

# Node.js

In this lesson, you will be provided with the basic application image for Node.js.

## WE'LL COVER THE FOLLOWING ^

- Result
- Files

## Result #

The resulting image is published as *learnbook/node-server*. You can run a container from it with the following command:

```
docker run --rm -it -p 8087:80 learnbook/node-server
```



Then point your browser to <http://localhost:8087>

## Files #

You can find these files in the [code/common-development-profiles/demos/nodejs](#) folder.

A static HTML file to be served:

[www/index.htm](#)

```
<h1>Hello !</h1>
<p>This page is served by Node.JS</p>
<p>Try our <a href="/v1/square/4">multiply API</a>.</p>
```



Define and run an HTTP server, a static files server and a REST API:

## index.js

---

```
const HTTP_PORT = 80;

const cors = require('cors');
const express = require('express');
const path = require('path');

var sourcesDirectory = path.resolve(__dirname, 'www');
var app = express();
app.use(cors());

// API
app.get('/v1/square/:value', function (req, res) {
  const value = req.params.value;
  const square = Math.pow(value, 2);
  res.send({
    value,
    square
  });
});

// Static files
app.use(express.static(sourcesDirectory, {
  index: 'index.htm',
  extensions: ['htm']
}));

var server = require('http').createServer(app);
server.listen(HTTP_PORT);

console.log(`Listening on http://localhost:${HTTP_PORT}`);
```

List dependencies that will need to be restored during the build:

## package.json

---

```
{
  "name": "node-server",
  "version": "1.0.0",
  "main": "index.js",
  "scripts": {
    "start": "node index.js"
  },
  "dependencies": {
    "async": "^2.4.1",
    "cors": "^2.8.3",
    "express": "^4.15.2"
  }
}
```

---

Docker image definition:

## Dockerfile

---

```
FROM node:10-alpine

# Create app directory
RUN mkdir -p /usr/src/app
WORKDIR /usr/src/app

# Install app dependencies
COPY package.json /usr/src/app/
RUN npm install

WORKDIR /usr/src/app

# Bundle app source
COPY . /usr/src/app/

EXPOSE 80

CMD ["npm", "start"]
```



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Let's look at another image in the next lesson.