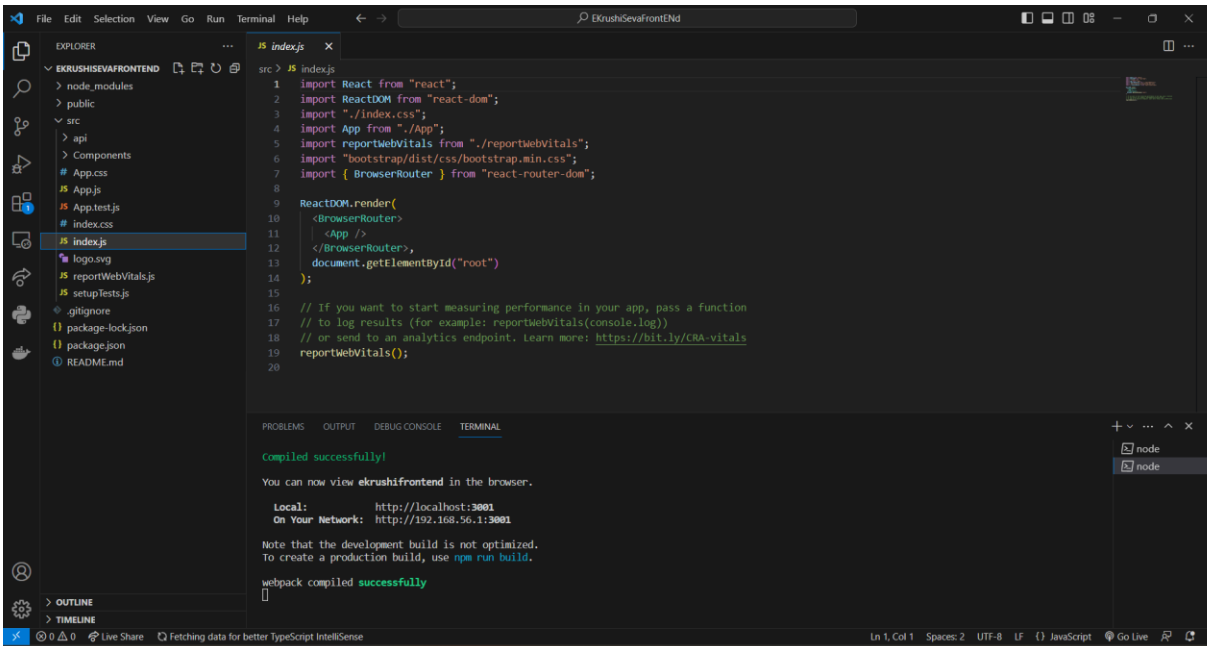
Name : Madhavi Suratkar

Topic : Docker Project Deployment

Date : 09-05-2023

React Application

1. Created App

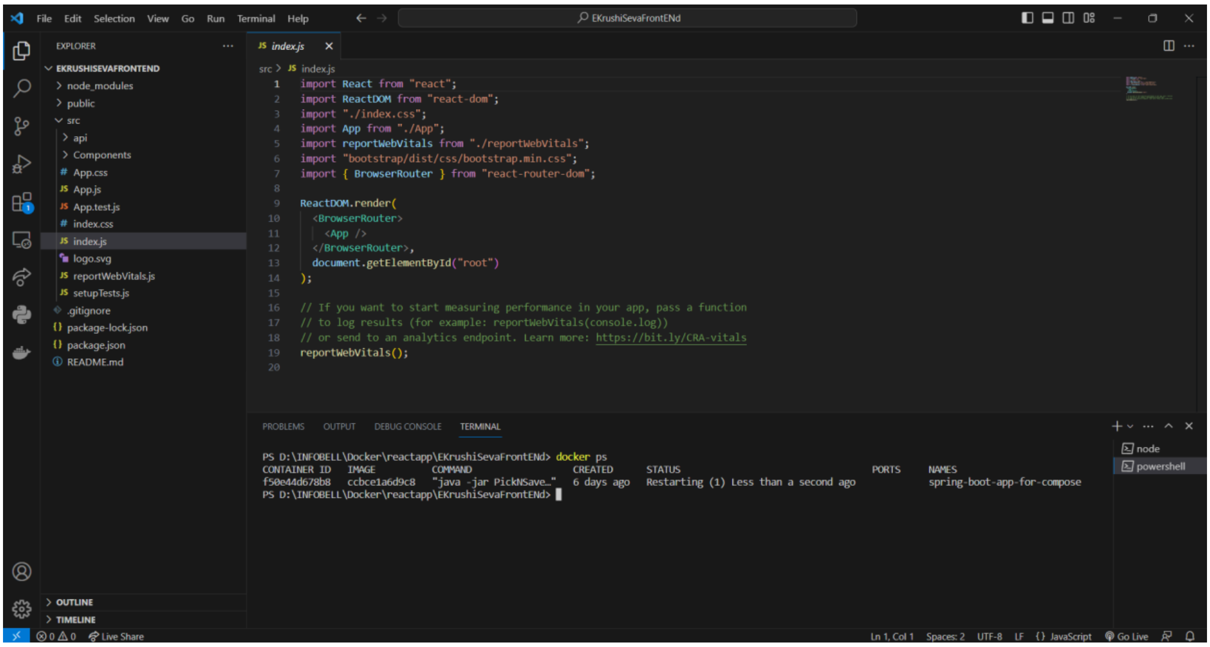


src > index.js

```
import React from "react";
import ReactDOM from "react-dom";
import "./index.css";
import App from "./App";
import reportWebVitals from "./reportWebVitals";
import "bootstrap/dist/css/bootstrap.min.css";
import { BrowserRouter } from "react-router-dom";

ReactDOM.render(
  <BrowserRouter>
    <App />
  </BrowserRouter>,
  document.getElementById("root")
);

// If you want to start measuring performance in your app, pass a function
// to log results (for example: reportWebVitals(console.log))
// or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals
reportWebVitals();
```

```
Compiled successfully!

You can now view ekrushifrontend in the browser.

  Local:            http://localhost:3001
  On Your Network:  http://192.168.56.1:3001

Note that the development build is not optimized.
To create a production build, use npm run build.

webpack compiled successfully
```

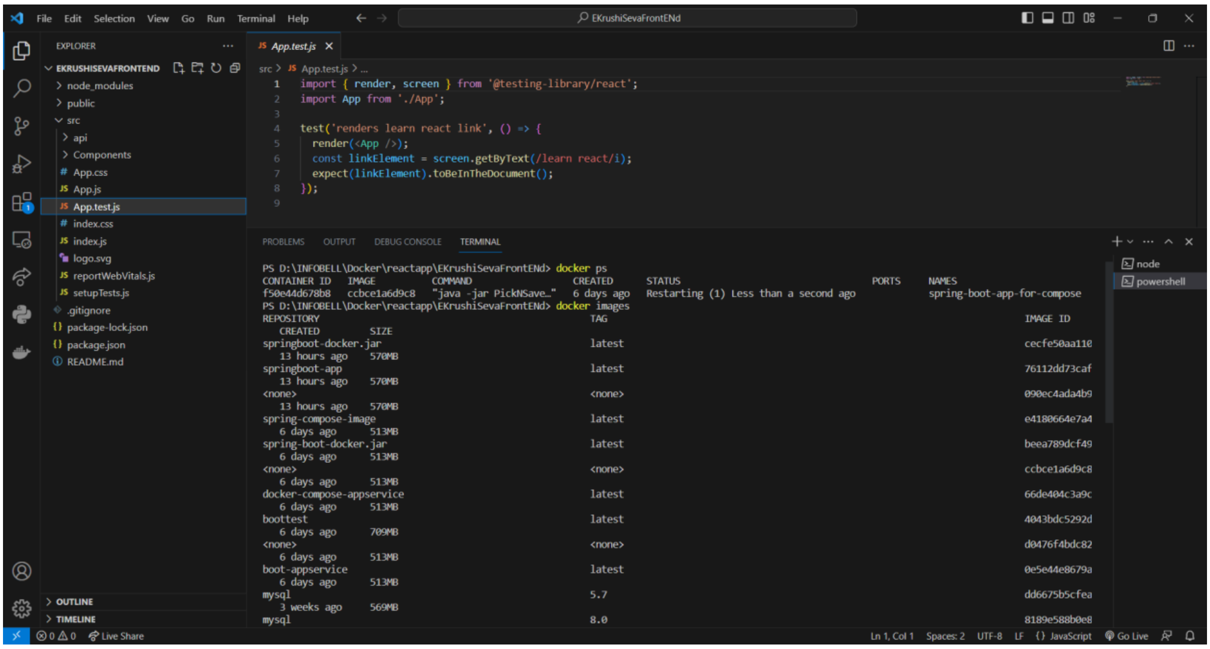
2. Checking running containers on a Docker host



