Using MySQL from Node.js

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CSE316: Fundamentals of Software Development

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http://www.cs.stonybrook.edu/~cse316

Node.js MySQL

- Node.js can be used in database applications (https://www.w3schools.com/nodejs/nodejs_mysql.asp)
  - Install MySQL Driver

npm install mysql

  - Current issue of Node mysql driver: uses the old password credentials, so in mysql run:

ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password BY 'yourPassword';

FLUSH PRIVILEGES;

Node.js MySQL

- Start by creating a connection to the database and a DB:

```
var mysql = require('mysql');
var con = mysql.createConnection({
 host: "localhost",
 user: "root",
 password: "pass4root"
});
con.connect(function(err) {
 if (err) throw err;
 console.log("Connected!");
 con.query("CREATE DATABASE mydb", function (err, result) {
  if (err) throw err;
  console.log("Database created");
 });
});
```

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Node.js MySQL

- Create table:

```
var mysql = require('mysql');
var con = mysql.createConnection({
  host: "localhost",
  user: "root",
  password: "pass4root",
  database: "mydb"
});
con.connect(function(err) {
  if (err) throw err;
  console.log("Connected!");
  var sql = "CREATE TABLE customers (name VARCHAR(255), address VARCHAR(255))";
  con.query(sql, function (err, result) {
    if (err) throw err;
    console.log("Table created");
  });
});
```

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Node.js MySQL

- Insert data:

```
var mysql = require('mysql');
var con = mysql.createConnection({
  host: "localhost",
  user: "root",
  password: "pass4root",
  database: "mydb"
});
con.connect(function(err) {
  if (err) throw err;
  console.log("Connected!");
  var sql = "INSERT INTO customers (name, address) VALUES ('Company Inc', 'Highway 37')";
  con.query(sql, function (err, result) {
    if (err) throw err;
    console.log("1 record inserted");
  });
});
```

Node.js MySQL

- Query data:

```
var mysql = require('mysql');
var con = mysql.createConnection({
  host: "localhost",
  user: "root",
  password: "pass4root",
  database: "mydb"
});
con.connect(function(err) {
  if (err) throw err;
  con.query("SELECT * FROM customers", function (err, result, fields) {
    if (err) throw err;
    console.log(result);
  });
});
```