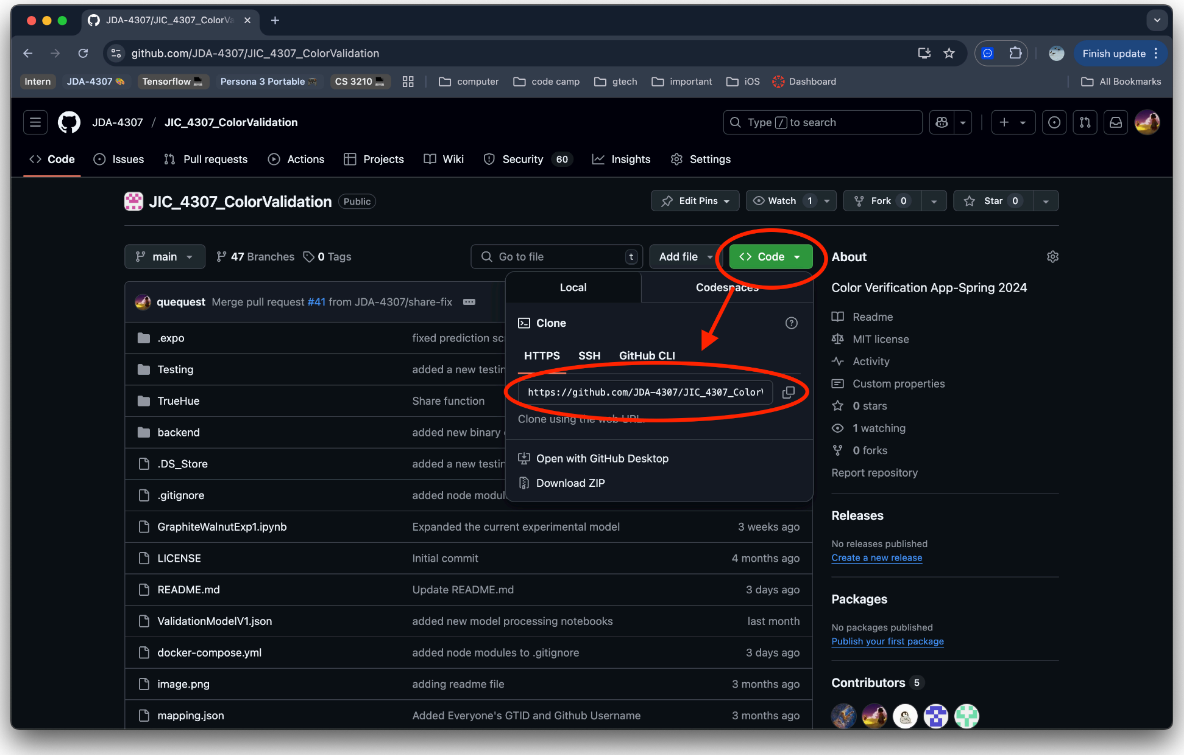


quequest Merge pull request #41 from JDA-4307/share-fix

.expo	fixed prediction sc	
Testing	added a new testin	
TrueHue	Share function	
backend	added new binary	
.DS_Store	added a new testin	
.gitignore	added node modul	
GraphiteWalnutExp1.ipynb	Expanded the current experimental model	3 weeks ago
LICENSE	Initial commit	4 months ago
README.md	Update README.md	3 days ago
ValidationModelV1.json	added new model processing notebooks	last month
docker-compose.yml	added node modules to .gitignore	3 days ago
image.png	adding readme file	3 months ago
mapping.json	Added Everyone's GTID and Github Username	3 months ago

```
https://github.com/JDA-4307/JIC_4307_Color
```

Clone using the web URL.

Color Verification App-Spring 2024

No releases published
Create a new release

No packages published
Publish your first package

Development Environment Setup Guide

Install VSCode

1. Download VSCode from: https://code.visualstudio.com/download
2. Follow the installation instructions for your operating system

Install Docker

1. Download Docker from: https://www.docker.com/get-started/
2. Alternatively, install via Terminal:
   Copy
   ```
   brew install --cask docker
   ```
3. Verify installation:
   Copy

```
docker --version
```

Install Homebrew

1. Open Terminal and run:
   Copy
   ```
   /bin/bash -c "$(curl -fsSL
   https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
   ```

