Creating a Simple Node.js Application

Now that Node.js and npm are installed, you can create your first Node.js application. This guide walks you through building a basic "Hello, World" server.

Step 1: Create a New Project Folder

Open your terminal and create a new folder for your project:

```
mkdir my-node-app
cd my-node-app
```

Step 2: Initialize the Project

Run the following command to create a `package.json` file, which keeps track of your project settings and dependencies:

```
npm init -y
```

This generates a basic `package.json` file with default values.

Step 3: Create the Application File

Create a new file named `app.js` (or any name you prefer):

```
touch app.js
```

Open `app.js` in your code editor and add the following code:

```javascript
const http = require('http');

const server = http.createServer((req, res) => {
  res.statusCode = 200;
  res.setHeader('Content-Type', 'text/plain');
  res.end('Hello, World!\n');
});

const port = 3000;
server.listen(port, () => {
  console.log(`Server running at http://localhost:${port}/`);
});
```

This creates a basic HTTP server that responds with "Hello, World!" to every request.

Step 4: Run the Application

In your terminal, start the server:

```
node app.js
```

If everything is set up correctly, you should see this message in the terminal:

```
Server running at http://localhost:3000/
```

Open your web browser and visit http://localhost:3000. You should see "Hello, World!" displayed.

Summary

- You created a new folder and initialized a Node.js project.

- You wrote a simple server using Node's built-in `http` module.

- You started the server and accessed it in your browser.