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EXPRESS PROJECT ---

Create your project folder name as –“Your Project name “

Inside your project folder create one “app folder “

Inside the app folder create “app.js” file

Now create “package.json” file using command terminal run the command for that “npm init” and filled whatever is required.

My package.json file contains the following code –

{

"name": "express\_project",

"version": "1.0.0",

"description": "This is Express Project ",

"main": "app/app.js",

"scripts": {

"test": "echo \"Error: no test specified\" && exit 1"

},

"repository": {

"type": "git",

"url": "git+https://github.com/Wishvanath/Express-Project.git"

},

"keywords": [

"Express",

"Website"

],

"author": "Wishvanath",

"license": "ISC",

"bugs": {

"url": "https://github.com/Wishvanath/Express-Project/issues"

},

"homepage": "https://github.com/Wishvanath/Express-Project#readme"

}

Now install the express module the command is “npm install express –save”

So after that you will get all the dependencies of the express module .

How to handle the http request in node and express -

// create a node server

var http = require('http');

var myServer = http.createServer(function(req, res){

res.writeHead(200, {"Content-Type":"text/plain"});

res.write("connection is established ");

res.end();

});

myServer.listen(3000);

console.log("Port is listening 3000");

NOTE:

Here “connection-type is “text/plain” so you cannot pass the html tag through the response

Like –

// create a node server

var http = require('http');

var myServer = http.createServer(function(req, res){

res.writeHead(200, {"Content-Type":"text/plain"});

res.write("<h1>connection is established</h1> ");

res.end();

});

myServer.listen(3000);

console.log("Port is listening 3000");

You will get the same output which you have written in “…”

Exact Output - <h1>connection is established</h1>

So you need to change the content-type html instead of plain.

The syntax is –

// create a node server

var http = require('http');

var myServer = http.createServer(function(req, res){

res.writeHead(200, {"Content-Type":"text/html"});

res.write("<h1>connection is established</h1> ");

res.end();

});

myServer.listen(3000);

console.log("Port is listening 3000");

The Output –

**connection is established**

Create a server in Express js -

// create a server in express js

// load the express module

var express = require('express');

var app = express();

app.get('/',(req,res) =>{

res.send("<h1>connection established</h1>");

});

// listening port

app.listen(3000,() =>{

console.log("You are listening the port no 3000");

})

The Output is –

# connection established

How to use node js feature with express js. Work on json file in express js

So first thing is we will retrieve the data from json format .

So for that make a new folder named as “data” inside that create a new file “data.json”

**App>data>data.json**

{

"friends":[

{

"title" : "Class friend",

"name" : "Wishvanath",

"shortname" : "wish",

"summary" : "You can tell about your self",

"description" : "<p>Viewer wants to know more about you</p>"

},

{

"title" : "Best friend",

"name" : "Wishva",

"shortname" : "wish",

"summary" : "You can tell about your self",

"description" : "<p>Viewer wants to know more about you</p>"

},

{

"title" : "About Me",

"name" : "Wishvanath",

"shortname" : "wish",

"summary" : "You can tell about your self",

"description" : "<p>Viewer wants to know more about you</p>"

}

]

}

To fetch the data from the data.json file

You need to first export the “data.json”file in your express module the syntax is –

// load the express module

var express = require('express');

var app = express();

// to export the data.json file

var dataFile = require('./data/data.json');

Next step –

Write the code in app.get method() which is as –

app.get('/',(req,res) =>{

// to get the data from json file

var info = '';

dataFile.friends.forEach(item => {

info +=`

<li>

<h2>${item.name}</h2>

<p>${item.summary}</p>

</li>

`;

});

res.send(`

<h1>WELCOME</h1>

${info}

`);

});

Now run your app.js file to use the command “node app/app.js”

You will get the Output like this –

# WELCOME

##  Wishvanath

You can tell about your self

##  Wishva

You can tell about your self

##  Wishvanath

You can tell about your self

To create different route -

Create route route –

// create root route

app.get('/', (req,res) =>{

res.send("<h1>Welcome Website Titles</h1>");

});

Create friends route –

// create friends route

app.get('/friends',(req,res) =>{

// to get the data from json file

var info = '';

dataFile.friends.forEach(item => {

info +=`

<li>

<h2>${item.name}</h2>

<p>${item.summary}</p>

<h4>${item.title}</h4>

</li>

`;

});

res.send(`

<h1>WELCOME</h1>

${info}

`);

