SQL PROJECT

**PROJECT: STUDENT DATABASE MANAGEMENT SYSTEM**

CREATE DATABASE student\_database;

USE student\_database;

CREATE TABLE students (

student\_id INT NOT NULL AUTO\_INCREMENT,

first\_name VARCHAR(255) NOT NULL,

last\_name VARCHAR(255) NOT NULL,

email VARCHAR(255) NOT NULL UNIQUE,

phone\_number VARCHAR(255) NOT NULL,

date\_of\_birth DATE NOT NULL,

gender CHAR(1) NOT NULL,

address VARCHAR(255) NOT NULL,

PRIMARY KEY (student\_id)

);

CREATE TABLE courses (

course\_id INT NOT NULL AUTO\_INCREMENT,

course\_name VARCHAR(255) NOT NULL,

course\_description VARCHAR(255) NOT NULL,

instructor\_name VARCHAR(255) NOT NULL,

start\_date DATE NOT NULL,

end\_date DATE NOT NULL,

PRIMARY KEY (course\_id)

);

CREATE TABLE enrollments (

student\_id INT NOT NULL,

course\_id INT NOT NULL,

PRIMARY KEY (student\_id, course\_id),

FOREIGN KEY (student\_id) REFERENCES students(student\_id),

FOREIGN KEY (course\_id) REFERENCES courses(course\_id)

);

This code creates three tables:

students: This table stores information about students, such as their first name, last name, email address, and phone number.

courses: This table stores information about courses, such as the course name and instructor.

enrollments: This table stores information about student enrollments in courses, such as the student ID, course ID, and grade.

Once you have created these tables, you can start inserting data into them. For example, to insert data into the students table, you would use the following SQL

SELECT students.first\_name, students.last\_name

FROM students

INNER JOIN enrollments ON students.id = enrollments.student\_id

WHERE enrollments.course\_id = 1;

This is just a basic example of how to use SQL to create and manage a student database management system. You can use SQL to perform much more complex tasks, such as generating reports and analyzing data.