

## Lesson 05 Demo 08

### Deploying a Node.js App

**Objective:** To deploy a Node.js app

**Tools required:** Node Package Manager, Visual Studio Code, Chrome Browser, and GitHub

**Prerequisites:** Basic Linux Commands, NPM commands, git commands, and Heroku account

Steps to be followed:

1. Create a Node.js app on a local machine
2. Push the code into the GitHub remote repository
3. Deploy the app to Heroku

#### Step 1: Create a Node.js app on a local machine

- 1.1 Open the terminal and inside the project directory execute the following command to initialize a Node.js project and generate the **package.json** file:

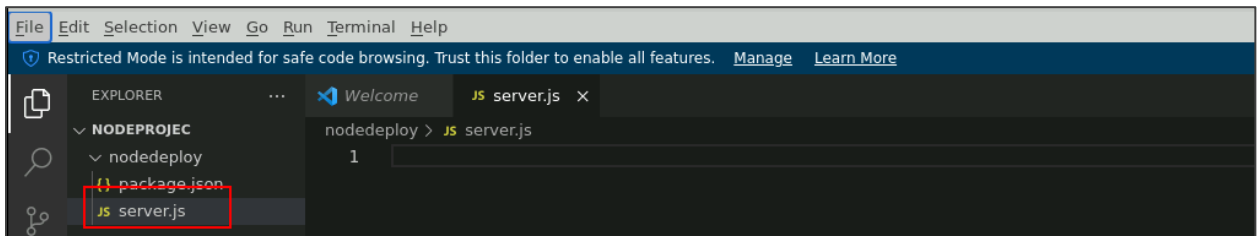
**npm init -y**

```
1: labuser@ubuntu2204: ~/Desktop/nodeProjec/nodedeploy ▼
labuser@ubuntu2204:~/Desktop/nodeProjec/nodedeploy$ npm init -y
Wrote to /home/labuser/Desktop/nodeProjec/nodedeploy/package.json:

{
  "name": "nodedeploy",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC"
}

labuser@ubuntu2204:~/Desktop/nodeProjec/nodedeploy$
```