2. Alternatively:

   sudo xcode-select -s /Library/Developer/CommandLineTools

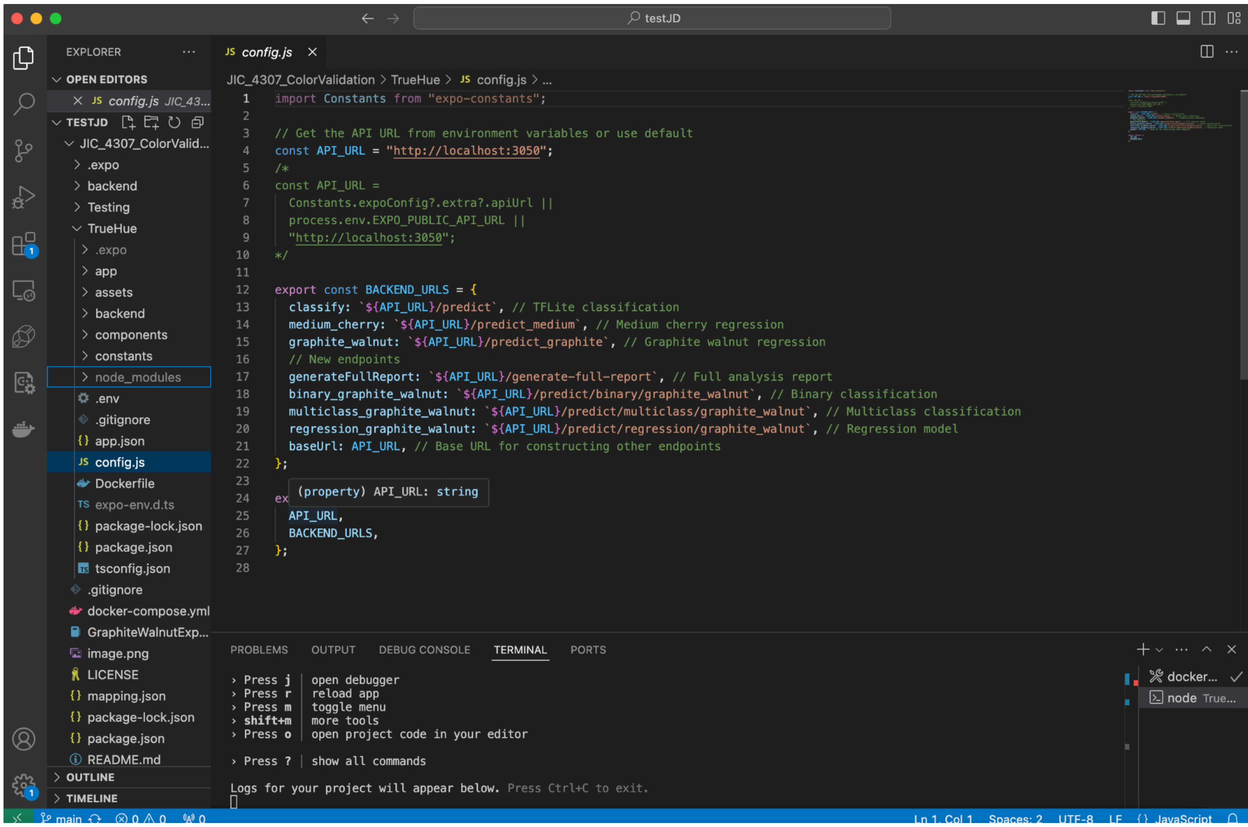
   /bin/bash -c "$(curl -fsSL
   https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"