src > index.js

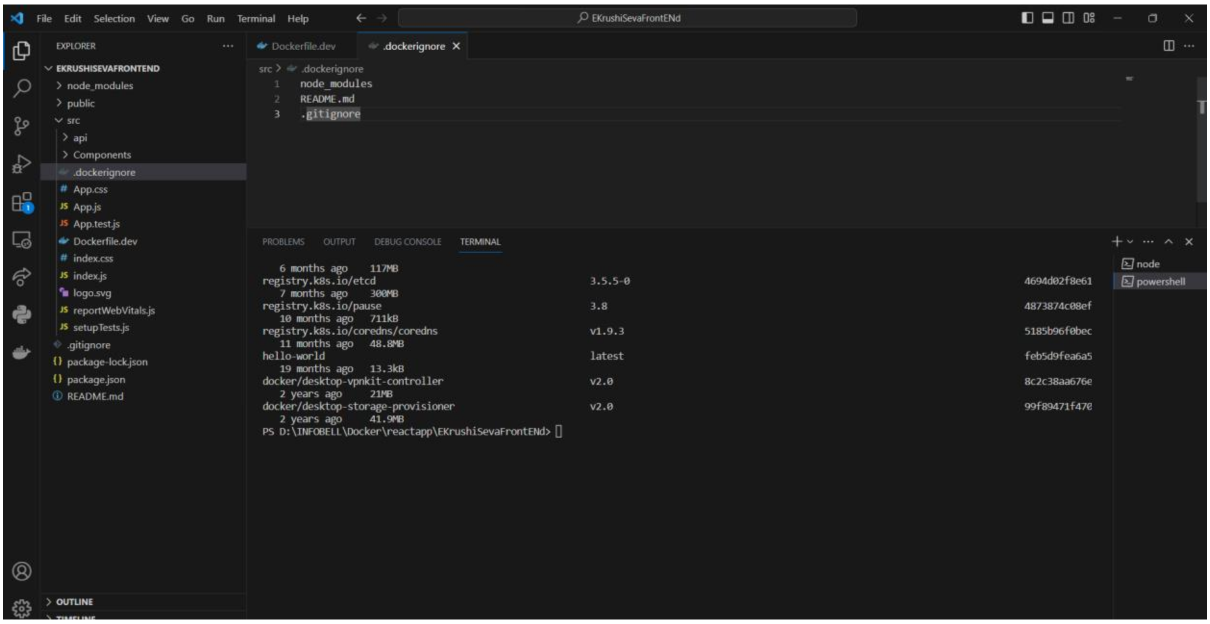
```
import React from "react";
import ReactDOM from "react-dom";
import "./index.css";
import App from "./App";
import reportWebVitals from "./reportWebVitals";
import "bootstrap/dist/css/bootstrap.min.css";
import { BrowserRouter } from "react-router-dom";

ReactDOM.render(
  <BrowserRouter>
    <App />
  </BrowserRouter>,
  document.getElementById("root")
);

// If you want to start measuring performance in your app, pass a function
// to log results (for example: reportWebVitals(console.log))
// or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals
reportWebVitals();
```

```
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd> docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED      STATUS                            PORTS     NAMES
f50e44d678b8   ccbce1a6d9c8   "java -jar PickNSave…"   6 days ago   Restarting (1) Less than a second ago           spring-boot-app-for-compose
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd>
```



```
import { render, screen } from '@testing-library/react';
import App from './App';

test('renders learn react link', () => {
  render(<App />);
  const linkElement = screen.getByText(/learn react/i);
  expect(linkElement).toBeInTheDocument();
});
```

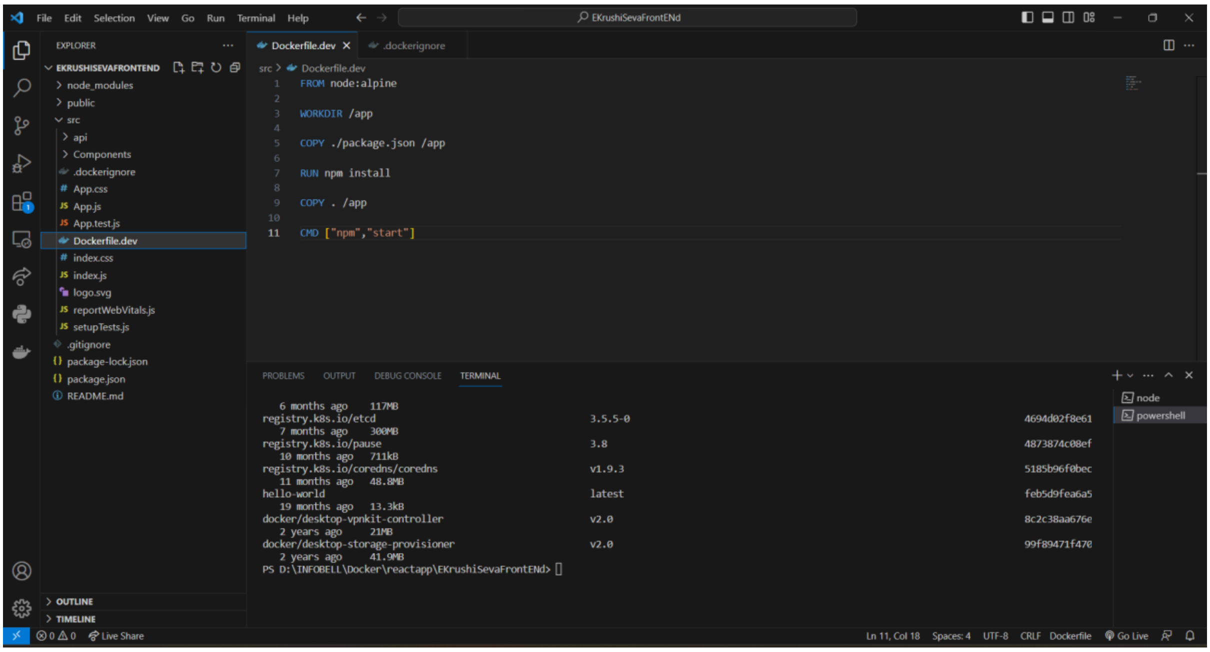
```
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd> docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED      STATUS                                 PORTS     NAMES
f50e44d678b8   ccbce1a6d9c8   "java -jar PickNSave…"   6 days ago   Restarting (1) Less than a second ago             spring-boot-app-for-compose
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd> docker images
REPOSITORY                                                  TAG                                                                           IMAGE ID
   CREATED         SIZE
springboot-docker.jar                                       latest                                                                        cecfe50aa110
   13 hours ago    570MB
springboot-app                                              latest                                                                        76112dd73caf
   13 hours ago    570MB
<none>                                                      <none>                                                                        090ec4ada4b9
   13 hours ago    570MB
spring-compose-image                                        latest                                                                        e4180664e7a4
   6 days ago      513MB
spring-boot-docker.jar                                      latest                                                                        beea789dcf49
   6 days ago      513MB
<none>                                                      <none>                                                                        ccbce1a6d9c8
   6 days ago      513MB
docker-compose-appservice                                   latest                                                                        66de404c3a9c
   6 days ago      513MB
boottest                                                    latest                                                                        4043bdc5292d
   6 days ago      709MB
<none>                                                      <none>                                                                        d0476f4bdc82
   6 days ago      513MB
boot-appservice                                             latest                                                                        0e5e44e8679a
   6 days ago      513MB
mysql                                                       5.7                                                                           dd6675b5cfea
   3 weeks ago     569MB
mysql                                                       8.0                                                                           8189e588b0e8
```



```
node_modules
README.md
.gitignore
```

```
   6 months ago    117MB
registry.k8s.io/etcd                                        3.5.5-0                                                                       4694d02f8e61
   7 months ago    300MB
registry.k8s.io/pause                                       3.8                                                                           4873874c08ef
   10 months ago   711kB
registry.k8s.io/coredns/coredns                             v1.9.3                                                                        5185b96f0bec
   11 months ago   48.8MB
hello-world                                                 latest                                                                        feb5d9fea6a5
   19 months ago   13.3kB
docker/desktop-vpnkit-controller                            v2.0                                                                          8c2c38aa676e
   2 years ago     21MB
docker/desktop-storage-provisioner                          v2.0                                                                          99f89471f470
   2 years ago     41.9MB
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd> []
```