});

Show particular friend name specifying by id –

// to take the user value through the route

app.get('/friends/:id', (req, res) =>{

// store the particular data in a variable

var friend = dataFile.friends[req.params.id];

res.send(`

<h1>${friend.title}</h1>

<h1>${friend.name}</h1>

<p>${friend.summary}</p>

`);

});

Now run on the browser like

<http://localhost:3000/friends/0>

The Output –

# Class friend

# Monika

You can tell about your self

Drawback –

**To create the all route in one page –** it has draw back like when you are working on large project and you need to create more route then what will happen your code will look complex even some times you will search where have declare the specific router so it has a good solution

**You can create a separate folder for route and make their separate file.**

Make separate route in separate folder -

Make a routes folder inside the app folder

Your project folder >app>routes

Inside the routes folder

**Routes>index.js**

**Routes>friends.js**

Index.js file code –

// load the express module

var express = require('express');

// load the router module to handle the route of the page

var router = express.Router();

// to show the welcome title for the user (front end )

// create root route

// now instead of app.get you can use the router.get() mthod

router.get('/', (req,res) =>{

res.send("<h1>Welcome Website Titles</h1>");

});

// export this module to use in app.js file

module.exports = router;

friends.js file code :

// load the express module

var express = require('express');

// load the router module from the express

var router = express.Router();

// to load the data.json file

var dataFile = require('../data/data.json');

// to take the user value through the route

router.get('/friends/:id', (req, res) =>{

// store the particular data in a variable

var friend = dataFile.friends[req.params.id];

res.send(`

<h1>${friend.title}</h1>

<h1>${friend.name}</h1>

<p>${friend.summary}</p>

`);

});

// create friends route

router.get('/friends',(req,res) =>{

// to get the data from json file

var info = '';

dataFile.friends.forEach(item => {

info +=`

<li>

<h2>${item.name}</h2>

<p>${item.summary}</p>

<h4>${item.title}</h4>

</li>

`;

});

res.send(`

<h1>WELCOME MY FRIENDS </h1>

<hr>

${info}

`);

});

// export this module to use in another module

module.exports = router;

app.js file code :

// creat a server in express js

// load the express module

var express = require('express');

var app = express();

// to load index.js module

app.use(require("./routes/index"));

// to load friends.js module

app.use(require("./routes/friends"));

// to assign the port no dynamically using the environment variable

const port\_no = process.env.PORT || 3000;

// listening port

app.listen(port\_no,() =>{

console.log(`You are listening the port no ${port\_no}`);

})

Now run your project and see the output in your browser –

First command <http://localhost:3000/>

Output –

# Welcome Website Titles

Second command <http://localhost:3000/friends>

Output –

# WELCOME MY FRIENDS

##  Monika

You can tell about your self

#### Class friend

##  Sankar

You can tell about your self

#### Best friend

##  Wishvanath

You can tell about your self

#### About Me

Third command <http://localhost:3000/friends/0>

Output –

# Class friend

# Monika

You can tell about your self

To use middle ware -

So in this section we will use external css and image file in our project so for that we need to create a folder inside the app folder name as “public”

App>public folder

Public>create css folder

Public>create images folder

Public>create js folder

Now in your app.js file load these module or use

The syntax is –

// to use the external file with the help of static middle ware

app.use(express.static('app/public'));

// now this public folder is accessable global

Now insert any image in any module

In index.js module –

// load the express module

var express = require('express');

// load the router module to handle the route of the page

var router = express.Router();

// to show the welcome title for the user (front end )

// create root route

// now instead of app.get you can use the router.get() mthod

router.get('/', (req,res) =>{

res.send(`

<h1>Welcome Friends</h1>

<img src = "/images/app\_back\_image.jpg" alt = "background Image" style= "height:100%;

margin-top:20px;

">

`);

});

// export this module to use in app.js file

module.exports = router;

To use the external style sheet –

// load the express module

var express = require('express');

// load the router module to handle the route of the page

var router = express.Router();

// to show the welcome title for the user (front end )

// create root route

// now instead of app.get you can use the router.get() mthod

router.get('/', (req,res) =>{

// link the external css file from your css folder

res.send(`

<link rel = "stylesheet" type="text/css" href ="/css/style.css">

<div class ="back\_image">

<h1>Welcome Friends</h1>

</div>

">

`);

});

// export this module to use in app.js file

module.exports = router;

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