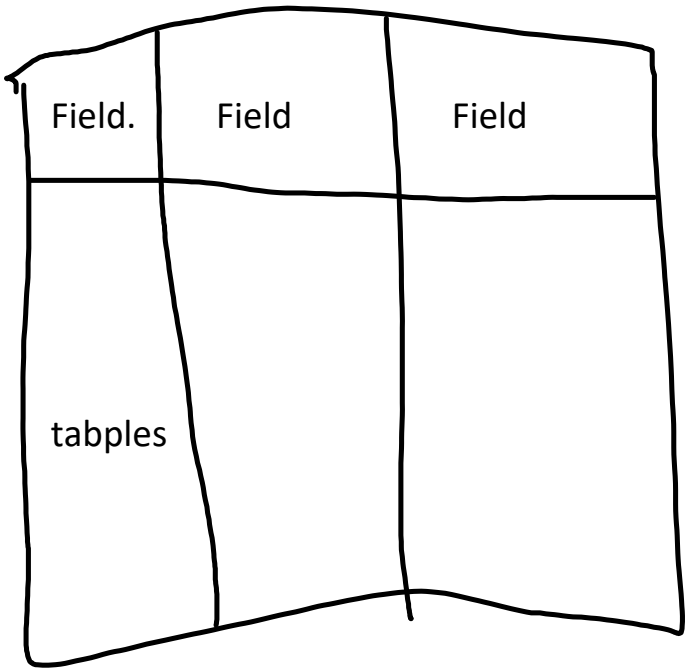
2019-2-6

2019年2月6日 星期三　　下午8:14

ER diagram to Relational Model

Relational Model: table with relations



Headers. : schema

Real contains: instance(the data)

Family

R(f1[the field]:domain1, f2:d2…….)
Name of the relations
Domain example: integers, from 1 to 100, etc…….

R<= d1*d2*d3…. ???

Instance: {(e1,e2…….)| e1 in d1,e2 in d2 ……..}
No duplicate. In theory

In realitv. very hard to check duplicate

Domain: set from which data is taken (field)

Int
Float,double
Strings: char(n), barchar(n)
Date,time,datetime
Enum don’t know what it is

Dgree(ar-ity): number of field
Cardinality: number of taples
DBMS enforces domain constraints

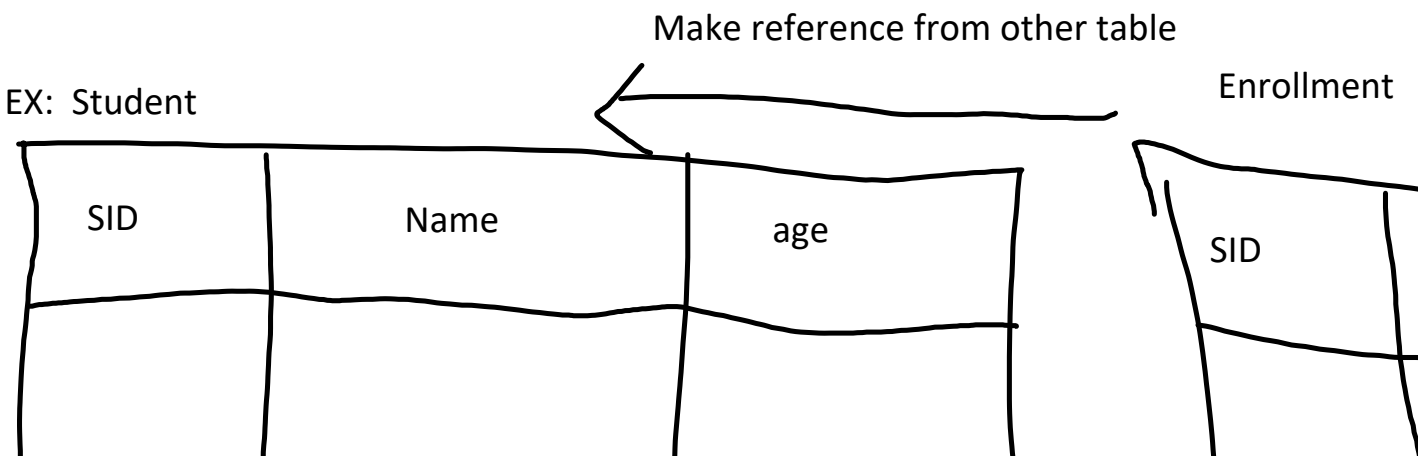
Example,
Students(sid:int,name:bafchar(80),age:int)
Check constrains