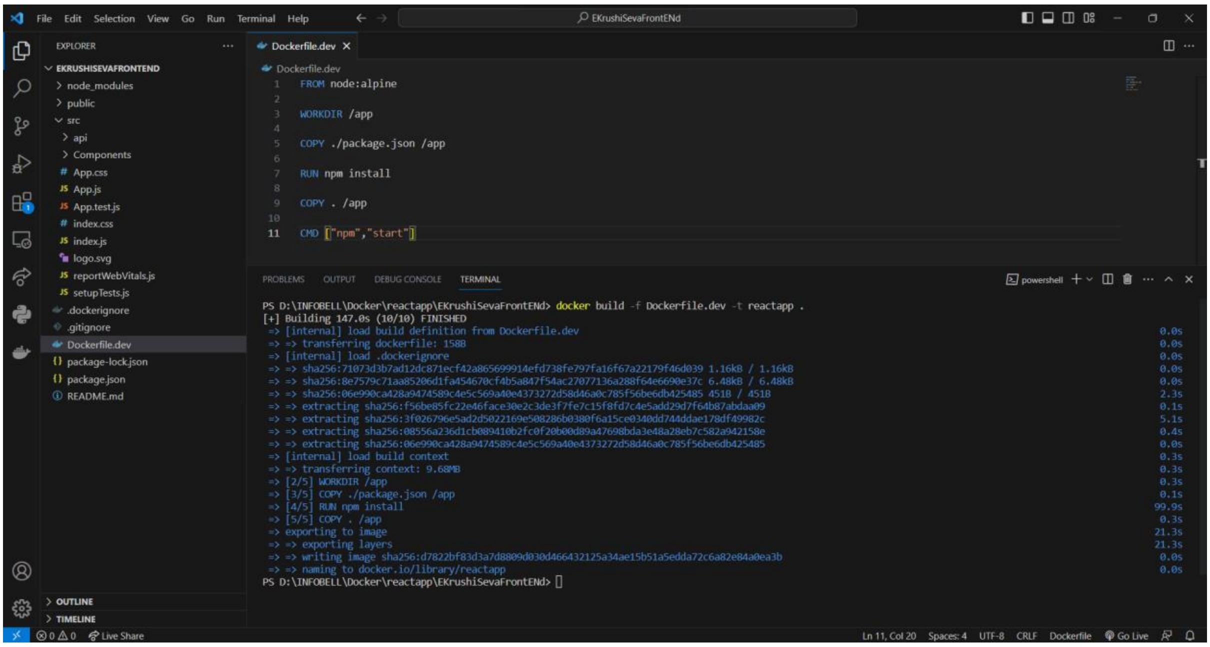
3. Created Dockerfile



```
FROM node:alpine

WORKDIR /app

COPY ./package.json /app

RUN npm install

COPY . /app

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

```
   6 months ago    117MB
registry.k8s.io/etcd                                   3.5.5-0                          4694d02f8e61
   7 months ago    300MB
registry.k8s.io/pause                                  3.8                              4873874c08ef
   10 months ago   711kB
registry.k8s.io/coredns/coredns                        v1.9.3                           5185b96f0bec
   11 months ago   48.8MB
hello-world                                            latest                           feb5d9fea6a5
   19 months ago   13.3kB
docker/desktop-vpnkit-controller                       v2.0                             8c2c38aa676e
   2 years ago     21MB
docker/desktop-storage-provisioner                     v2.0                             99f89471f470
   2 years ago     41.9MB
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd> 
```

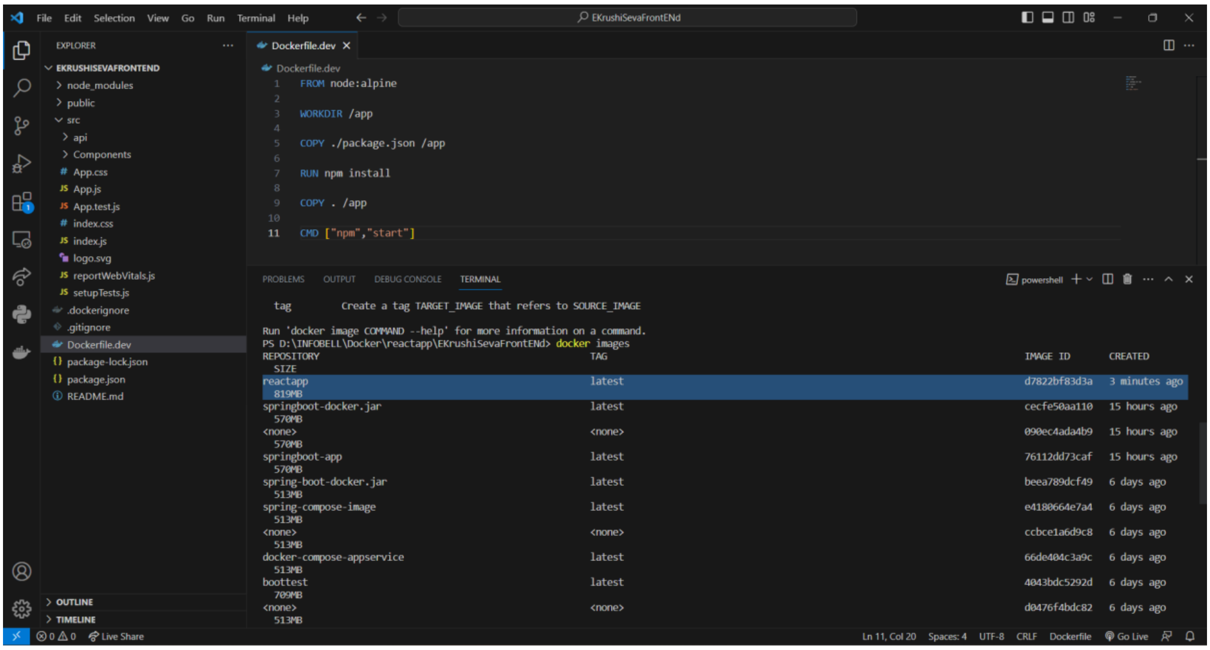
4. Created Docker Image



