
ACCESSPTID		CHAR(7)

CREDIT_ACCT_TRANSACTION

Name	Null?	Type
TRANSID	NOT NULL	NUMBER(10)
CREDITACCTNO	NOT NULL	CHAR(10)
TRANSTYPE	NOT NULL	VARCHAR2(8)
TRANSDATETIME	NOT NULL	TIMESTAMP(6)
AMOUNT	NOT NULL	NUMBER(10,2)
DESCRIPTION		VARCHAR2(50)