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

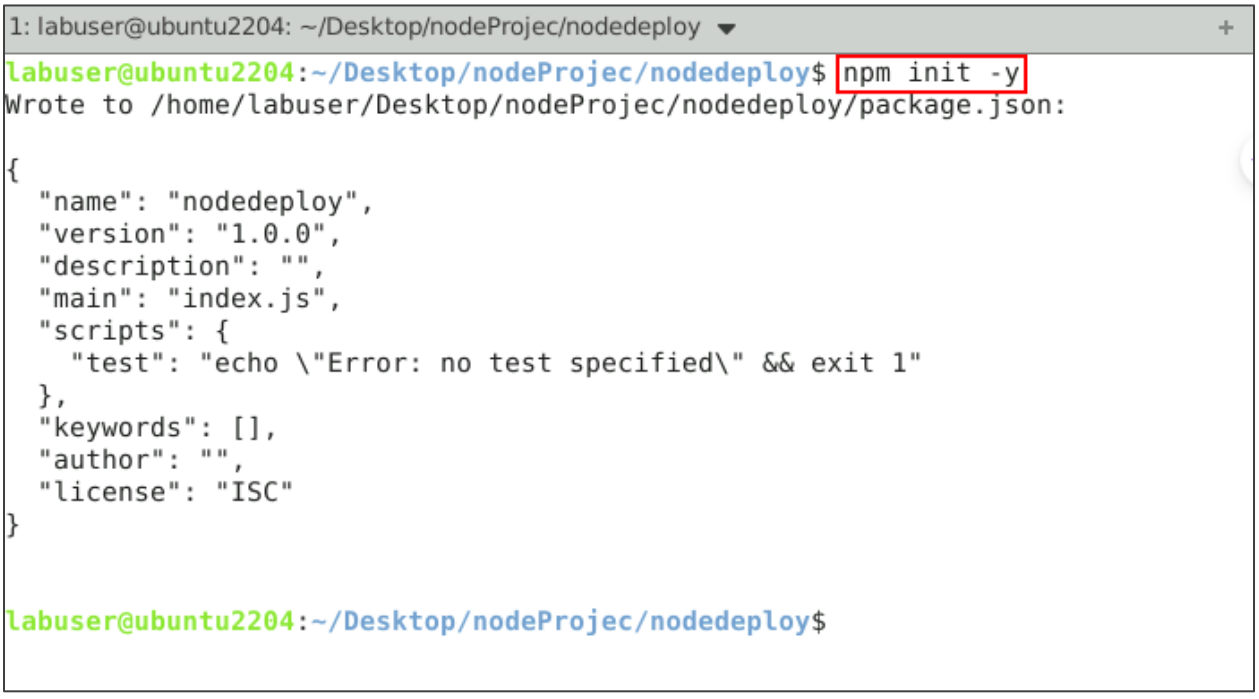
Prerequisites: Basic Linux Commands, NPM commands, git commands, and Heroku account

Steps to be followed:

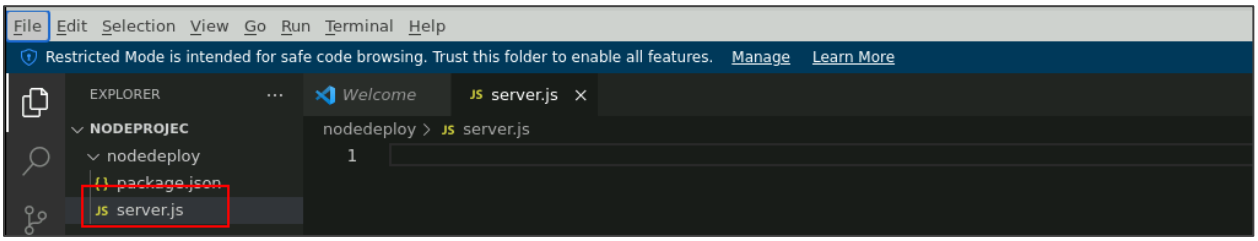