```
FROM node:alpine

WORKDIR /app

COPY ./package.json /app

RUN npm install

COPY . /app

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

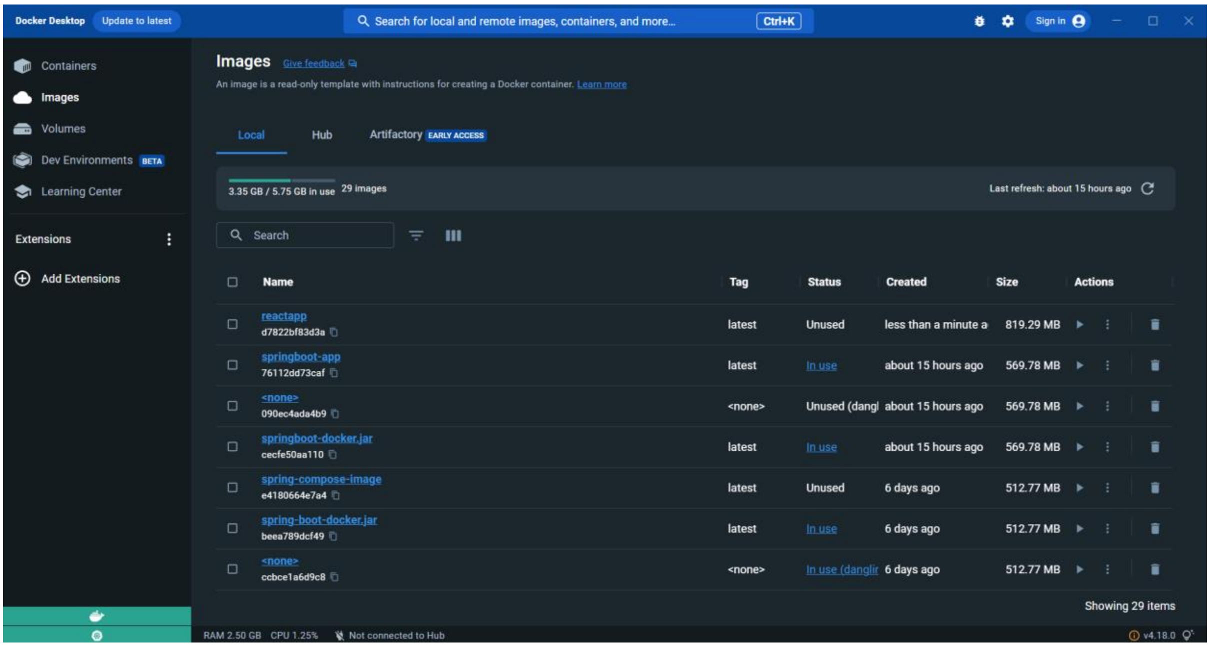
```
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd> docker build -f Dockerfile.dev -t reactapp .
[+] Building 147.0s (10/10) FINISHED
 => [internal] load build definition from Dockerfile.dev                                                             0.0s
 => => transferring dockerfile: 158B                                                                                 0.0s
 => [internal] load .dockerignore                                                                                    0.0s
 => => sha256:71073d3b7ad12dc871ecf42a865699914efd738fe797fa16f67a22179f46d039 1.16kB / 1.16kB                       0.0s
 => => sha256:8e7579c71aa85206d1fa454670cf4b5a847f54ac27077136a288f64e6690e37c 6.48kB / 6.48kB                       0.0s
 => => sha256:06e990ca428a9474589c4e5c569a40e4373272d58d46a0c785f56be6db425485 451B / 451B                           2.3s
 => => extracting sha256:f56be85fc22e46face30e2c3de3f7fe7c15f8fd7c4e5add29d7f64b87abdaa09                            0.1s
 => => extracting sha256:3f026796e5ad2d5022169e508286b0380f6a15ce0340dd744ddae178df49982c                            5.1s
 => => extracting sha256:08556a236d1cb089410b2fc0f20b00d89a47698bda3e48a28eb7c582a942158e                            0.4s
 => => extracting sha256:06e990ca428a9474589c4e5c569a40e4373272d58d46a0c785f56be6db425485                            0.0s
 => [internal] load build context                                                                                    0.3s
 => => transferring context: 9.68MB                                                                                  0.3s
 => [2/5] WORKDIR /app                                                                                               0.3s
 => [3/5] COPY ./package.json /app                                                                                   0.1s
 => [4/5] RUN npm install                                                                                           99.9s
 => [5/5] COPY . /app                                                                                                0.3s
 => exporting to image                                                                                              21.3s
 => => exporting layers                                                                                             21.3s
 => => writing image sha256:d7822bf83d3a7d8809d030d466432125a34ae15b51a5edda72c6a82e84a0ea3b                         0.0s
 => => naming to docker.io/library/reactapp                                                                          0.0s
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd> 
```

5. Checking Docker images



```
FROM node:alpine

WORKDIR /app

COPY ./package.json /app

RUN npm install

COPY . /app

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