3. Follow any additional instructions displayed after installation
   a. If xcode doesn’t exist: xcode-select --install

Install Git

1. Using Homebrew, install Git:
   Copy
   ```
   brew install git
   ```

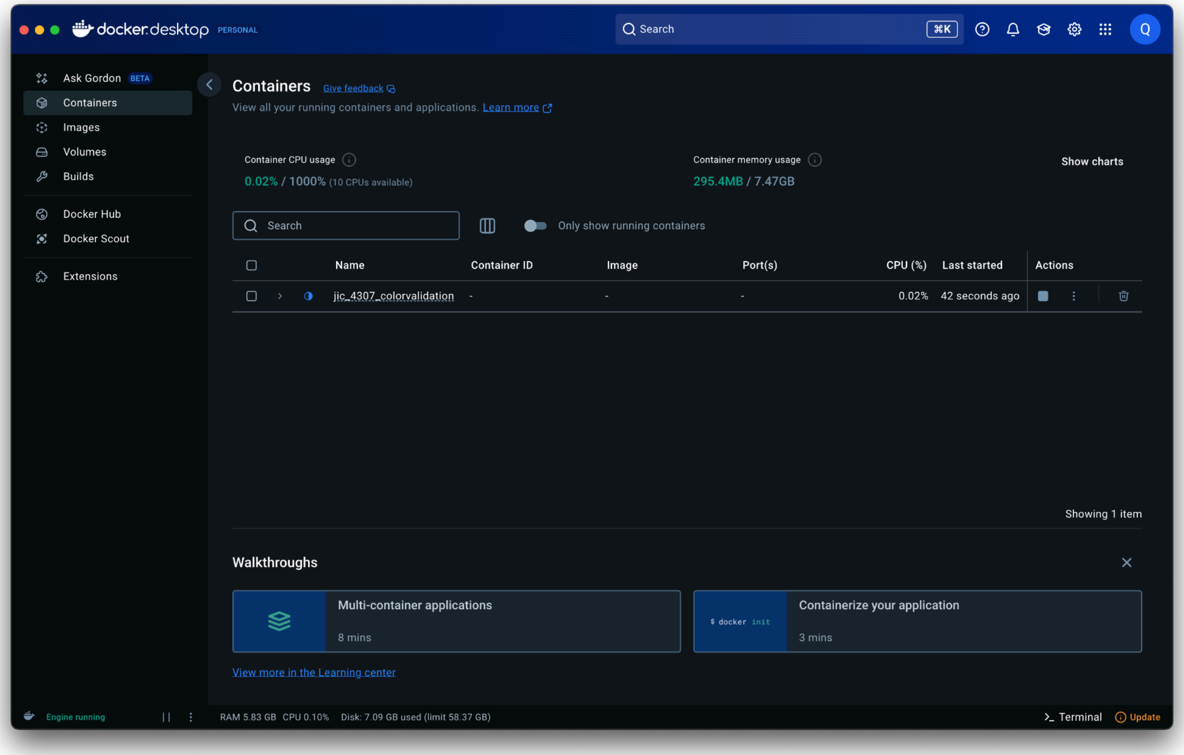
2. Verify installation:
   Copy
   ```
   git --version
   ```

1. git clone https://github.com/JDA-4307/JIC_4307_ColorValidation.git
   Repo Link (https://github.com/JDA-4307/JIC_4307_ColorValidation)
2. First open the cloned folder:
   - Locate the config.js file and change the localhost to your local ip address. You can get your local ip address by opening up the terminal and using the following command: `ipconfig getifaddr en0`
   - So the new API_URL should look something like :
   - `http://(your local ip):3050`
   - 

```javascript
import Constants from "expo-constants";

// Get the API URL from environment variables or use default
const API_URL = "http://localhost:3050";
/*
const API_URL =
  Constants.expoConfig?.extra?.apiUrl ||
  process.env.EXPO_PUBLIC_API_URL ||
  "http://localhost:3050";
*/

export const BACKEND_URLS = {
  classify: `${API_URL}/predict`, // TFLite classification
  medium_cherry: `${API_URL}/predict_medium`, // Medium cherry regression
  graphite_walnut: `${API_URL}/predict_graphite`, // Graphite walnut regression
  // New endpoints
  generateFullReport: `${API_URL}/generate-full-report`, // Full analysis report
  binary_graphite_walnut: `${API_URL}/predict/binary/graphite_walnut`, // Binary classification
  multiclass_graphite_walnut: `${API_URL}/predict/multiclass/graphite_walnut`, // Multiclass classification
  regression_graphite_walnut: `${API_URL}/predict/regression/graphite_walnut`, // Regression model
  baseUrl: API_URL, // Base URL for constructing other endpoints
};

ex
  API_URL,
  BACKEND_URLS,
};
```

```
› Press j │ open debugger
› Press r │ reload app
› Press m │ toggle menu
› shift+m │ more tools
› Press o │ open project code in your editor

› Press ? │ show all commands

Logs for your project will appear below. Press Ctrl+C to exit.
```

3. Have Docker Open



Containers Give feedback

View all your running containers and applications. Learn more

Container CPU usage
0.02% / 1000% (10 CPUs available)

Container memory usage
295.4MB / 7.47GB

□			Name	Container ID	Image	Port(s)	CPU (%)	Last started	Actions
□	›	◑	jic_4307_colorvalidation	-	-	-	0.02%	42 seconds ago	■ ⋮ 🗑

