**Database Design Document**

2022级计算机科学与技术（全英创新班）

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**1 Create Table**

use experiment\_2;

create table student(

sID varchar(10) check(length(sID)=10),

sName varchar(20),

sex enum("Male","Female"),

entrance\_age integer check(entrance\_age between 10 and 50),

entrance\_year integer,

class varchar(20)

);

create table course(

cID varchar(7) check(length(cID)=7),

cName varchar(20),

tID varchar(5),

credit integer,

grade Integer,

canceled\_year Integer

);

create table teacher(

tID varchar(5) check(length(tID)=5),

tName varchar(20),

courses varchar(20)

);

create table course\_choosing(

sID varchar(10),

cID varchar(7),

tID varchar(5),

choose\_year integer,

score integer

);

alter table student add primary key(sID);

alter table course add primary key(cID);

alter table teacher add primary key(tID);

alter table course\_choosing add foreign key(sID) references student(sID);

alter table course\_choosing add foreign key(cID) references course(cID);

alter table course\_choosing add foreign key(tID) references teacher(tID);

**2 Insert Data**

use experiment\_2;

insert into student values(3010000000,'Kong','male',18,2022,'CS');

insert into student values(3020000000,'Zak','female',18,2023,'CS');

insert into student values(3030000000,'Maan','male',17,2022,'Web');

insert into teacher values(20100,'Wing',4010000,'Computer Science Introduction');

insert into teacher values(20100,'Wing',4020000,'Machine Learning');

insert into teacher values(20200,'Ngan',4030000,'Algorithm');

insert into teacher values(20200,'Ngan',4040000,'Discrete Mathematics');

insert into course values(4010000,'Computer Science Introduction',20100,2,2019,2026);

insert into course values(4040000,'Discrete Mathematics',20200,4,2020,'');

insert into course values(4030000,'Algorithm',20200,4,2019,2024);

insert into course values(4020000,'Machine Learning',20100,1,2021,2023);

insert into course\_choosing values(3010000000,4040000,20200,2023,97);

insert into course\_choosing values(3020000000,4040000,20200,2023,89);

insert into course\_choosing values(3030000000,4010000,20100,2022,88);

insert into course\_choosing values(3030000000,4040000,20200,2023,94);

insert into course\_choosing values(3010000000,4010000,20100,2022,92);

insert into course\_choosing values(3010000000,4030000,20200,2023,76);

insert into course\_choosing values(3020000000,4030000,20200,2022,-1);

insert into user\_info values(101,'Admin',123456);

insert into user\_info values(20100,'Teacher',123456);

insert into user\_info values(20200,'Teacher',123456);

insert into user\_info values(3010000000,'Student',123456);

insert into user\_info values(3020000000,'Student',123456);

insert into user\_info values(3030000000,'Student',123456);