1. Create a Node.js app on a local machine
2. Push the code into the GitHub remote repository
3. Deploy the app to Heroku

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

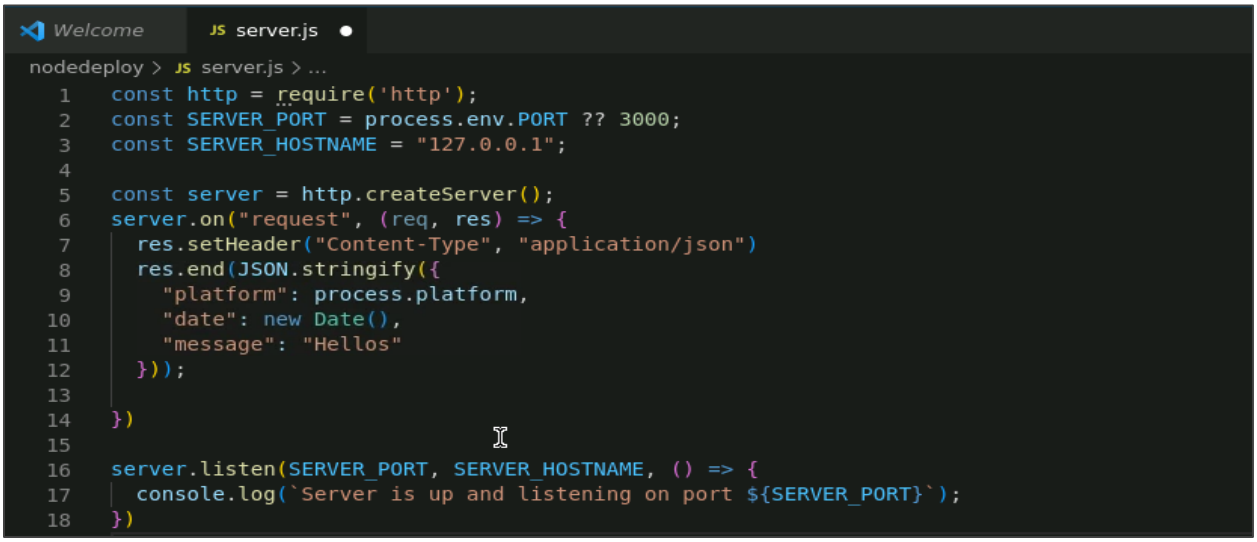


1.2 Open the project directory with VS Code and create a new file named **server.js**