Showing 1 item

Walkthroughs

Multi-container applications
8 mins

```
$ docker init
```

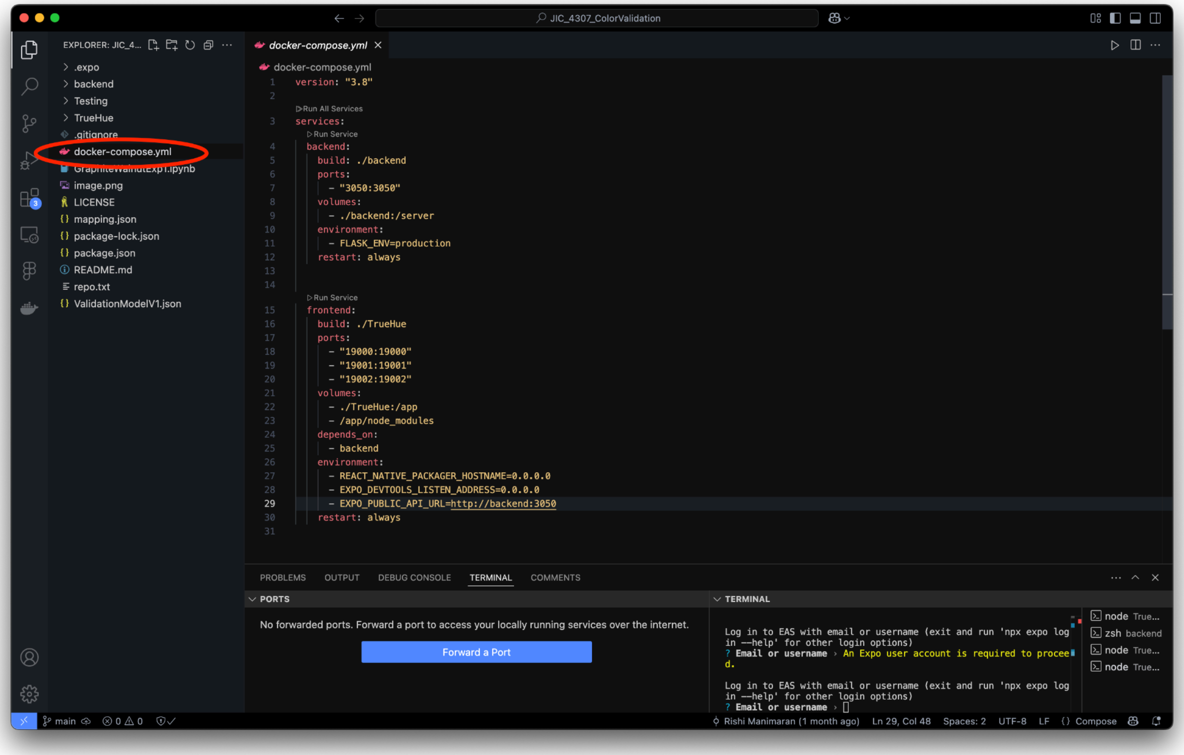
Containerize your application
3 mins

View more in the Learning center

Engine running

RAM 5.83 GB CPU 0.10% Disk: 7.09 GB used (limit 58.37 GB)

4. In VSCode, open the docker-compose.yml file.

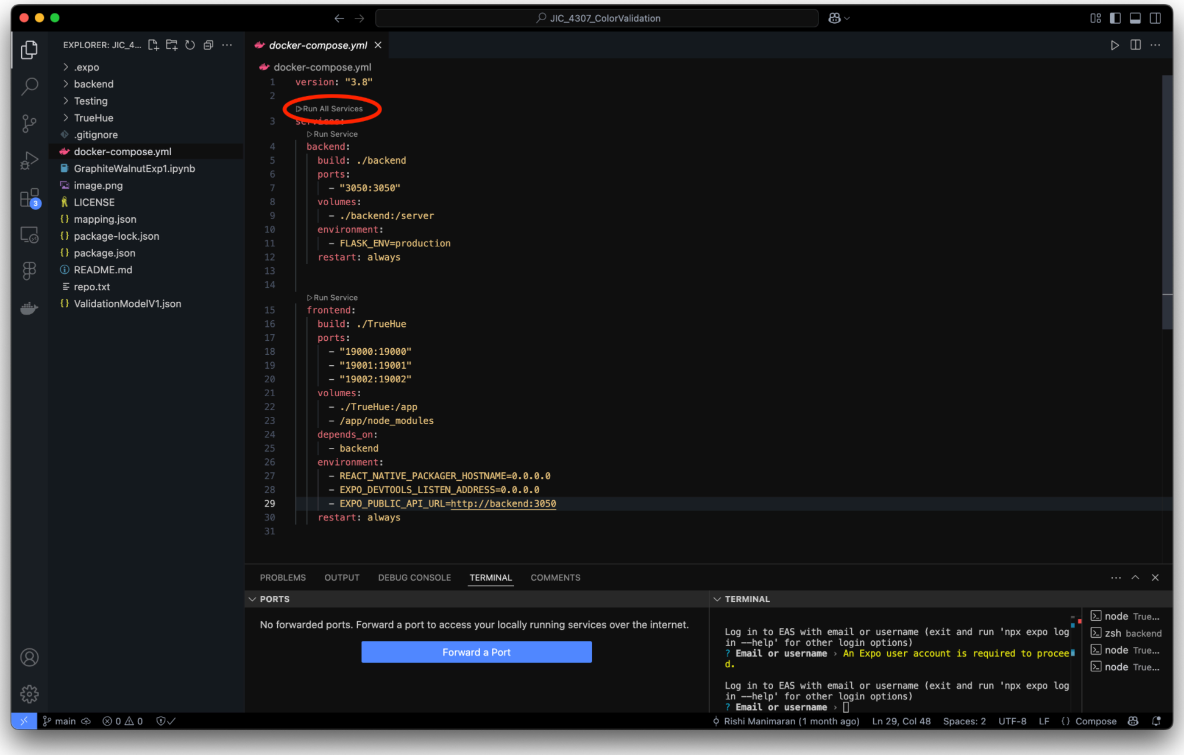


```yaml
version: "3.8"

services:
  backend:
    build: ./backend
    ports:
      - "3050:3050"
    volumes:
      - ./backend:/server
    environment:
      - FLASK_ENV=production
    restart: always


  frontend:
    build: ./TrueHue
    ports:
      - "19000:19000"
      - "19001:19001"
      - "19002:19002"
    volumes:
      - ./TrueHue:/app
      - /app/node_modules
    depends_on:
      - backend
    environment:
      - REACT_NATIVE_PACKAGER_HOSTNAME=0.0.0.0
      - EXPO_DEVTOOLS_LISTEN_ADDRESS=0.0.0.0
      - EXPO_PUBLIC_API_URL=http://backend:3050
    restart: always

