

## ASSIGNMENT – 1

Design a database for a university system that will manage student and course information.

• Students:

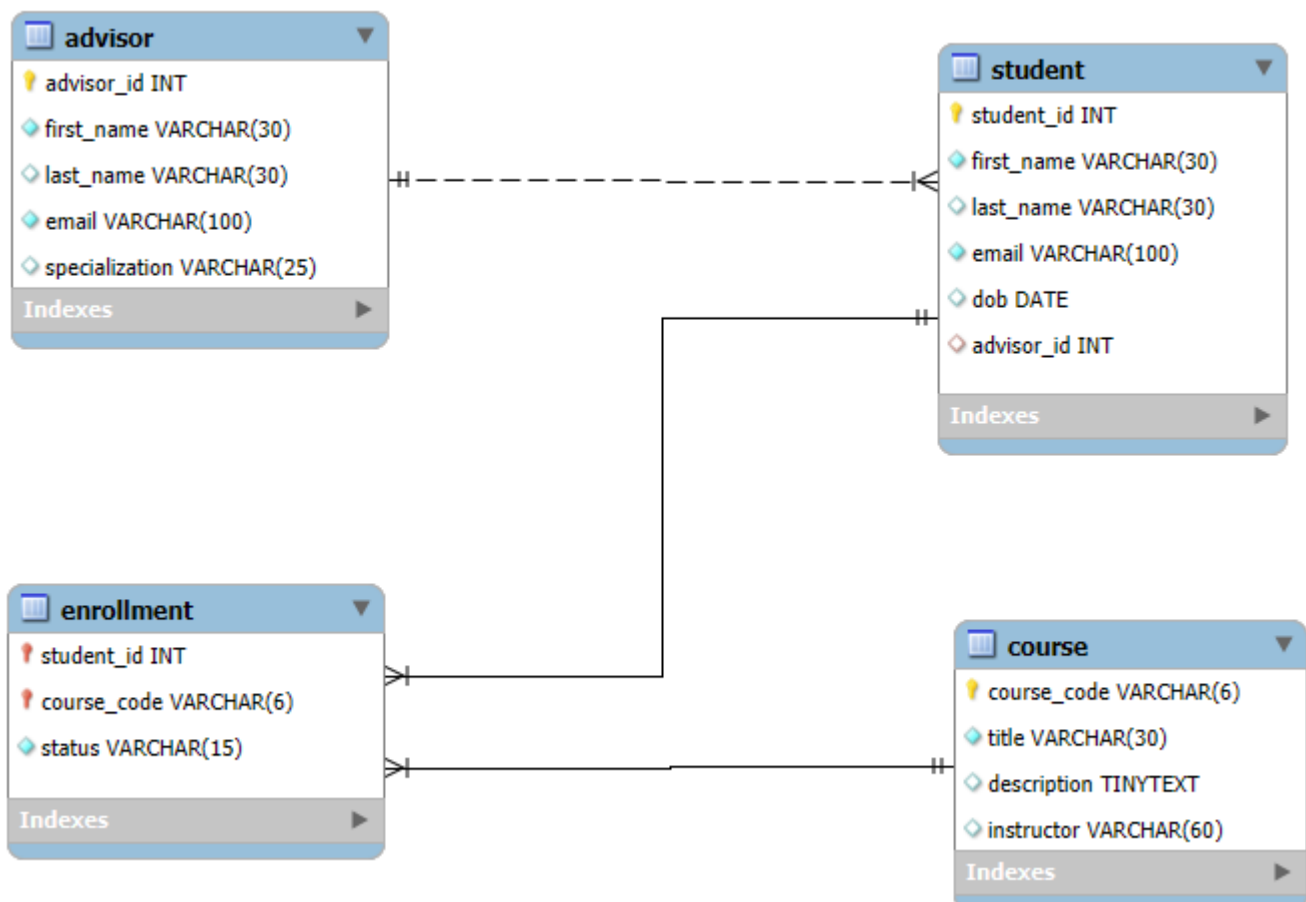
- ☐ Each student has a unique student ID, name, email address, and date of birth.
- ☐ Each student can be associated with at most one advisor.
- ☐ Each student can be associated with multiple courses.

• Advisors:

- ☐ Each advisor has a unique advisor ID, name, email address, and specialization.
- ☐ An advisor may be assigned to advise multiple students.

• Courses:

- ☐ Each course has a unique course code, title, description, and instructor.
- ☐ Each course can have multiple enrolled students.



```
CREATE TABLE advisor(  
    advisor_id INT AUTO_INCREMENT PRIMARY KEY,  
    first_name VARCHAR(30) NOT NULL,  
    last_name VARCHAR(30),  
    email VARCHAR(100) UNIQUE NOT NULL,  
    specialization VARCHAR(25)  
);
```

```
CREATE TABLE student(  
    student_id INT AUTO_INCREMENT PRIMARY KEY,  
    first_name VARCHAR(30) NOT NULL,  
    last_name VARCHAR (30),  
    email VARCHAR(100) UNIQUE NOT NULL,  
    dob DATE,  
    advisor_id INT,  
    FOREIGN KEY(advisor_id) REFERENCES advisor(advisor_id) ON DELETE SET NULL  
);
```

```
CREATE TABLE course(  
    course_code VARCHAR(6) PRIMARY KEY,  
    title VARCHAR(30) NOT NULL,  
    description TINYTEXT,  
    instructor VARCHAR(60)  
);
```

```
CREATE TABLE enrollment(  
    student_id INT NOT NULL,  
    course_code VARCHAR(6) NOT NULL,  
    status VARCHAR(15) NOT NULL,  
    PRIMARY KEY(student_id,course_code),  
    FOREIGN KEY(student_id) REFERENCES student(student_id) ON DELETE CASCADE,  
    FOREIGN KEY(course_code) REFERENCES course(course_code) ON DELETE CASCADE  
);
```