```
  tag         Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE

Run 'docker image COMMAND --help' for more information on a command.
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd> docker images
REPOSITORY                                        TAG                                                                   IMAGE ID       CREATED
  SIZE
reactapp                                          latest                                                                d7822bf83d3a   3 minutes ago
  819MB
springboot-docker.jar                             latest                                                                cecfe50aa110   15 hours ago
  570MB
<none>                                            <none>                                                                090ec4ada4b9   15 hours ago
  570MB
springboot-app                                    latest                                                                76112dd73caf   15 hours ago
  570MB
spring-boot-docker.jar                            latest                                                                beea789dcf49   6 days ago
  513MB
spring-compose-image                              latest                                                                e4180664e7a4   6 days ago
  513MB
<none>                                            <none>                                                                ccbce1a6d9c8   6 days ago
  513MB
docker-compose-appservice                         latest                                                                66de404c3a9c   6 days ago
  513MB
boottest                                          latest                                                                4043bdc5292d   6 days ago
  709MB
<none>                                            <none>                                                                d0476f4bdc82   6 days ago
  513MB
```



Images

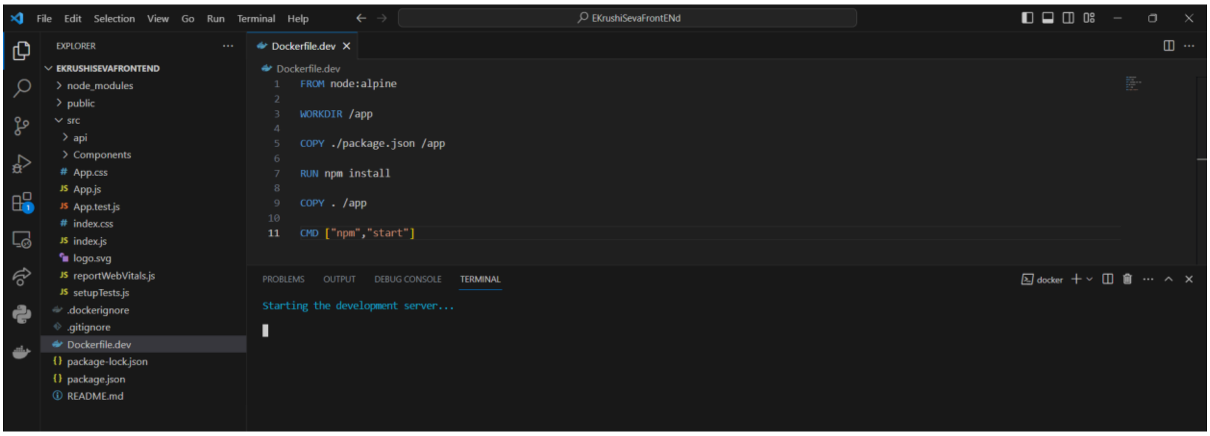
An image is a read-only template with instructions for creating a Docker container. Learn more

3.35 GB / 5.75 GB in use 29 images

Last refresh: about 15 hours ago

□	Name	Tag	Status	Created	Size	Actions
□	reactapp d7822bf83d3a	latest	Unused	less than a minute a	819.29 MB	▶ ⋮
□	springboot-app 76112dd73caf	latest	In use	about 15 hours ago	569.78 MB	▶ ⋮
□	<none> 090ec4ada4b9	<none>	Unused (dangl	about 15 hours ago	569.78 MB	▶ ⋮
□	springboot-docker.jar cecfe50aa110	latest	In use	about 15 hours ago	569.78 MB	▶ ⋮
□	spring-compose-image e4180664e7a4	latest	Unused	6 days ago	512.77 MB	▶ ⋮
□	spring-boot-docker.jar beea789dcf49	latest	In use	6 days ago	512.77 MB	▶ ⋮
□	<none> ccbce1a6d9c8	<none>	In use (danglir	6 days ago	512.77 MB	▶ ⋮

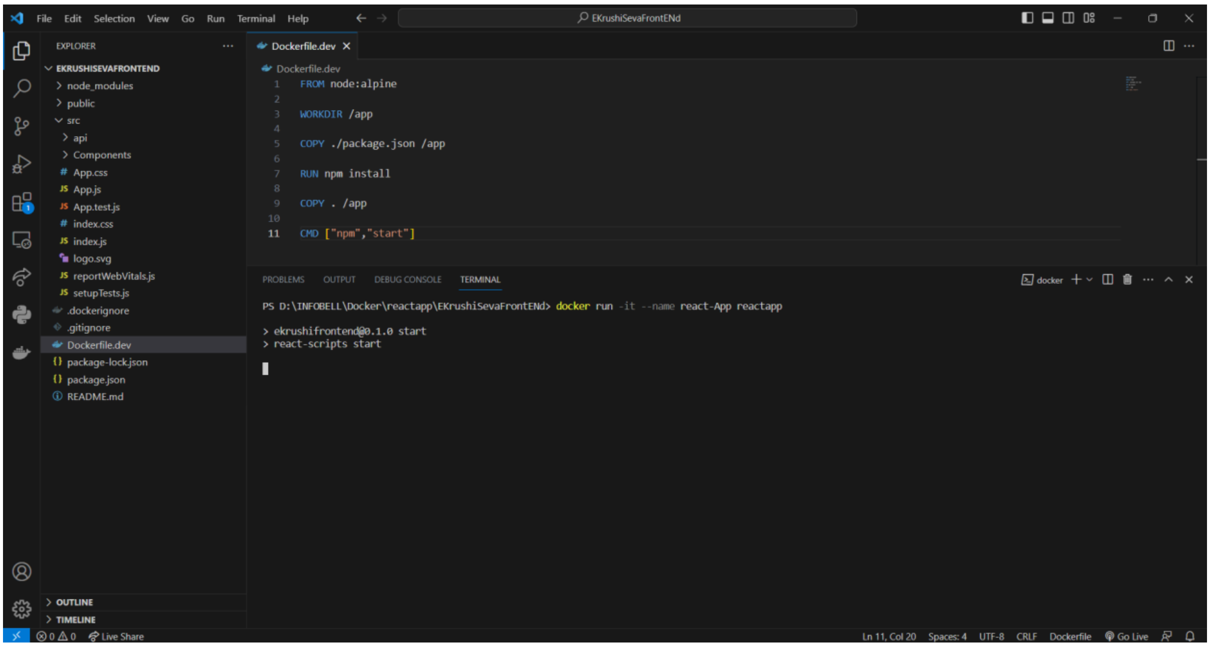
Showing 29 items



```
FROM node:alpine

WORKDIR /app

COPY ./package.json /app

RUN npm install

COPY . /app

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

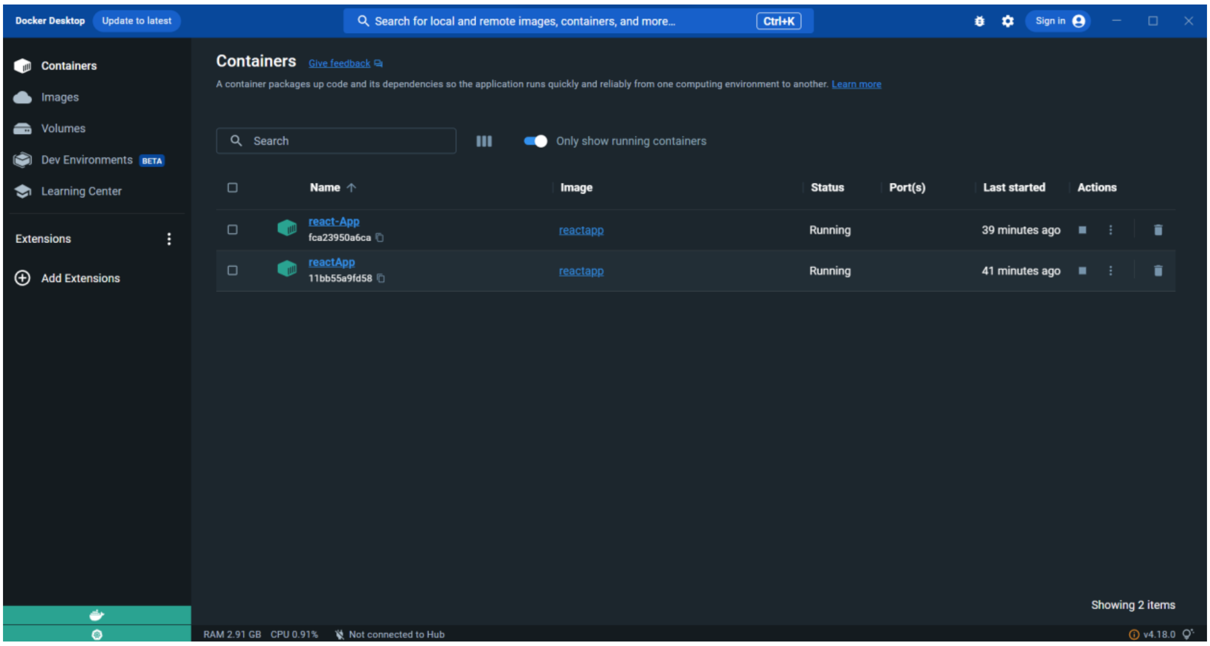
```
Starting the development server...
```

6. Creating Container



```
FROM node:alpine

WORKDIR /app

COPY ./package.json /app

RUN npm install

COPY . /app

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