```

No forwarded ports. Forward a port to access your locally running services over the internet.

```
Log in to EAS with email or username (exit and run 'npx expo log
in --help' for other login options)
? Email or username › An Expo user account is required to procee
d.

Log in to EAS with email or username (exit and run 'npx expo log
in --help' for other login options)
? Email or username › 
```

5. Above services, press the “run all services button”

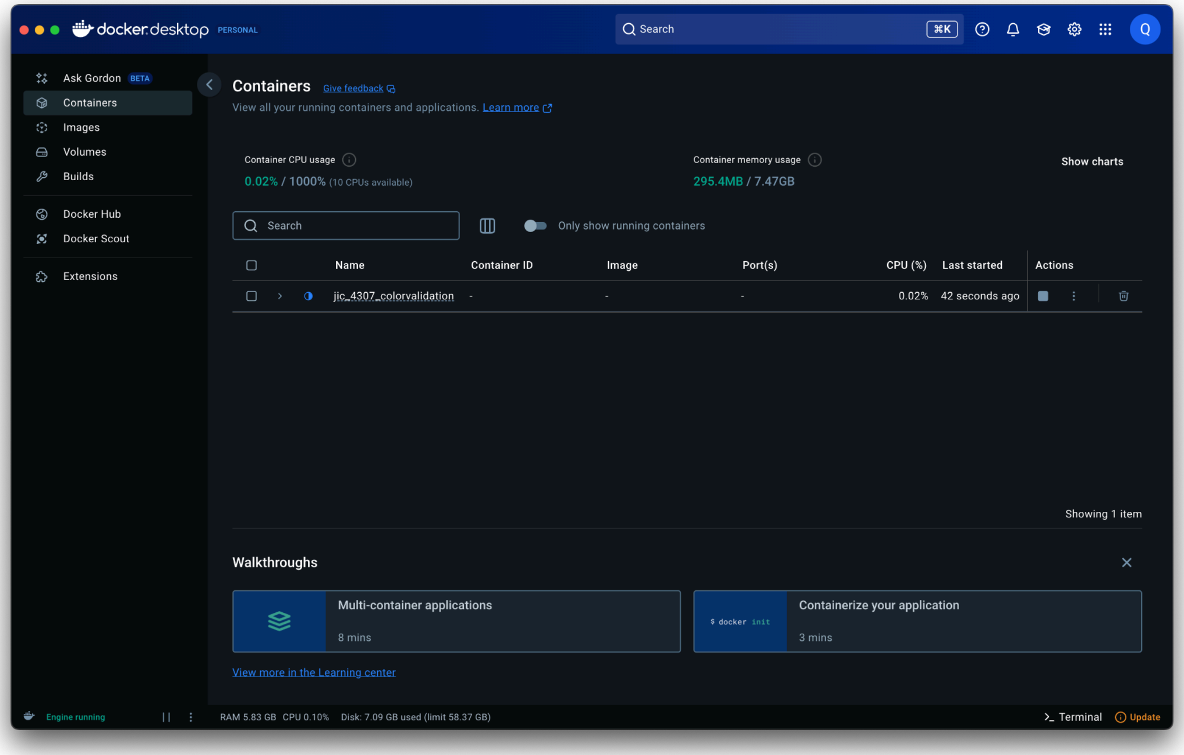


```
version: "3.8"

services:
  backend:
    build: ./backend
    ports:
      - "3050:3050"
    volumes:
      - ./backend:/server
    environment:
      - FLASK_ENV=production
    restart: always


  frontend:
    build: ./TrueHue
    ports:
      - "19000:19000"
      - "19001:19001"
      - "19002:19002"
    volumes:
      - ./TrueHue:/app
      - /app/node_modules
    depends_on:
      - backend
    environment:
      - REACT_NATIVE_PACKAGER_HOSTNAME=0.0.0.0
      - EXPO_DEVTOOLS_LISTEN_ADDRESS=0.0.0.0
      - EXPO_PUBLIC_API_URL=http://backend:3050
    restart: always

