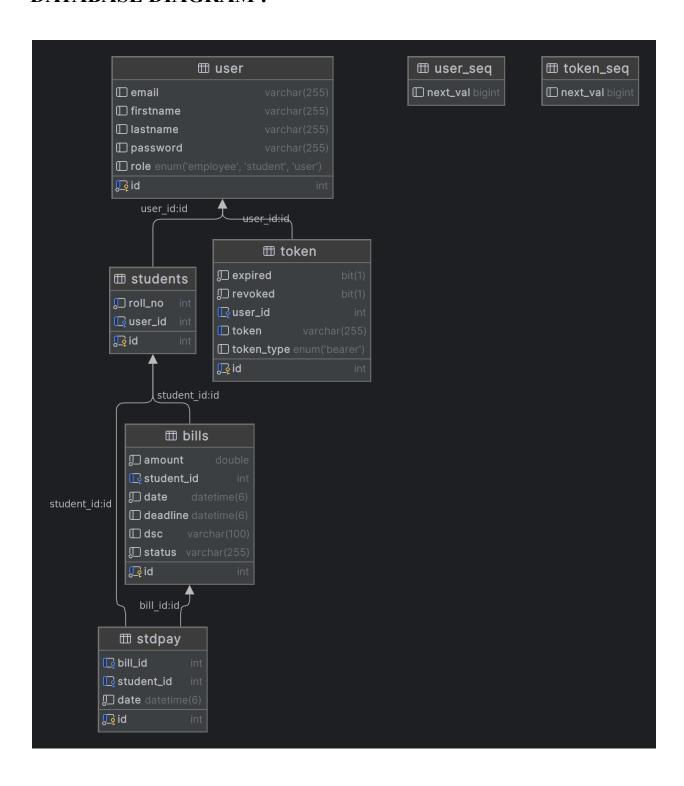
DATABASE DIAGRAM:



CREATE TABLES:

```
-- Checking for dababase
DROP DATABASE IF EXISTS academiq;
CREATE DATABASE IF NOT EXISTS academiq;
USE academiq;
-- Checking for all tables
DROP TABLE IF EXISTS user, token, students, bills, stdpay;
-- Creating table user
CREATE TABLE user (
  id INT AUTO INCREMENT PRIMARY KEY,
  firstname VARCHAR (255),
  lastname VARCHAR (255),
  email VARCHAR(255),
  password VARCHAR (255),
  role VARCHAR (255)
);
-- Creating table token
CREATE TABLE token (
   id INT AUTO INCREMENT PRIMARY KEY,
  token VARCHAR (255) UNIQUE,
  tokenType VARCHAR (255),
  revoked BOOLEAN,
  expired BOOLEAN,
  user id INT,
  FOREIGN KEY (user_id) REFERENCES user(id)
);
-- Creating table students
CREATE TABLE students (
  id INT AUTO INCREMENT PRIMARY KEY,
  roll no INT UNIQUE NOT NULL,
  user id INT UNIQUE,
  FOREIGN KEY (user id) REFERENCES user (id)
```

```
-- Creating table bills
CREATE TABLE bills (
  id INT AUTO INCREMENT PRIMARY KEY,
  student_id INT,
  dsc VARCHAR (100),
  amount DOUBLE NOT NULL,
  date DATE NOT NULL,
  deadline DATE,
  status VARCHAR (255) NOT NULL,
  FOREIGN KEY (student_id) REFERENCES students(id)
);
-- Creating table stdpay (for Student_Payment)
CREATE TABLE stdpay (
  id INT AUTO INCREMENT PRIMARY KEY,
  student_id INT,
  bill id INT UNIQUE,
  date DATE NOT NULL,
  FOREIGN KEY (student_id) REFERENCES students(id),
  FOREIGN KEY (bill_id) REFERENCES bills(id)
);
```

ALTER TABLES:

```
-- Add refence in token and associate with user

ALTER TABLE token

ADD FOREIGN KEY (user_id) REFERENCES user(id);

-- Add refence in student and associate with user

ALTER TABLE students

ADD FOREIGN KEY (user_id) REFERENCES user(id);

-- Add refence in bills and associate with student

ALTER TABLE bills

ADD FOREIGN KEY (student_id) REFERENCES students(id);

-- Add refence in stdpay and associate with students and bills

ALTER TABLE stdpay

ADD FOREIGN KEY (student_id) REFERENCES students(id),

ADD FOREIGN KEY (student_id) REFERENCES students(id),

ADD FOREIGN KEY (bill_id) REFERENCES bills(id);
```

INSERT VALUES INTO TABLES:

```
-- Insert users
INSERT INTO user (firstname, lastname, email, password, role)
VALUES ('Parag', 'Sharma', 'parag@gmail.com', '1234', 'STUDENT');
INSERT INTO user (firstname, lastname, email, password, role)
VALUES ('Jacob', 'Mathew', 'jacob@gmail.com', '1234', 'STUDENT');
-- Insert tokens
INSERT INTO token (token, tokenType, revoked, expired, user id)
VALUES ('token value 1', 'BEARER', false, false, 1);
INSERT INTO token (token, tokenType, revoked, expired, user id)
VALUES ('token value 2', 'BEARER', false, false, 2);
-- Insert students and associate with users
INSERT INTO students (roll no, user id) VALUES (101, 1);
INSERT INTO students (roll_no, user_id) VALUES (102, 2);
-- Insert bills for students
INSERT INTO bills (student id, dsc, amount, date, deadline, status)
VALUES (1, '1st bill', 500.99, '2023-11-01', '2023-12-01', 'Done');
INSERT INTO bills (student id, dsc, amount, date, deadline, status)
VALUES (1, '2nd bill', 750.99, '2023-11-01', '2023-12-01', 'Pending');
INSERT INTO bills (student id, dsc, amount, date, deadline, status)
VALUES (1, '3rd bill', 850.99, '2023-11-01', '2023-12-01', 'Pending');
INSERT INTO bills (student id, dsc, amount, date, deadline, status)
VALUES (1, '4th bill', 950.99, '2023-11-01', '2023-12-01', 'Pending');
INSERT INTO bills (student id, dsc, amount, date, deadline, status)
VALUES (1, '5th bill', 150.99, '2023-11-01', '2023-12-01', 'Pending');
INSERT INTO bills (student id, dsc, amount, date, deadline, status)
VALUES (2, '6th bill', 500.99, '2023-11-01', '2023-12-01', 'Done');
INSERT INTO bills (student id, dsc, amount, date, deadline, status)
VALUES (2, '7th bill', 750.99, '2023-11-01', '2023-12-01', 'Pending');
INSERT INTO bills (student_id, dsc, amount, date, deadline, status)
VALUES (2, '8th bill', 850.99, '2023-11-01', '2023-12-01', 'Pending');
INSERT INTO bills (student id, dsc, amount, date, deadline, status)
VALUES (2, '9th bill', 950.99, '2023-11-01', '2023-12-01', 'Pending');
```

```
INSERT INTO bills (student_id, dsc, amount, date, deadline, status)
VALUES (2, '10th bill', 150.99, '2023-11-01', '2023-12-01', 'Pending');
-- Insert stdpay for bills and students
INSERT INTO stdpay (student_id, bill_id, date)
VALUES (1, 1, '2023-11-15');
INSERT INTO stdpay (student_id, bill_id, date)
VALUES (2, 6, '2023-11-15');
```