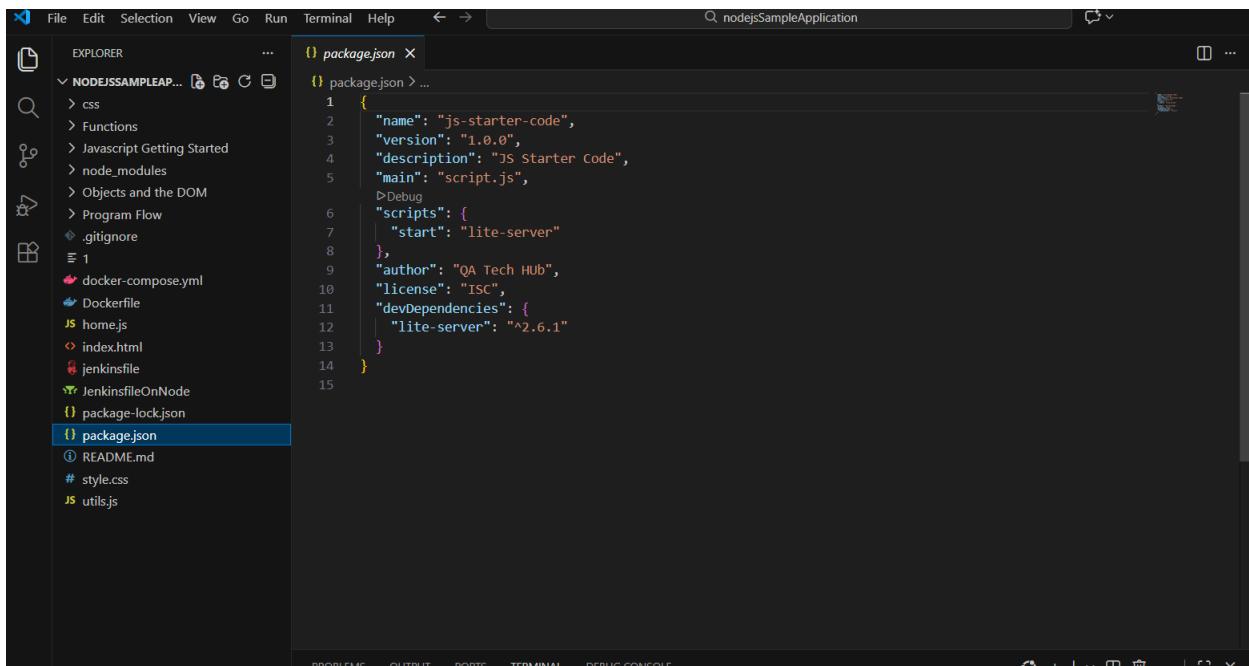


LAB | Build and Deploy a Node.js App Using Docker

TASK 1 – Containerizing a Node.js Application



The screenshot shows the Visual Studio Code interface with the following details:

- File Bar:** File, Edit, Selection, View, Go, Run, Terminal, Help.
- Search Bar:** nodejsSampleApplication
- Explorer:** Shows a tree view of the project structure:
 - NODEJSAMPLEAPP
 - css
 - Functions
 - Javascript Getting Started
 - node_modules
 - Objects and the DOM
 - Program Flow
 - .gitignore
 - 1
 - docker-compose.yml
 - Dockerfile
 - home.js
 - index.html
 - jenkinsfile
 - JenkinsfileOnNode
 - package-lock.json
 - package.json
 - README.md
 - style.css
 - utils.js
- Editor:** The package.json file is open in the editor, showing its contents:

```
1 {  
2   "name": "js-starter-code",  
3   "version": "1.0.0",  
4   "description": "JS Starter Code",  
5   "main": "script.js",  
6   "scripts": {  
7     "start": "lite-server"  
8   },  
9   "author": "QA Tech HUB",  
10  "license": "ISC",  
11  "devDependencies": {  
12    "lite-server": "^2.6.1"  
13  }  
14}  
15
```
- Bottom Bar:** PROBLEMS, OUTPUT, PORTS, TERMINAL, DEBUG CONSOLE.

```
vijayagagla@DESKTOP-FP4OP26:~/nodejsSampleApplication$ npm install --save-dev lite-server
npm WARN old lockfile
npm WARN old lockfile The package-lock.json file was created with an old version of npm,
npm WARN old lockfile so supplemental metadata must be fetched from the registry.
npm WARN old lockfile
npm WARN old lockfile This is a one-time fix-up, please be patient...
npm WARN old lockfile

added 158 packages, and audited 159 packages in 9s

11 packages are looking for funding
  run `npm fund` for details

7 vulnerabilities (2 low, 5 high)

To address issues that do not require attention, run:
  npm audit fix

Some issues need review, and may require choosing
a different dependency.

Run `npm audit` for details.
```

```
vijayagagla@DESKTOP-FP40P26:~/nodejsSampleApplication$ npm start

> js-starter-code@1.0.0 start
> lite-server

Did not detect a `bs-config.json` or `bs-config.js` override file. Using lite-server defaults...
** browser-sync config **

{
  injectChanges: false,
  files: [ './**/*.{html,htm,css,js}' ],
  watchOptions: { ignored: 'node_modules' },
  server: {
    baseDir: './',
    middleware: [ [Function (anonymous)], [Function (anonymous)] ]
  }
}

[BrowserSync] Access URLs:
-----
  Local: http://localhost:3000
  External: http://172.22.209.161:3000
-----
  UI: http://localhost:3001
  UI External: http://localhost:3001
-----
}

[BrowserSync] Access URLs:
-----
  Local: http://localhost:3000
  Local: http://localhost:3000
  External: http://172.22.209.161:3000
-----
  UI: http://localhost:3001
  UI External: http://localhost:3001
-----
```

