What is Node Js?

Node.js is a cross-platform environment and library for running JavaScript applications that are used to create networking and server-side applications.

Node.js = Runtime Environment + JavaScript Library

Installation :

You can download the latest version of Node.js installable archive file the link,

Link - <https://nodejs.org/en/download/>

Project Creation :

1. Run command in a new project folder - npm init
2. Install Express Js, Cors and Nodemon
   1. npm install express --save
   2. npm install nodemon --save
   3. npm install cors --save
   4. npm i mysql --save
3. To Run node js project - npm start

What is SQL?

SQL is a short form of the **structured query language**, and it is pronounced as S-Q-L or sometimes as See-Quell.

Download XAMPP:

Link - <https://www.apachefriends.org/download.html>

After doing the configuration we can open, [http://localhost/phpmyadmin/](http://localhost:7070/phpmyadmin/)

Online Setup - <https://remotemysql.com/>

SQL Commands

The SQL commands help in creating and managing the database. The most common SQL commands which are highly used are mentioned below:

Online Database

Website URL:<https://www.db4free.net/phpMyAdmin/index.php>

Username: vcentry

Password: test@123

CREATE Command

This command helps in creating the new database, new table, table view, and other objects of the database.

1. To create Database

Syntax: **CREATE DATABASE database\_name;**

1. To create Table

Syntax : **CREATE TABLE table\_name (columnName1 dataType, columnName2 dataType,...,columnNameN dataType);**

To create Unique ID - CREATE TABLE ${TABLE\_NAME} ( **Id int NOT NULL AUTO\_INCREMENT, PRIMARY KEY(Id)**)

To Paginate Records :

[SELECT](http://localhost:7070/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) [COUNT](http://localhost:7070/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/group-by-functions.html#function_count)(\*) AS Total FROM `table\_name`;

SELECT \* FROM `table\_name` LIMIT `per\_page` OFFSET `start\_page\_index`;

DataType:

1. Number - int(3)
2. String - varchar(255), TEXT
3. Boolean - boolean

INSERT command

This command helps in inserting the data or records into the database tables. We can easily insert the records in single as well as multiple rows of the table.

Syntax : **INSERT INTO table\_name (column1, column2,.., columnN) VALUES ( , value2,.., valueN);**

SELECT command

This command helps in accessing the single or multiple rows from one or multiple tables of the database. We can also use this command with the WHERE clause.

Syntax : **SELECT expressions(\* or columnName) FROM tableName;**

UPDATE command

This command helps in updating or changing the stored data in the database.

Syntax : **UPDATE table\_name SET columnName1 = value1,..., columnNameN = valueN WHERE condition**

ALTER Command

**ALTER TABLE table\_name ADD columName dataType;**

DELETE command

This command helps in removing or erasing the saved records from the database tables. It erases single or multiple tuples from the tables of the database.

Syntax: **DELETE FROM table\_name WHERE condition;**

DROP command

This command helps in deleting the entire table, table view, and other objects from the database.

1. To delete Database

Syntax: **DROP DATABASE database\_name;**

1. To delete Table

Syntax: **DROP TABLE table\_name;**

MSSQL Package :   
Link : <https://www.npmjs.com/package/mysql>

Command : npm i mysql --save

To Generate Secret key for JWT -> node -e console.log(require('crypto').randomBytes(48).toString('hex'));

Live Free Database :

https://remotemysql.com/login.php

npm i multer

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