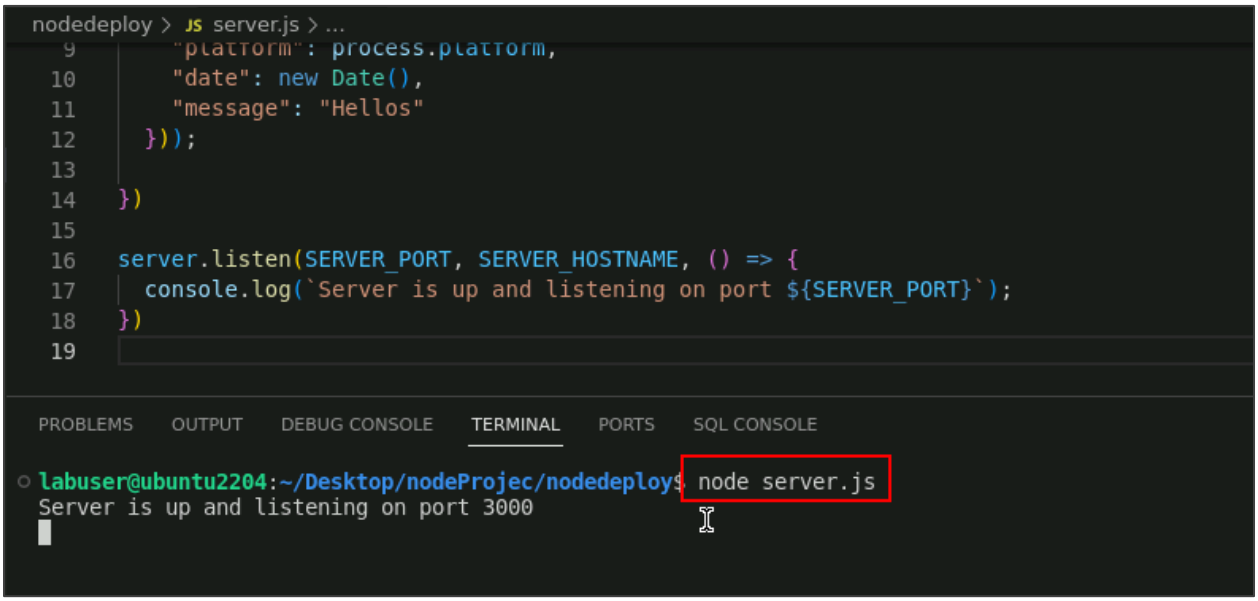


1.3 Write the basic server code in the **server.js** file:

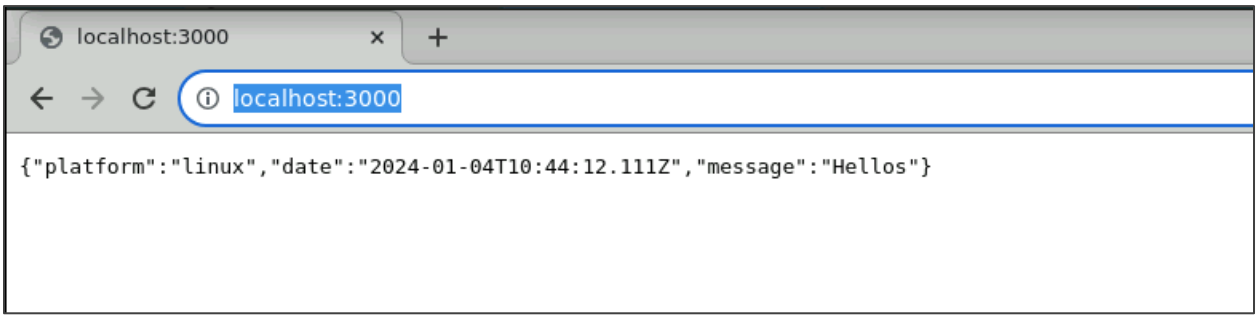
```
const http = require('http');
const SERVER_PORT = process.env.PORT ?? 3000;