```

No forwarded ports. Forward a port to access your locally running services over the internet.

```
Log in to EAS with email or username (exit and run 'npx expo log
in --help' for other login options)
? Email or username › An Expo user account is required to procee
d.

Log in to EAS with email or username (exit and run 'npx expo log
in --help' for other login options)
? Email or username › 
```

6. Wait for everything to install
   You should have a new Docker Container



Containers

View all your running containers and applications. Learn more

Container CPU usage
0.02% / 1000% (10 CPUs available)

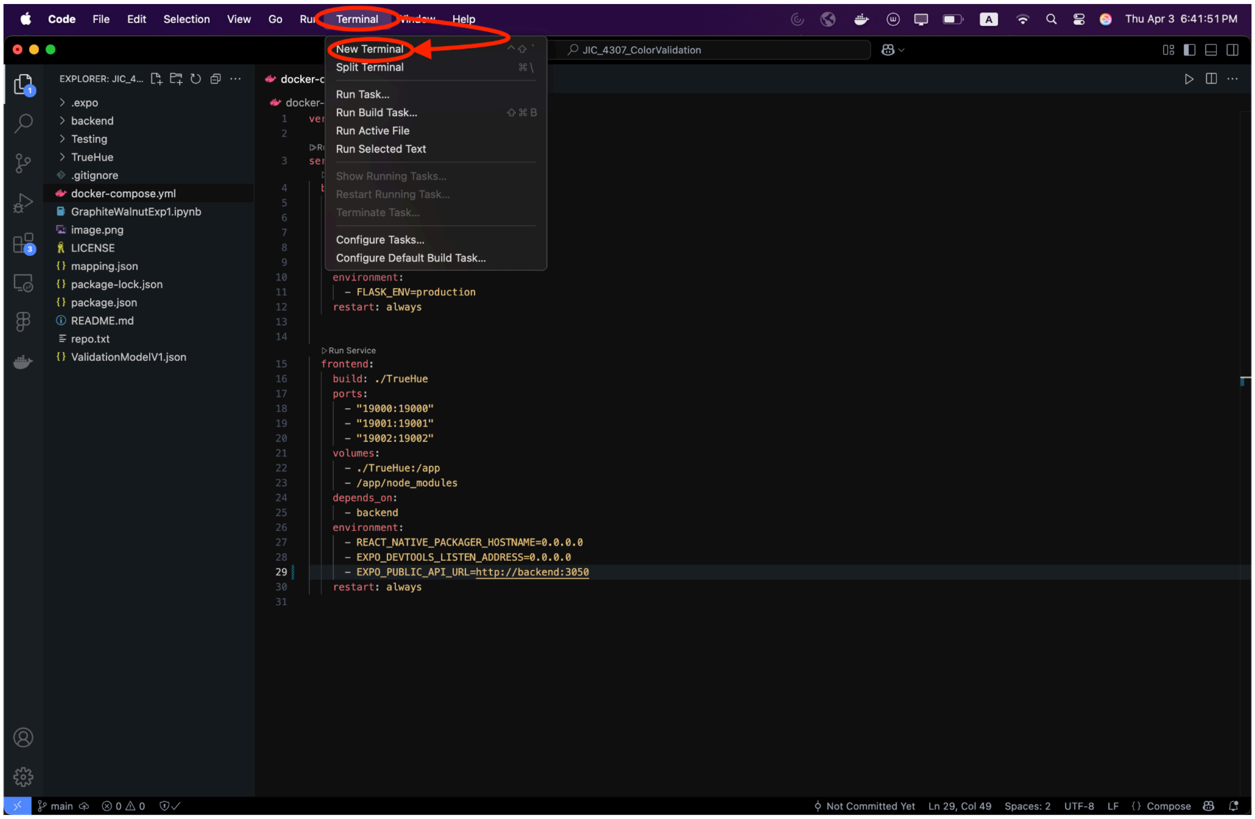
Container memory usage
295.4MB / 7.47GB

□			Name	Container ID	Image	Port(s)	CPU (%)	Last started	Actions
□	›	◑	jic_4307_colorvalidation	-	-	-	0.02%	42 seconds ago	■ ⋮ 🗑