```
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd> docker run -it --name react-App reactapp

> ekrushifrontend@0.1.0 start
> react-scripts start
```



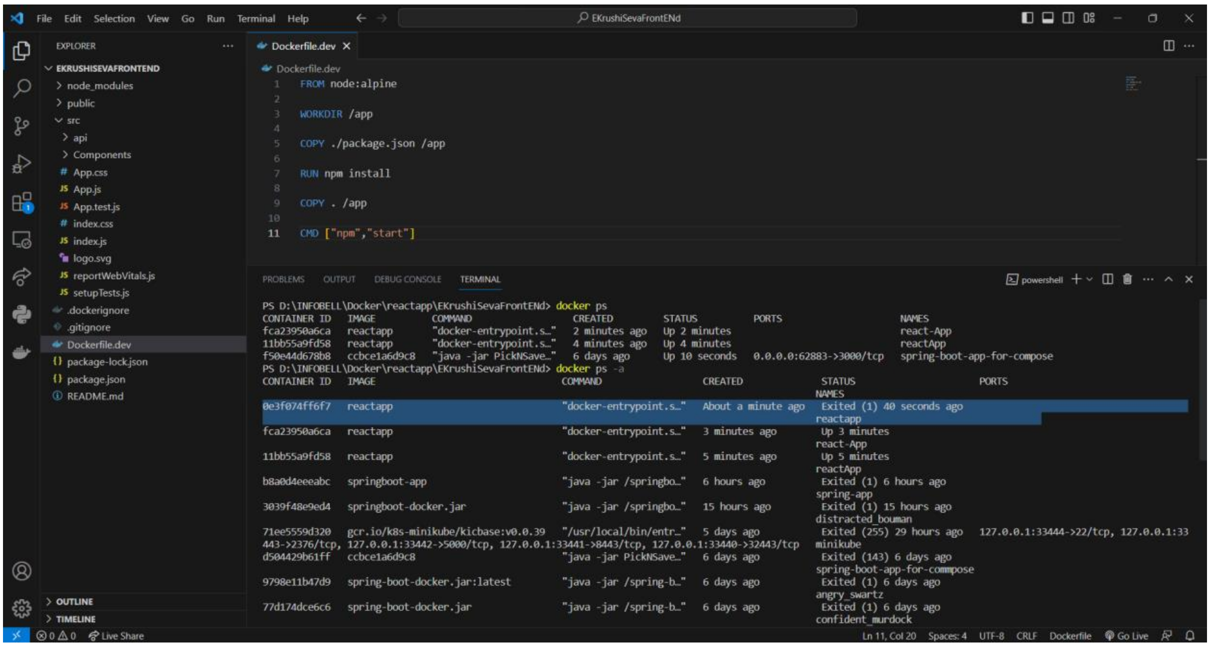
Containers

A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another. Learn more

Name	Image	Status	Port(s)	Last started
react-App fca23950a6ca	reactapp	Running		39 minutes ago
reactApp 11bb55a9fd58	reactapp	Running		41 minutes ago

Showing 2 items

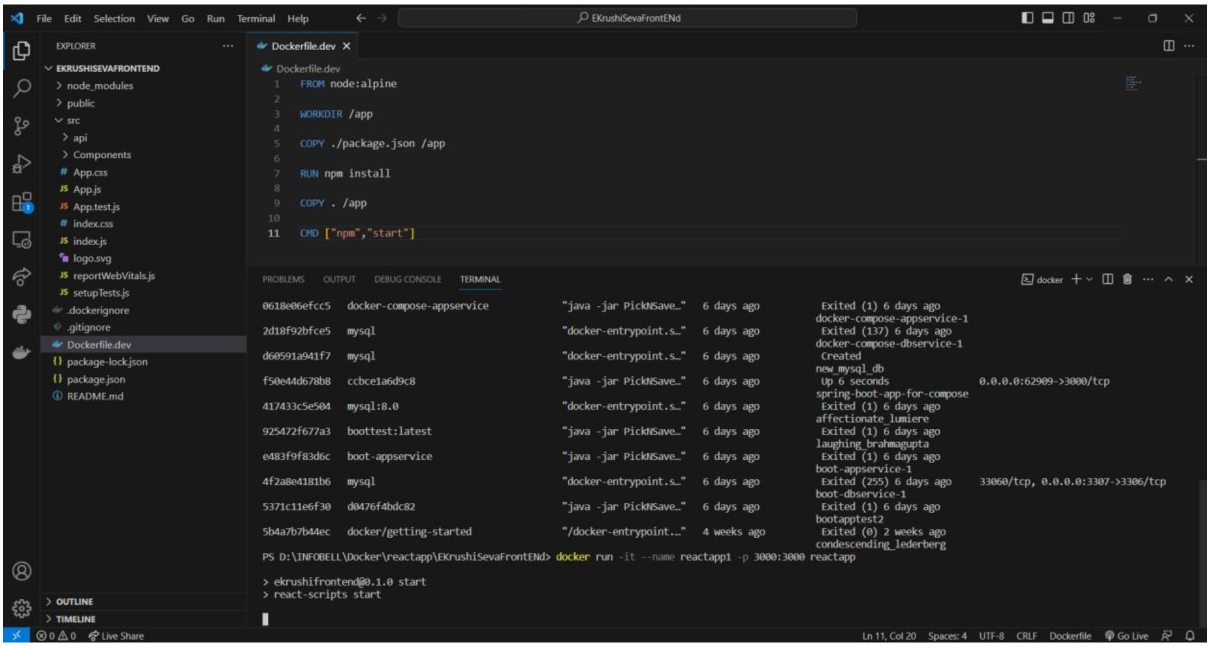
RAM 2.91 GB CPU 0.91% Not connected to Hub v4.18.0



Dockerfile.dev

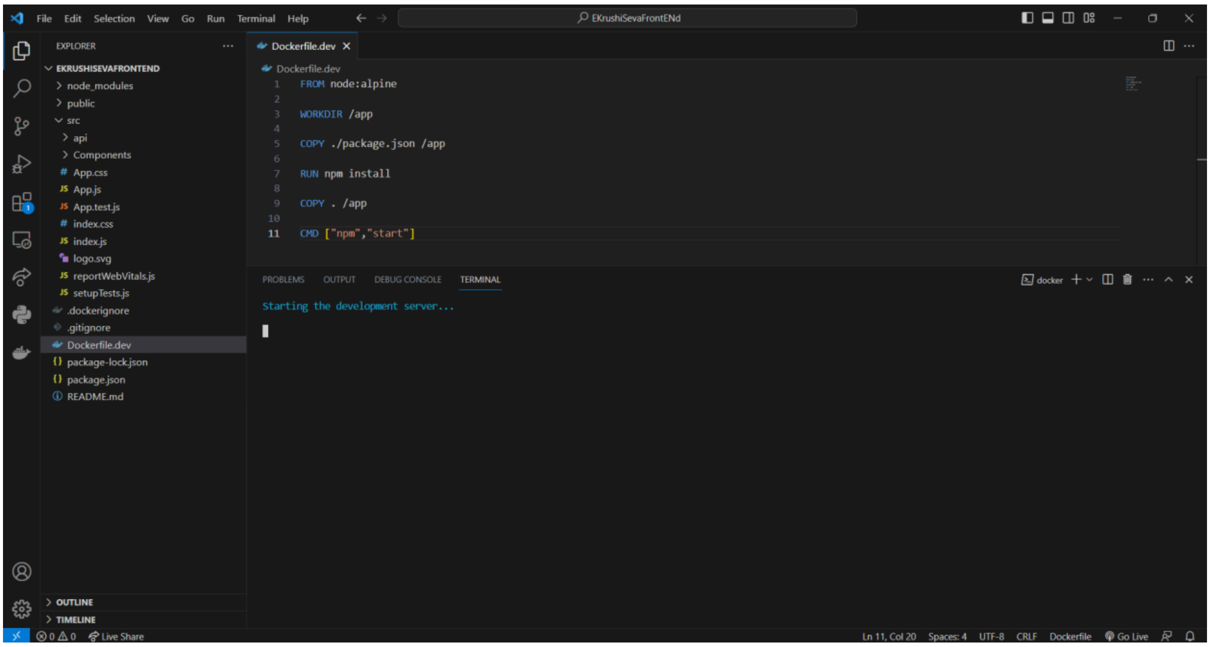
```
FROM node:alpine

