

## REALTIME FRONTEND APPLICATION

**Step 1:** Install the git

```
$ sudo yum -y install https://packages.endpoint.com/rhel/7/os/x86\_64/endpoint-repo-1.7-1.x86\_64.rpm
```

```
$ sudo yum install git
```

**Step 2:** clone the url from gitlab

```
$ git clone (url)
```

**Step 3:** create Dockerfile

```
$ touch Dockerfile
```

```
$ vi Dockerfile
```

```
# pull the base image
```

```
FROM node:14-alpine as build
```

```
# set the working direction
```

```
WORKDIR /app
```

```
# copy package.json
```

```
COPY package.json ./
```

```
COPY package-lock.json ./
```

```
# install app dependencies
```

```
RUN npm install
```

```
# add app
```

```
COPY . ./
```

```
RUN npm run build
```

```
FROM nginx:stable-alpine
```

```
COPY --from=build /app/build /usr/share/nginx/html
```

```
EXPOSE 80
```

CMD ["nginx", "-g", "daemon off;"]

**Step 4:** create docker ignore file

\$ touch .dockerignore

\$ vi .dockerignore

node\_modules

build

.dockerignore

Dockerfile

Dockerfile.prod

**Step 5:** create docker image

\$ docker build -t react-image .

```
root@localhost:~/ywc-matt-ui_v2
The project was built assuming it is hosted at /.
You can control this with the homepage field in your package.json.

The build folder is ready to be deployed.
You may serve it with a static server:

  yarn global add serve
  serve -s build

Find out more about deployment here:

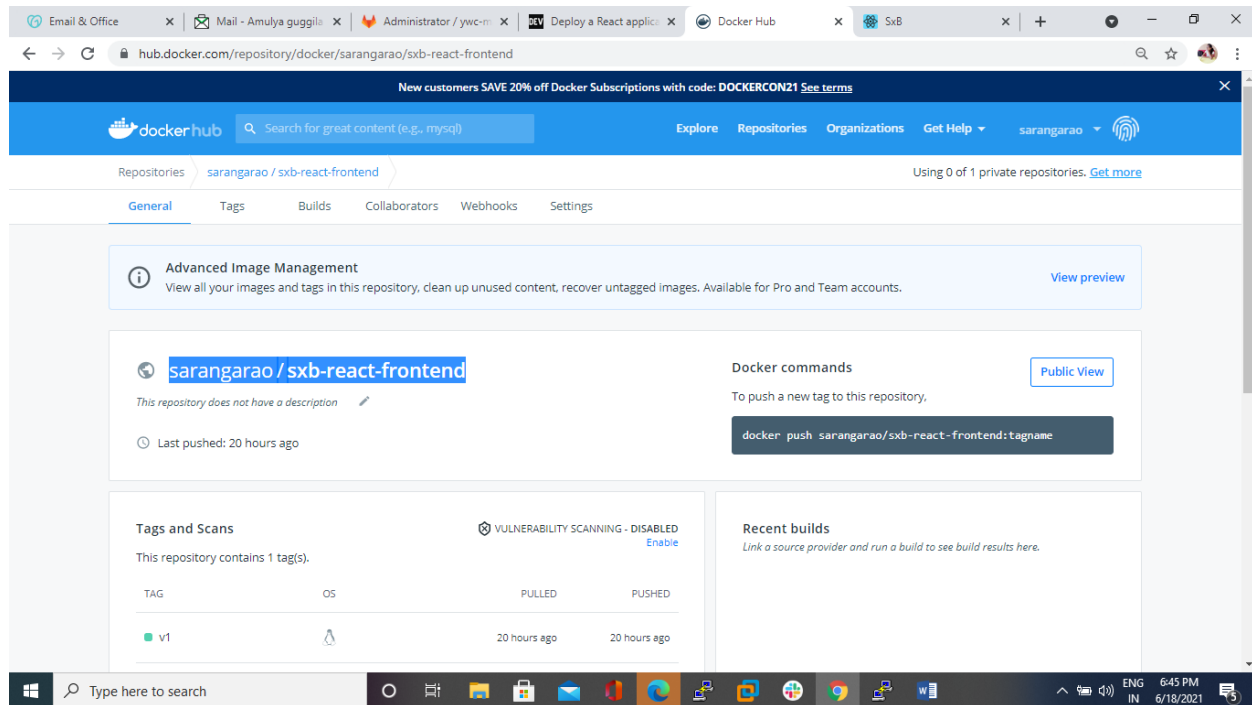
  bit.ly/CRA-deploy

Removing intermediate container c4e4d777ace3
--> 4f0d779447e8
Step 8/11 : FROM nginx:stable-alpine
stable-alpine: Pulling from library/nginx
540db60ca938: Pull complete
b824a2584ece: Pull complete
82d0e0426b2d: Pull complete
ed76aa154407: Pull complete
ef4cf5a20f9a: Pull complete
9d3441de5d5e: Pull complete
Digest: sha256:3e129fe0de45ea916f768ceb792a75c473dc32147d6c3a0913fd9c3ae28dd8f1
Status: Downloaded newer image for nginx:stable-alpine
--> c1cccff1fb908
Step 9/11 : COPY --from=build /app/build /usr/share/nginx/html
--> 2d690c7ealc2
Step 10/11 : EXPOSE 80
--> Running in d948f55dfeb9
Removing intermediate container d948f55dfeb9
--> 291596414c3b
Step 11/11 : CMD ["nginx", "-g", "daemon off;"]
--> Running in d8846c161953
Removing intermediate container d8846c161953
--> 34c22dd3b754
Successfully built 34c22dd3b754
Successfully tagged react-image:latest
[root@localhost ywc-matt-ui_v2]# docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
react-image          latest              34c22dd3b754       12 seconds ago     29MB
<none>               <none>             4f0d779447e8       29 seconds ago     407MB
node                 14-alpine          c2ce8f082a62       2 days ago         117MB
```

**Step 6:** push the docker image to docker hub

\$ docker tag react-image dockerhub ID/new folder name

\$ docker push dockerhub ID/new folder name



## Step 7: create directory

```
$ mkdir Deployments
```

```
$ cd Deployments
```

## Step 8: create a file in Deployments folder

```
$ touch deployment.yaml
```

```
$ vi deployment.yaml
```

```
kind: Deployment
```

```
apiVersion: apps/v1
```

```
metadata:
```

```
  name: my-react-app
```

```
spec:
```

```
  replicas: 2
```

```
  selector:
```

```
    matchLabels:
```

```
  app: my-react-app
template:
  metadata:
    labels:
      app: my-react-app
  spec:
    containers:
      - name: my-react-app
        image: sarangarao/sxb-react-frontend:v1
        imagePullPolicy: Always
        ports:
          - containerPort: 80
    restartPolicy: Always
```

---

```
kind: Service
apiVersion: v1
metadata:
  name: my-react-app
spec:
  type: NodePort
  ports:
    - port: 80
      targetPort: 80
      protocol: TCP
```

nodePort: 31000

selector:

app: my-react-app

**step 8:** apply in kubernetes

\$ kubectl apply -f deployment.yaml

**Step 9:** check for the pods

\$ kubectl get pods

Access in the browser with ip