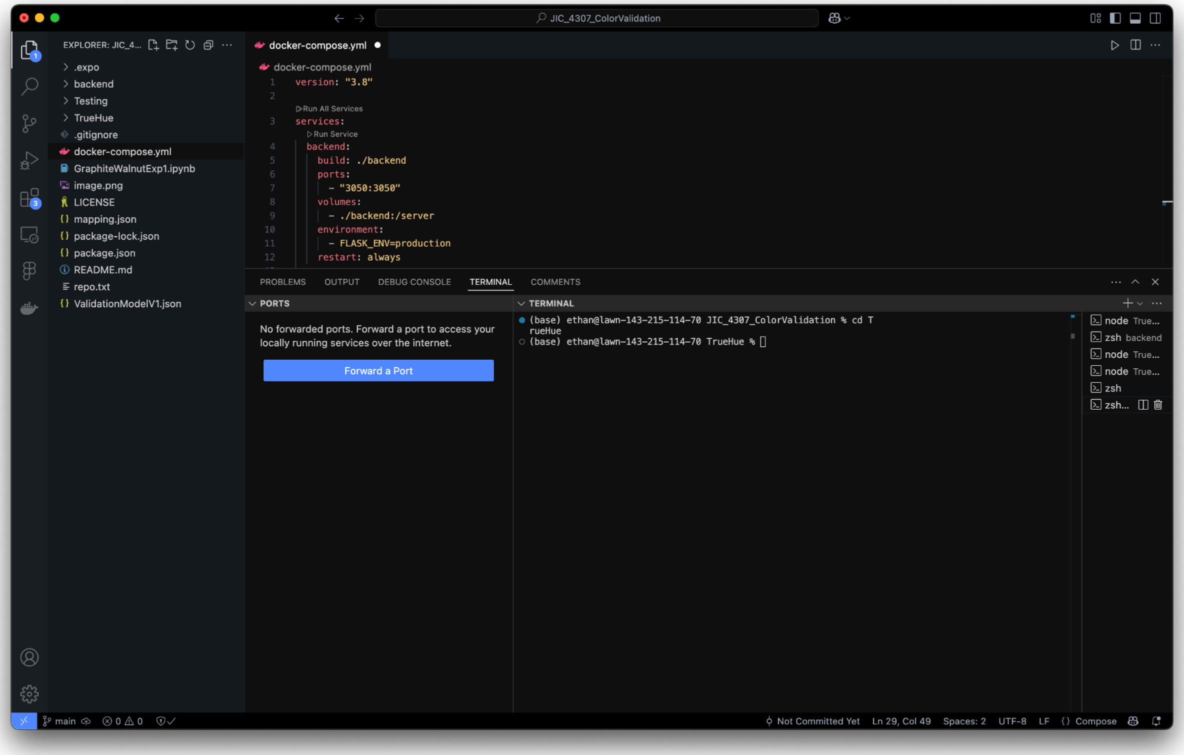
Showing 1 item

RAM 5.83 GB CPU 0.10% Disk: 7.09 GB used (limit 58.37 GB)

