



By

## Team 48

### Team Members:

Vikram Malik - 2019287  
Vidhi Sharma - 2019286  
Priyansh - 2019078  
Ashmeet Singh - 2019412  
Raghav Bhalla - 2019379

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## Relational schema

### Course

**ID:** *INT, NOT NULL , UNIQUE,primary key*  
**COURSE\_ID:** *VARCHAR(10), NOT NULL*  
**NAME:** *VARCHAR(30), NOT NULL ,UNIQUE*  
**CREDIT:** *INT, NOT NULL , CHECK(CREDIT >= 1 AND CREDIT <= 4)*  
**LEVEL:** *INT NOT NULL ,CHECK(LEVEL >= 1 AND LEVEL <= 3)*  
**INFO:** *VARCHAR(1024)*

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### Student

**ID:** *INT, NOT NULL ,UNIQUE,FOREIGN KEY(ID) REFERENCES*  
*USERS(ID)*  
**AGE:** *INT , NOT NULL*

**DOB:** *VARCHAR(10), NOT NULL*  
**QUALIFICATIONS :** *varchar(20) ,NOT NULL*  
**GUARDIAN\_NAME:** *VARCHAR(50) , NOT NULL*  
**GENDER:** *VARCHAR(1), NOT NULL ,CHECK(GENDER = 'M' OR GENDER = 'F' OR GENDER = 'O')*

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## University

**ID:** *INT, NOT NULL, UNIQUE, FOREIGN KEY REFERENCES USERS(ID)*  
**LOCATION:** *VARCHAR(50), NOT NULL*  
**INFO:** *VARCHAR(1024)*  
**EDUCAMP\_RANKING:** *INT, NOT NULL*

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## Users

**ID:** *INT, NOT NULL, UNIQUE*  
**NAME:** *VARCHAR(50), NOT NULL*  
**EMAIL:** *VARCHAR(50), PRIMARY KEY, NOT NULL UNIQUE*  
**PASSWORD:** *VARCHAR(50), NOT NULL*

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## Professor

**ID :** *INT, NOT NULL ,UNIQUE,FOREIGN KEY(ID) REFERENCES USERS(ID)*  
**QUALIFICATIONS :** *VARCHAR(50) ,NOT NULL*  
**OFFICE\_HOURS :**  *VARCHAR(50), NOT NULL*

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## Private\_tutor

**ID:** *INT, NOT NULL, UNIQUE, FOREIGN KEY REFERENCES USERS(ID)*  
**COURSE\_ID:** *INT, NOT NULL, UNIQUE, FOREIGN KEY REFERENCES COURSE(ID)*

**QUALIFICATIONS:** VARCHAR(50), NOT NULL  
**FEES:** INT, NOT NULL, CHECK(FEES >= 1000)

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## Teaching\_assistant

**ID:** INT, NOT NULL, UNIQUE, FOREIGN KEY(ID) REFERENCES USERS(ID)  
**COURSE\_ID:** INT, NOT NULL, UNIQUE, FOREIGN KEY(COURSE\_ID) REFERENCES COURSE(ID)  
**OFFICE\_HOURS:** VARCHAR(50), NOT NULL,

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## University\_Data (belongs\_to, teaches, taught\_by)

**COURSE\_ID:** INT NOT NULL UNIQUE, FOREIGN KEY REFERENCES COURSE(ID)  
**PROFESSOR\_ID:** INT NOT NULL UNIQUE, FOREIGN KEY REFERENCES PROFESSOR(ID)  
**UNIVERSITY\_ID:** INT NOT NULL, FOREIGN KEY REFERENCES UNIVERSITY(ID)

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## Course\_data (enrolls, taught\_by)

**COURSE\_ID :** INT , NOT NULL, UNIQUE, FOREIGN KEY(COURSE\_ID) REFERENCES COURSE(ID)

**STUDENT\_ID:** INT , NOT NULL, UNIQUE, FOREIGN KEY(STUDENT\_ID) REFERENCES STUDENT(ID)

**GRADE :** INT, CHECK(GRADE >=0 AND GRADE <=10),  
**YEAR :** INT CHECK(YEAR>1900),

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## Course\_Pre\_requisites (pre-requires)

**COURSE\_ID:** INT, NOT NULL, FOREIGN KEY REFERENCES COURSE(ID)  
**PRE\_REQUISITE\_COURSE\_ID:** INT, NOT NULL, FOREIGN KEY REFERENCES COURSE(ID)

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## Teaching\_Assistant\_Data (*graded\_by,assists*)

TEACHING\_ASSISTANT\_ID: *INT, NOT NULL, FOREIGN KEY REFERENCES  
TEACHING\_ASSISTANT(ID)*

PROFESSOR\_ID : *INT, NOT NULL, FOREIGN KEY REFERENCES PROFESSOR(ID)*  
STUDENT\_ID: *INT, NOT NULL, FOREIGN KEY REFERENCES STUDENT(ID)*

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## Private\_tutor\_data (*gives\_tution*)

PRIVATE\_TUTOR\_ID: *INT, NOT NULL, FOREIGN KEY REFERENCES  
PRIVATE\_TUTOR(ID)*  
STUDENT\_ID: *INT, NOT NULL, FOREIGN KEY REFERENCES STUDENT(ID)*

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## Administrator

ID: *INT, NOT NULL, UNIQUE, FOREIGN KEY REFERENCES USERS(ID)*

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