1.2 Open the project directory with VS Code and create a new file named **server.js**

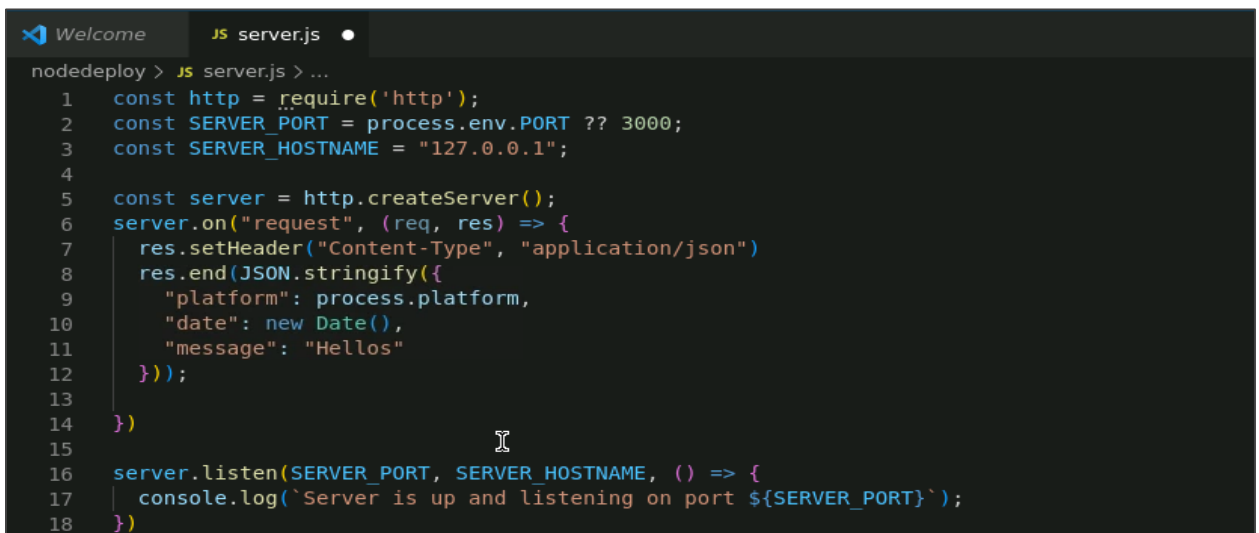


1.3 Write the basic server code in the **server.js** file:

```
const http = require('http');
const SERVER_PORT = process.env.PORT ?? 3000;
const SERVER_HOSTNAME = "127.0.0.1";

const server = http.createServer();
server.on("request", (req, res) => {
  res.setHeader("Content-Type", "application/json")
  res.end(JSON.stringify({
    "platform": process.platform,
    "date": new Date(),
    "message": "Hellos"
  }));
})

server.listen(SERVER_PORT, SERVER_HOSTNAME, () => {
  console.log(`Server is up and listening on port ${SERVER_PORT}`);
})
```



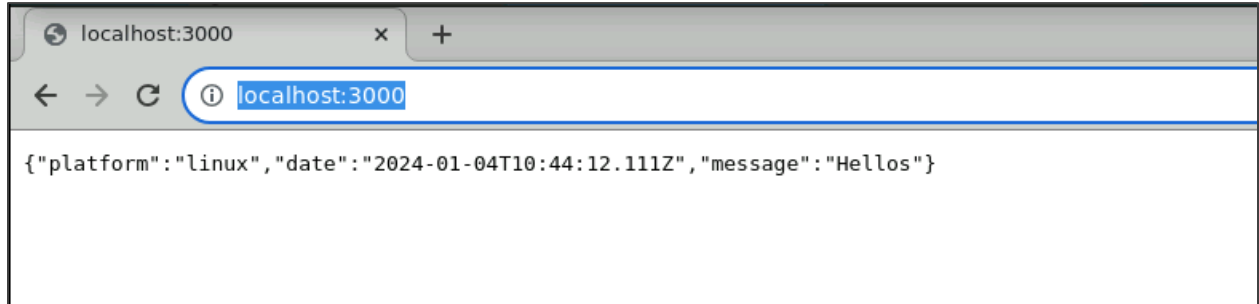
- 1.4 Save the file and execute the **node server.js** command on the terminal to run the server on a local machine for final testing before deployment

```
nodedeploy > js server.js > ...
9      "platform": process.platform,
10     "date": new Date(),
11     "message": "Hellos"
12   });
13
14 })
15
16 server.listen(SERVER_PORT, SERVER_HOSTNAME, () => {
17   console.log(`Server is up and listening on port ${SERVER_PORT}`);
18 })
19
```

PROBLEMS OUTPUT DEBUG CONSOLE **TERMINAL** PORTS SQL CONSOLE

Labuser@ubuntu2204:~/Desktop/nodeProjec/nodedeploys **node server.js**  
Server is up and listening on port 3000

- 1.5 Open the Chrome browser and navigate to **http://localhost:3000/** to view the output



## Step 2: Push the code into the GitHub remote repository

- 2.1 Go to <https://github.com/> on the system browser and create a new remote repository to push the source code of the Node.js app

### Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository](#).

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Owner \*


Repository name \*


/ nodeserver ✓

Great repository names are short and [nodeserver is available.](#) Inspiration? How about **vigilant-funicular**?

Description (optional)

---

☒  **Public**  
Anyone on the internet can see this repository. You choose who can commit.

☐  **Private**  
You choose who can see and commit to this repository.

---

**Initialize this repository with:**  
Skip this step if you're importing an existing repository.

☐ **Add a README file**  
This is where you can write a long description for your project. [Learn more](#).