7. In the VSCode Terminal, navigate to the “TrueHue” folder using `cd TrueHue`



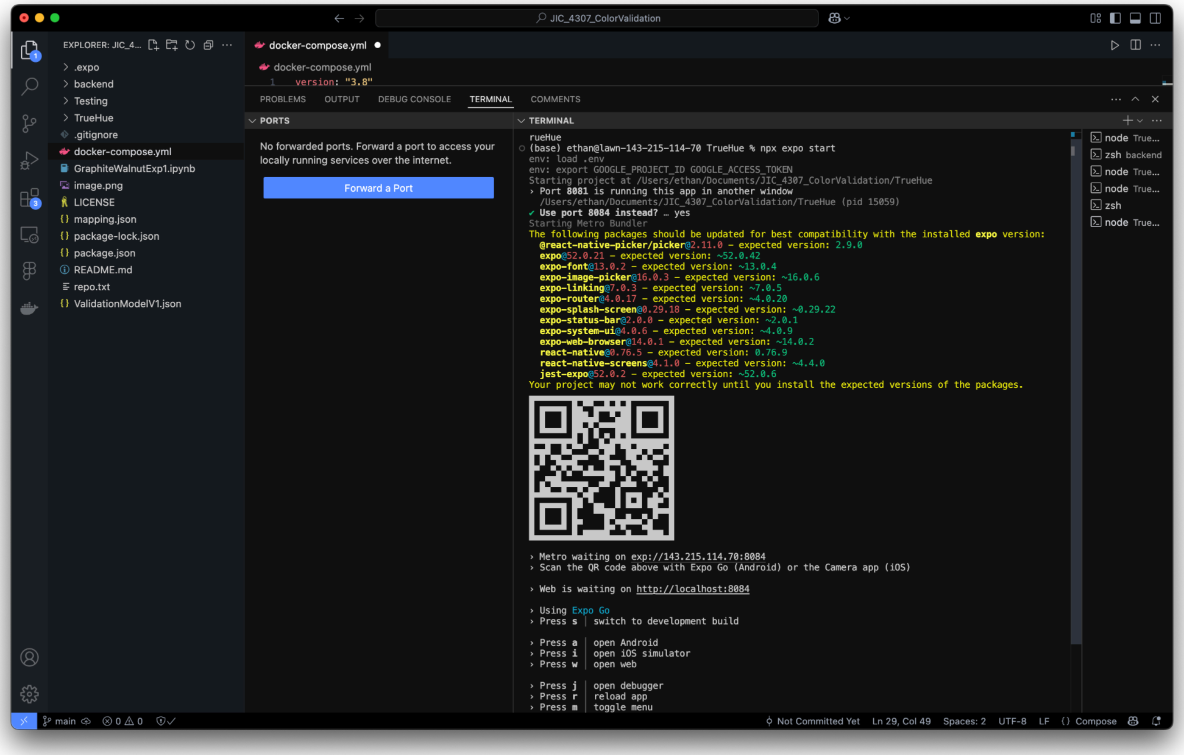
```
      environment:
        - FLASK_ENV=production
      restart: always


    frontend:
      build: ./TrueHue
      ports:
        - "19000:19000"
        - "19001:19001"
        - "19002:19002"
      volumes:
        - ./TrueHue:/app
        - /app/node_modules
      depends_on:
        - backend
      environment:
        - REACT_NATIVE_PACKAGER_HOSTNAME=0.0.0.0
        - EXPO_DEVTOOLS_LISTEN_ADDRESS=0.0.0.0
        - EXPO_PUBLIC_API_URL=http://backend:3050
      restart: always
```



```
version: "3.8"

services:
  backend:
    build: ./backend
    ports:
      - "3050:3050"
    volumes:
      - ./backend:/server
    environment:
      - FLASK_ENV=production
    restart: always
```

```
(base) ethan@lawn-143-215-114-70 JIC_4307_ColorValidation % cd T
rueHue
(base) ethan@lawn-143-215-114-70 TrueHue % 
```

8. Run `npm install`
9. In the terminal, enter `npx expo start`



```
1   version: "3.8"
```

No forwarded ports. Forward a port to access your locally running services over the internet.

```
rueHue
(base) ethan@lawn-143-215-114-70 TrueHue % npx expo start
env: load .env
env: export GOOGLE_PROJECT_ID GOOGLE_ACCESS_TOKEN
Starting project at /Users/ethan/Documents/JIC_4307_ColorValidation/TrueHue
› Port 8081 is running this app in another window
  /Users/ethan/Documents/JIC_4307_ColorValidation/TrueHue (pid 15059)
✓ Use port 8084 instead? … yes
Starting Metro Bundler
The following packages should be updated for best compatibility with the installed expo version:
  @react-native-picker/picker@2.11.0 - expected version: 2.9.0
  expo@52.0.21 - expected version: ~52.0.42
  expo-font@13.0.2 - expected version: ~13.0.4
  expo-image-picker@16.0.3 - expected version: ~16.0.6
  expo-linking@7.0.3 - expected version: ~7.0.5
  expo-router@4.0.17 - expected version: ~4.0.20
  expo-splash-screen@0.29.18 - expected version: ~0.29.22
  expo-status-bar@2.0.0 - expected version: ~2.0.1
  expo-system-ui@4.0.6 - expected version: ~4.0.9
  expo-web-browser@14.0.1 - expected version: ~14.0.2
  react-native@0.76.5 - expected version: 0.76.9
  react-native-screens@4.1.0 - expected version: ~4.4.0
  jest-expo@52.0.2 - expected version: ~52.0.6
Your project may not work correctly until you install the expected versions of the packages.

› Metro waiting on exp://143.215.114.70:8084
› Scan the QR code above with Expo Go (Android) or the Camera app (iOS)

› Web is waiting on http://localhost:8084

› Using Expo Go
› Press s │ switch to development build

› Press a │ open Android
› Press i │ open iOS simulator
› Press w │ open web

› Press j │ open debugger
› Press r │ reload app
› Press m │ toggle menu
```

10. Run on your browser (w), iOS simulator (i), android simulator (a), or scan the QR code to run in the Expo App