WORKDIR /app

COPY ./package.json /app

RUN npm install

COPY . /app

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

```
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd> docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED         STATUS           PORTS                     NAMES
fca23950a6ca   reactapp       "docker-entrypoint.s…"   2 minutes ago   Up 2 minutes                               react-App
11bb55a9fd58   reactapp       "docker-entrypoint.s…"   4 minutes ago   Up 4 minutes                               reactApp
f50e44d678b8   ccbce1a6d9c8   "java -jar PickNSave…"   6 days ago      Up 10 seconds    0.0.0.0:62883->3000/tcp   spring-boot-app-for-compose
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd> docker ps -a
CONTAINER ID   IMAGE                                 COMMAND                  CREATED              STATUS                       PORTS
NAMES
0e3f074ff6f7   reactapp                              "docker-entrypoint.s…"   About a minute ago   Exited (1) 40 seconds ago
reactapp
fca23950a6ca   reactapp                              "docker-entrypoint.s…"   3 minutes ago        Up 3 minutes
react-App
11bb55a9fd58   reactapp                              "docker-entrypoint.s…"   5 minutes ago        Up 5 minutes
reactApp
b8a0d4eeeabc   springboot-app                        "java -jar /springbo…"   6 hours ago          Exited (1) 6 hours ago
spring-app
3039f48e9ed4   springboot-docker.jar                 "java -jar /springbo…"   15 hours ago         Exited (1) 15 hours ago
distracted_bouman
71ee5559d320   gcr.io/k8s-minikube/kicbase:v0.0.39   "/usr/local/bin/entr…"   5 days ago           Exited (255) 29 hours ago    127.0.0.1:33444->22/tcp, 127.0.0.1:33
443->2376/tcp, 127.0.0.1:33442->5000/tcp, 127.0.0.1:33441->8443/tcp, 127.0.0.1:33440->32443/tcp   minikube
d504429b61ff   ccbce1a6d9c8                          "java -jar PickNSave…"   6 days ago           Exited (143) 6 days ago
spring-boot-app-for-compose
9798e11b47d9   spring-boot-docker.jar:latest         "java -jar /spring-b…"   6 days ago           Exited (1) 6 days ago
angry_swartz
77d174dce6c6   spring-boot-docker.jar                "java -jar /spring-b…"   6 days ago           Exited (1) 6 days ago
confident_murdock
```



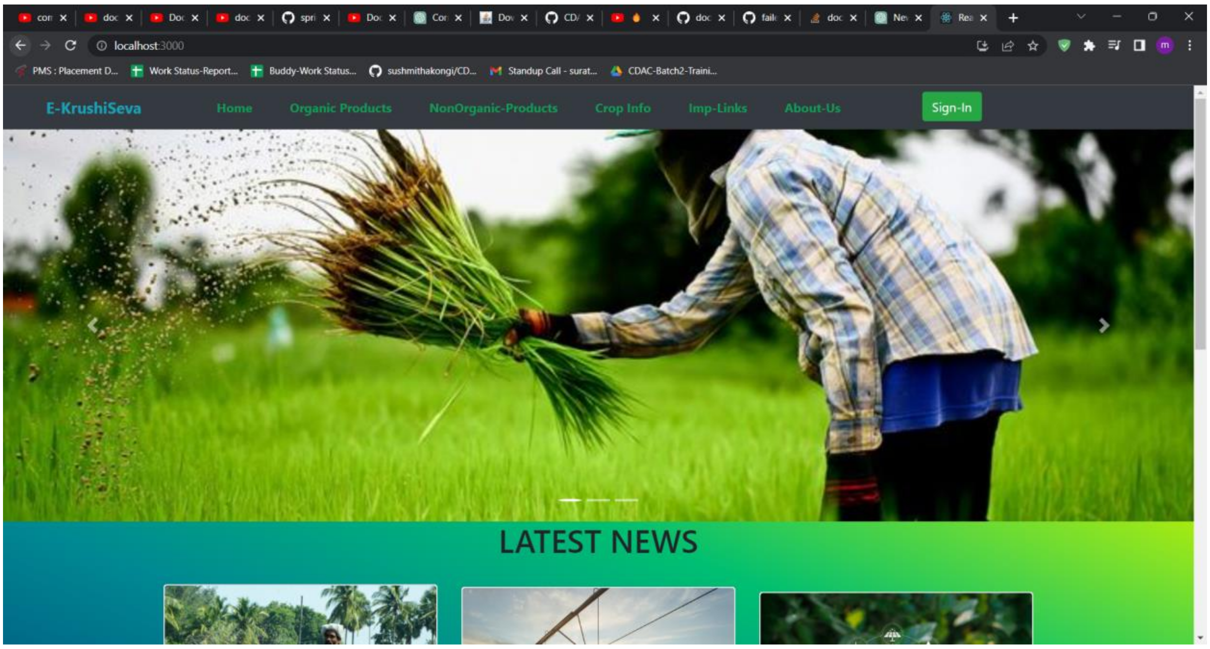
```
FROM node:alpine

WORKDIR /app

COPY ./package.json /app

RUN npm install

COPY . /app

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

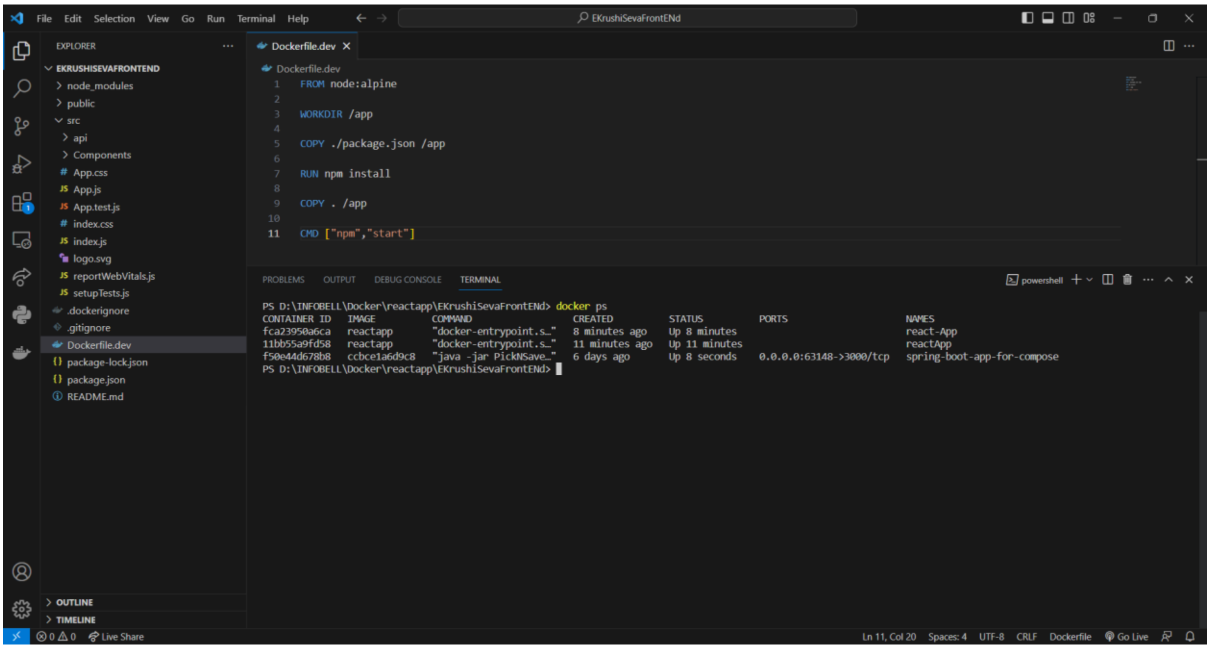
```
0618e06efcc5   docker-compose-appservice          "java -jar PickNSave…"   6 days ago          Exited (1) 6 days ago
        docker-compose-appservice-1
2d18f92bfce5   mysql                              "docker-entrypoint.s…"   6 days ago          Exited (137) 6 days ago
        docker-compose-dbservice-1
d60591a941f7   mysql                              "docker-entrypoint.s…"   6 days ago          Created
        new_mysql_db
f50e44d678b8   ccbce1a6d9c8                       "java -jar PickNSave…"   6 days ago          Up 6 seconds              0.0.0.0:62909->3000/tcp
        spring-boot-app-for-compose
417433c5e504   mysql:8.0                          "docker-entrypoint.s…"   6 days ago          Exited (1) 6 days ago
        affectionate_lumiere
925472f677a3   boottest:latest                    "java -jar PickNSave…"   6 days ago          Exited (1) 6 days ago
        laughing_brahmagupta
e483f9f83d6c   boot-appservice                    "java -jar PickNSave…"   6 days ago          Exited (1) 6 days ago
        boot-appservice-1
4f2a8e4181b6   mysql                              "docker-entrypoint.s…"   6 days ago          Exited (255) 6 days ago   33060/tcp, 0.0.0.0:3307->3306/tcp
        boot-dbservice-1
5371c11e6f30   d0476f4bdc82                       "java -jar PickNSave…"   6 days ago          Exited (1) 6 days ago
        bootapptest2
5b4a7b7b44ec   docker/getting-started             "/docker-entrypoint.…"   4 weeks ago         Exited (0) 2 weeks ago
        condescending_lederberg
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd> docker run -it --name reactapp1 -p 3000:3000 reactapp