**Add .gitignore**  
Choose which files not to track from a list of templates. [Learn more](#).

.gitignore template: None ▼

**Choose a license**  
A license tells others what they can and can't do with your code. [Learn more](#).

License: None ▼

---

 You are creating a public repository in your personal account.

---

Create repository

2.2 In the command prompt, run the below commands in this sequence:


```
git init
git remote add origin <remote-url>
git add .
git commit -m "Initial Commit"
git push origin master
```

```
[_ nodedeploy % git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /Users/ /Desktop/nodeDemoProject/nodedeploy/.git/
[ nodedeploy % git remote add origin https://github.com/ /nodeserver.]
git
[ nodedeploy % git add .
[ nodedeploy % git commit -m "Initial Commit"
[master (root-commit) bc88cc7] Initial Commit
 2 files changed, 31 insertions(+)
 create mode 100644 package.json
 create mode 100644 server.js
[ nodedeploy % git push origin master
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 10 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 741 bytes | 741.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/ /nodeserver.git
 * [new branch]      master -> master
[ nodedeploy % ]
```

## Step 3: Deploy the app to Heroku


### 3.1 Create a free account for Heroku

## Get started on Heroku today




### Heroku account

Create apps, connect databases and add-on services, and collaborate on your apps.



### Your app platform

A platform for apps, with app management & instant scaling, for development and production.



### Deploy now

Go from code to running app in minutes. Deploy, scale, and deliver your app to the world.

First name \*

Last name \*

Email address \*

Company name

Role \*

Role


Country/Region \*

Country/Region

Primary development language \*

Select a language

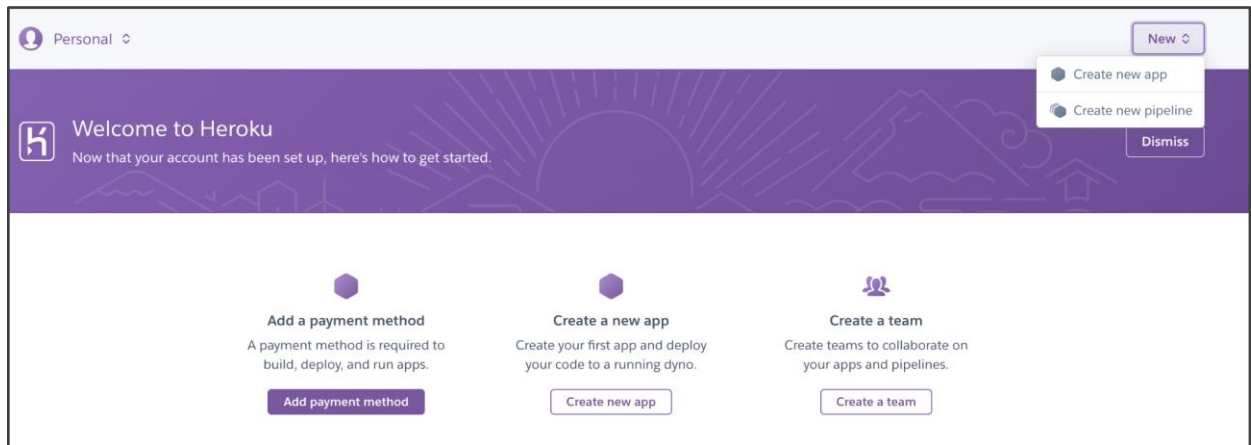
☐ I'm not a robot

  
reCAPTCHA  
Privacy - Terms

CREATE AN ACCOUNT

Signing up signifies that you have read and agree to the [Terms of Service](#) and our [Privacy Policy](#).  
[Cookie Preferences](#).

3.2 Login using the credential, click **New** on the top right corner, and select **Create new app**



3.3 Provide a name for the Node.js app and click on **Create**, then link the GitHub account to deploy the application

By following these steps, you have successfully deployed a Node.js app.