localhost:3000

Leiter/in - ITIT-Proje... GitHub Flow Git A successful Git bra... PMP Practice Exam... GitHub - danielboh... Catalina(Tomcat) Cu... Apache Tomcat Har... redirect - Tomcat is...

What can we help you find? SEARCH

CLOTHING FOOTWEAR EQUIPMENT BAGS & TRAVEL TRAIL REVIEWS

Saurabh Dhingra Log Out

TASK 2 – Writing the Dockerfile

File Edit Selection View Go Run Terminal Help ← → 🔍 nodejsSampleApplication

EXPLORER

✓ NODEJSSAMPLEAPPLICATION

- > css
- > Functions
- > Javascript Getting Started
- > Objects and the DOM
- > Program Flow
- ↳ .gitignore
- Ξ 1
- docker-compose.yml
- ↳ Dockerfile
- JS home.js
- ↳ index.html
- jenkinsfile
- JenkinsfileOnNode
- { package-lock.json
- { package.json
- ① README.md
- # style.css
- JS utils.js

Dockerfile

```

1 # Base Image
2 FROM node:latest
3
4 # Metadata
5 LABEL maintainer="Ironhack DevOps"
6
7 # Set Working Directory
8 WORKDIR /var/www
9
10 # Copy application files to the container
11 COPY .
12
13 # Install dependencies
14 RUN npm install
15
16 # Expose application port
17 EXPOSE 3000
18
19 # Define persistent volume for application files
20 VOLUME [ "/var/www" ]
21
22 # Start the application
23 ENTRYPOINT [ "npm", "start" ]
24
25

```

```
vijayagagla@DESKTOP-FP4OP26:~/nodejsSampleApplication$ docker build -t sample-node-app .
failed to fetch metadata: fork/exec /usr/local/lib/docker/cli-plugins/docker-buildx: no such file or directory

DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
Install the buildx component to build images with BuildKit:
https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 1.423MB
Step 1/8 : FROM node:latest
latest: Pulling from library/node
6bc9f599b3ef: Pulling fs layer
89edcaae7ec4: Pulling fs layer
bbceb0035429: Pulling fs layer
6dc8224e38b6: Pulling fs layer
dddde450c5b0: Pulling fs layer
de9b91b246f8: Pulling fs layer
0c59397af5a7: Pulling fs layer
697fcc91b93d: Pulling fs layer
6dc8224e38b6: Waiting
dddde450c5b0: Waiting
```

```
vijayagagla@DESKTOP-FP4OP26:~/nodejsSampleApplication$ docker image ls
REPOSITORY          TAG      IMAGE ID      CREATED     SIZE
sample-node-app    latest   725336e6a2fc  8 seconds ago  1.19GB
fastapi-app        latest   c3d91ed3d204  3 hours ago   171MB
docker-challenge   v1.1    5ab2631058a2  3 hours ago   124MB
vijayagagla123/python-app  1.0    a9b2dbf242a7  3 hours ago   136MB
node-app           multi   07458c73ae5a  3 hours ago   194MB
<none>              <none>  44fdeafc5cf3  4 hours ago   1.09GB
my-web-app         v1      21e2bc07af57  4 hours ago   140MB
my-first-image     v1      4ff6a15ba88f  4 hours ago   124MB
myrepo/my-image    v1.0    097f9df45115  5 hours ago   8.44MB
node               latest   7987dcb1dfa1  8 hours ago   1.13GB
python             3.11-slim 4b9bdfe9d486  10 hours ago  124MB
postgres           15-alpine bb506a9728d2  6 days ago   274MB
postgres           16-alpine d7ead3a9d3fe  6 days ago   276MB
alpine             latest   a40c03cbb81c  6 days ago   8.44MB
ubuntu             latest   493218ed0f40  3 weeks ago   78.1MB
hello-world        latest   1b44b5a3e06a  5 months ago  10.1kB
wagoodman/dive    latest   bebd1bf49b51  10 months ago 59.2MB
vijayagagla@DESKTOP-FP4OP26:~/nodejsSampleApplication$ docker run -d -p 9090:3000 sample-node-app
74df77db2b05a6068ed6b6d265c685e4647e8a26f6239e5579730660cab4d02b
```



What can we help you find? SEARCH
[CLOTHING](#) [FOOTWEAR](#) [EQUIPMENT](#) [BAGS & TRAVEL](#) [TRAIL REVIEWS](#)

Saurabh Dhingra [Log Out](#)



COUPLES RETREAT WEEKDAY
SAVE AN EXTRA 20%

