Using MySQL With Node.js

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Abstract

The objective of this project was to demonstrate how to connect a MySQL database to   
Node.js in order to manipulate data within the database. I chose this project because web development is an area of interest to me. I used MySQL server, MySQL Workbench, Node.js, Express, nodemon, and Visual Studio Code.

Using MySQL With Node.js

In order to access MySQL database with Node.js, a MySQL driver is needed. I used the mysql and express module from the npm package manager which is included with Node.js. In terminal I executed the command ‘npm install --save mysql express’. Express is a framework for routes. I also used ‘npm init’ to create a package.json manifest file which includes app name, version, and dependencies. I used Nodemon module that runs the server and updates changes in the code automatically ‘npm install -g nodemon’.

Initially I connected to the database to the entry point which is a JavaScript file using the host, user, and password for MySQL server I set up earlier. Then I set up the express server routing with ‘const app = express();’ then ‘app.get('/createdb', (req, res) => {‘ The SQL is then embedded within with ‘ let sql = 'CREATE DATABASE nodesql'; ‘

I created various methods through express routes such as /createdb, /createpoststable, /addpost1, /addpost2, /getposts, /getpost/:id, /updatepost/:id and /deletepost/:id to create the database, tables, posts, and be able manipulate them.

To improve this project, I would implement a frontend user interface which would be easier because I am already working with JavaScript which alone is a frontend language. Node.js and express allows for backend functionalities such as communicating with the database. I also could include user login with certain users having admin permissions while others have only the ability to read posts.

References

Mysqljs. (2018, September 24). Mysqljs/mysql. Retrieved fromhttps://github.com/mysqljs/mysql

W3schools. (n.d.). Retrieved from https://www.w3schools.com/nodejs/nodejs\_mysql.asp