> ekrushifrontend@0.1.0 start
> react-scripts start

▮
```



```
FROM node:alpine

WORKDIR /app

COPY ./package.json /app

RUN npm install

COPY . /app

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

```
Starting the development server...

▮
```

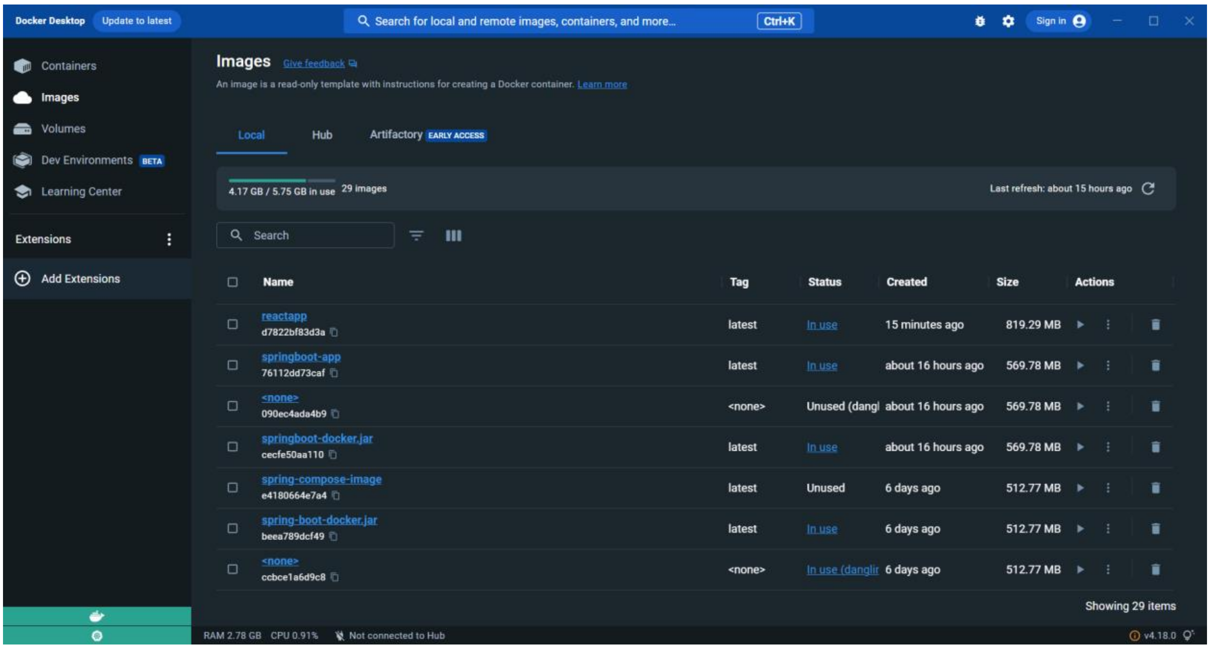




Dockerfile.dev

```
FROM node:alpine

WORKDIR /app

COPY ./package.json /app

RUN npm install

COPY . /app

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

```
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd> docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED          STATUS          PORTS                    NAMES
fca23950a6ca   reactapp       "docker-entrypoint.s…"   8 minutes ago    Up 8 minutes                             react-App
11bb55a9fd58   reactapp       "docker-entrypoint.s…"   11 minutes ago   Up 11 minutes                            reactApp
f50e44d678b8   ccbce1a6d9c8   "java -jar PickNSave…"   6 days ago       Up 8 seconds    0.0.0.0:63148->3000/tcp  spring-boot-app-for-compose
PS D:\INFOBELL\Docker\reactapp\EKrushiSevaFrontENd> 
```



Images

Give feedback

An image is a read-only template with instructions for creating a Docker container. Learn more

4.17 GB / 5.75 GB in use 29 images

Last refresh: about 15 hours ago

☐	Name	Tag	Status	Created	Size	Actions
☐	reactapp d7822bf83d3a	latest	In use	15 minutes ago	819.29 MB	▶ ⋮
☐	springboot-app 76112dd73caf	latest	In use	about 16 hours ago	569.78 MB	▶ ⋮
☐	<none> 090ec4ada4b9	<none>	Unused (dangl	about 16 hours ago	569.78 MB	▶ ⋮
☐	springboot-docker.jar cecfe50aa110	latest	In use	about 16 hours ago	569.78 MB	▶ ⋮
☐	spring-compose-image e4180664e7a4	latest	Unused	6 days ago	512.77 MB	▶ ⋮
☐	spring-boot-docker.jar beea789dcf49	latest	In use	6 days ago	512.77 MB	▶ ⋮
☐	<none> ccbce1a6d9c8	<none>	In use (danglir	6 days ago	512.77 MB	▶ ⋮

Showing 29 items

RAM 2.78 GB CPU 0.91% Not connected to Hub v4.18.0