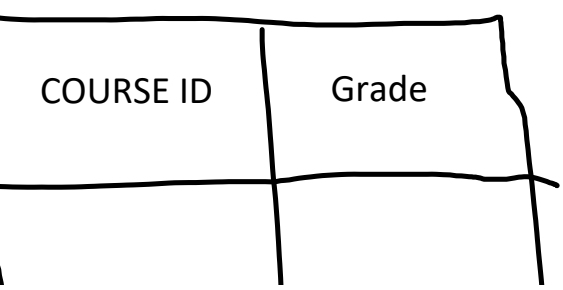
Integrity constrains: legal instance
Domain constrains:

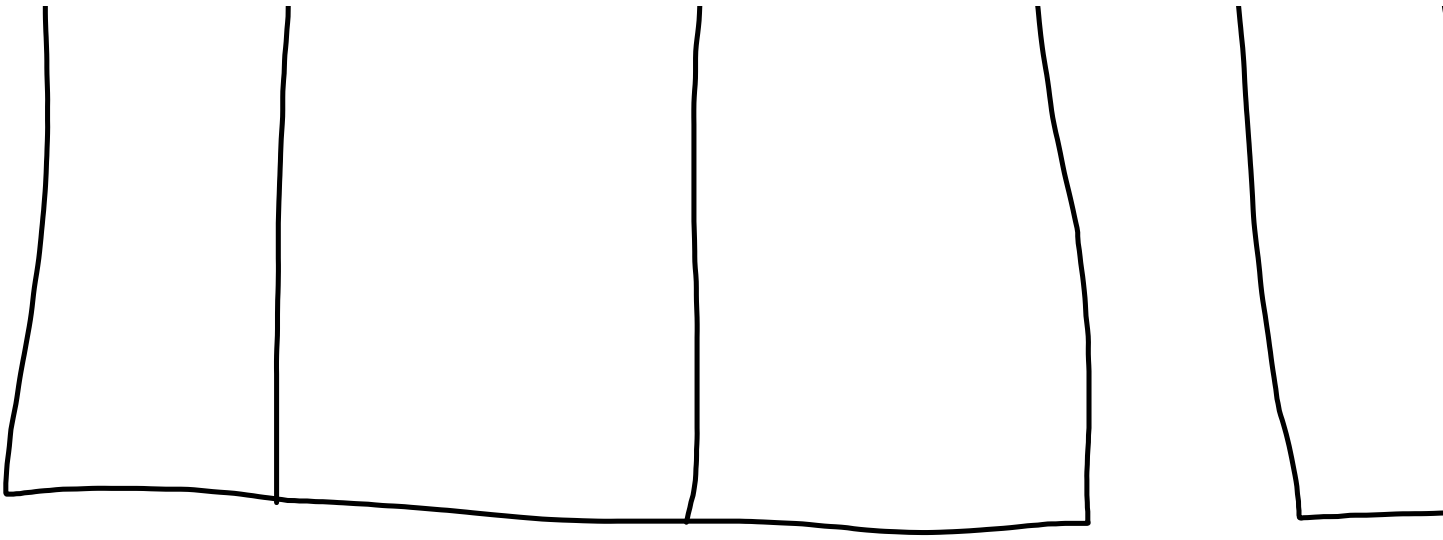
DBMS: might modify data so that it satisfy integrity constrains

Key constrain:
candidate key
Primary key
Minimal set of attributes that uniquelly identifies the taple

Super key: any set of attributes that contains a candidate key




COURSE ID
Grade

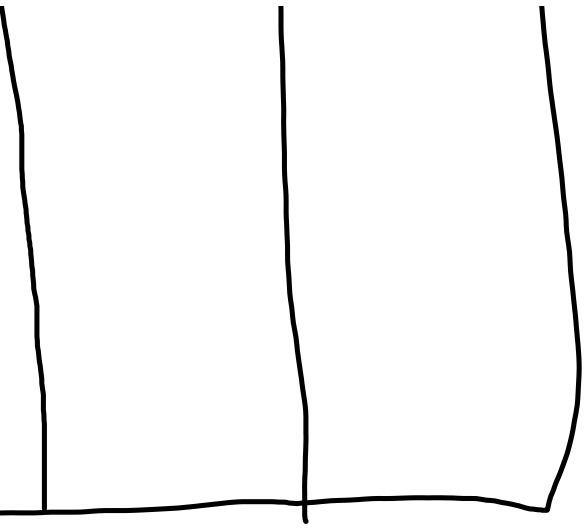


Referential integrity constraint
EX:
Student(SID:INT,NAME:barchar(80),age:int,primary key(sid))

Enrollment(sid:int, csd:int,grade:char(2),priamry key(sid,cid),foreign key(sid) references stu

Person(ssn,name,parent,primarykey(ssn),forein key(parent) referent person(ssn))

Temporarily turn off intergrity constrans



udent(sid)optional)