const SERVER_HOSTNAME = "127.0.0.1";

const server = http.createServer();
server.on("request", (req, res) => {
 res.set header("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

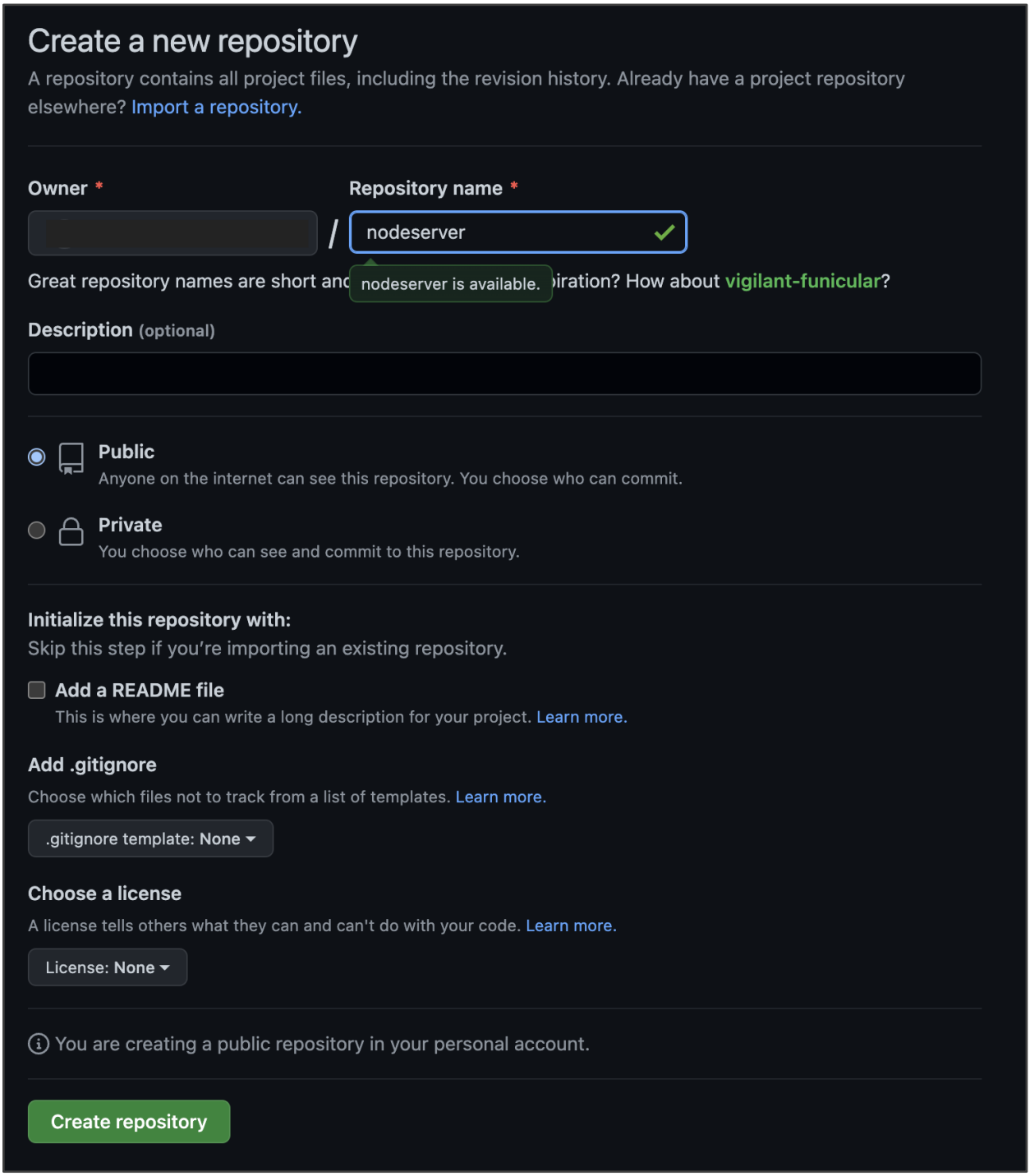


1.5 Open the Chrome browser and navigate to **http://localhost:3000/** to view the output



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



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

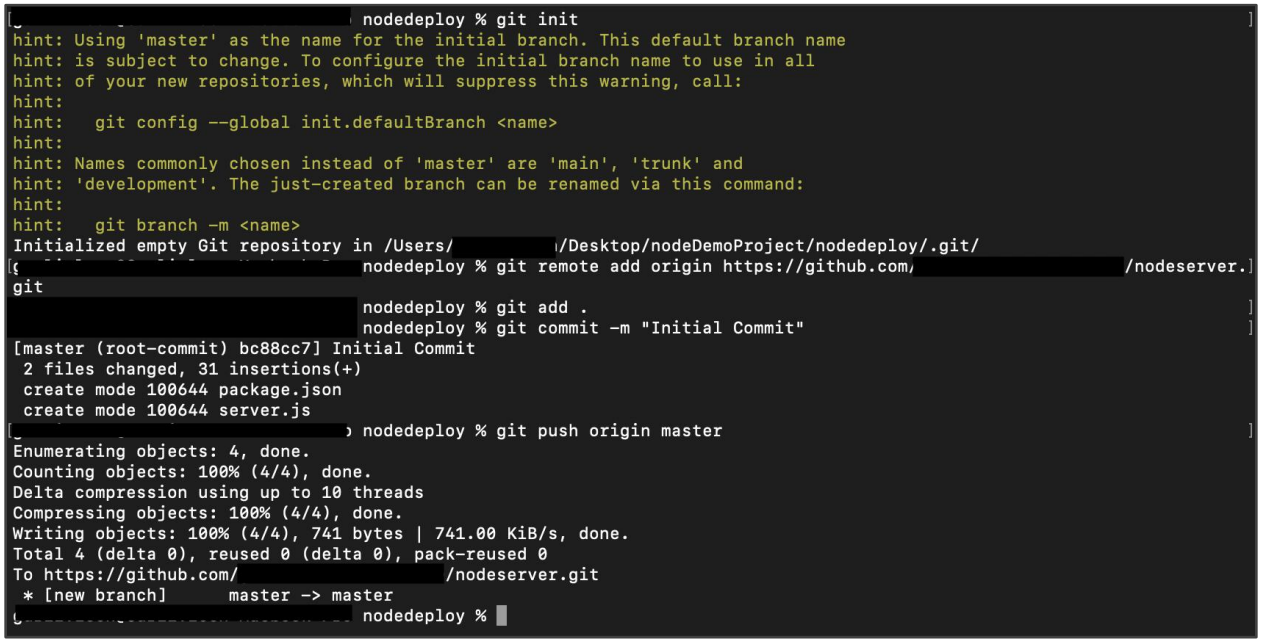
git init

git remote add origin <remote-url>

git add .

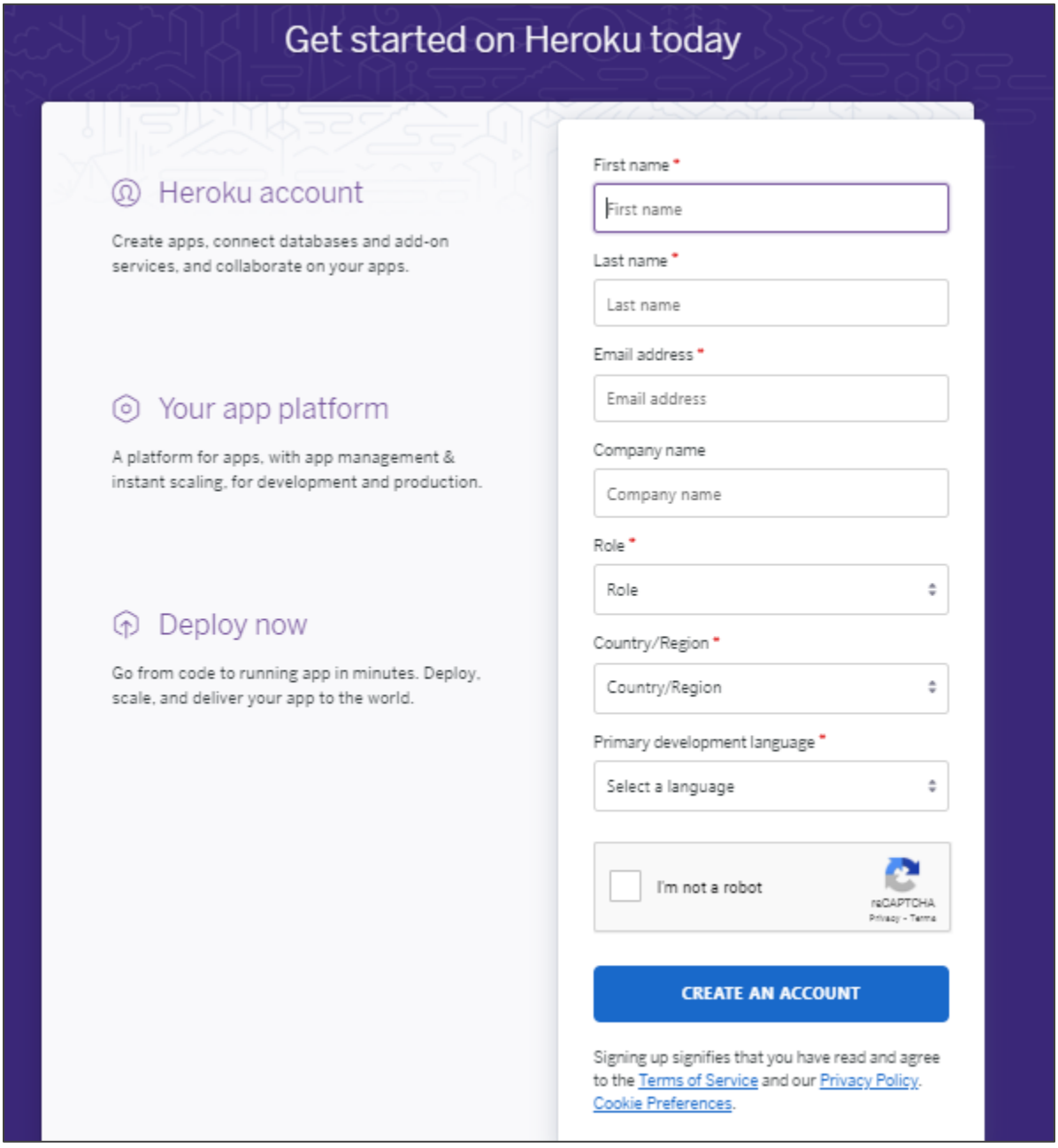
git commit -m "Initial Commit"

git push origin master

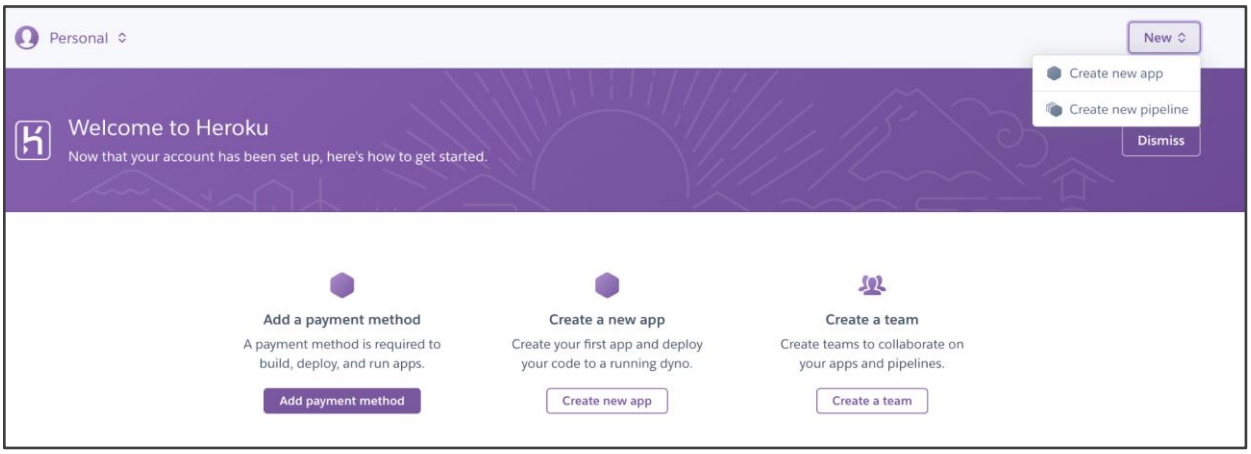


Step 3: Deploy the app to Heroku

3.1 Create a free account for Heroku



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.