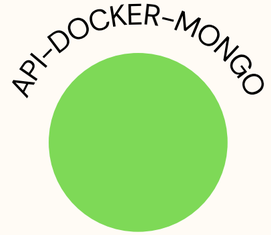
Securely Package and Deploy your APIs with Docker and Docker Compose.

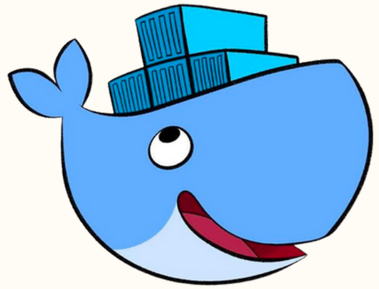
Talk by
Pradumna Saraf



Who am I?

Pradumna Saraf

- DevOps and Go Developer
- Open Source Evangliasm
- Postman Student Leader
- Create Content



Why Docker?

WORKS ON MY MACHINE
38

Software Dependencies

Inconsistent Environment

Scalability

Isolation

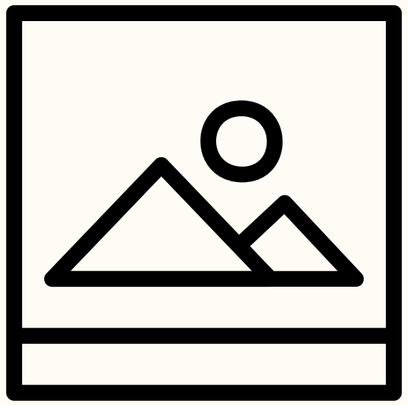
Security

Portability

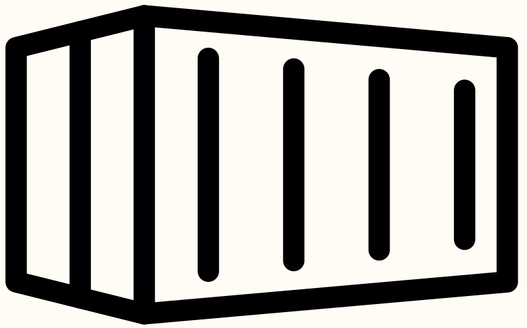
What specific problem does Docker solve?

Components

Dockerfile



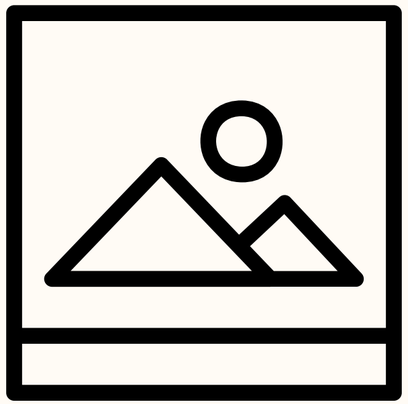
Docker Image



Container

Components

Dockerfile



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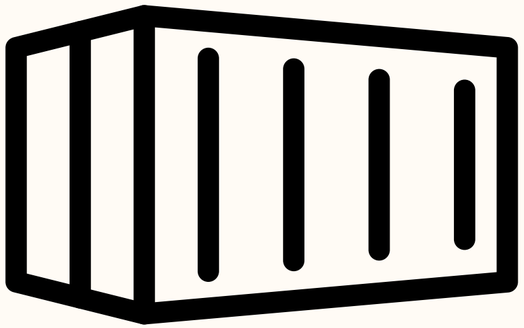
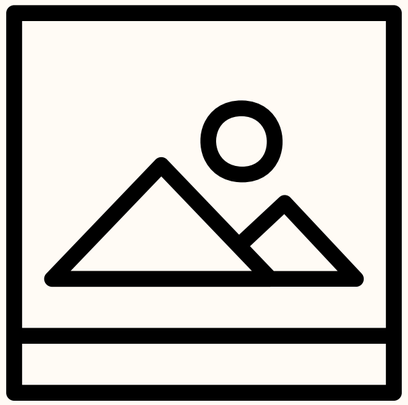


Container

```
FROM node:16-alpine
WORKDIR /app
COPY package.json ./
RUN npm install
COPY . .
EXPOSE 3000
CMD ["npm", "start"]
```

Components

Dockerfile



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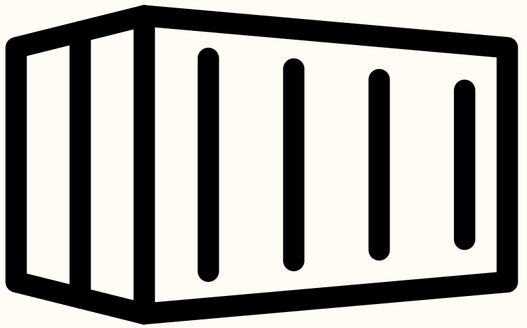
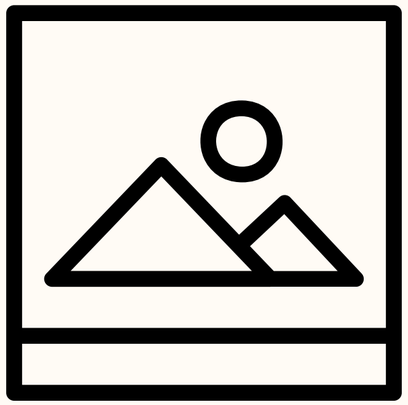


Container

Components

Dockerfile



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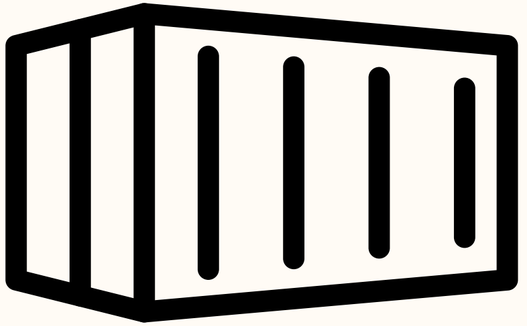
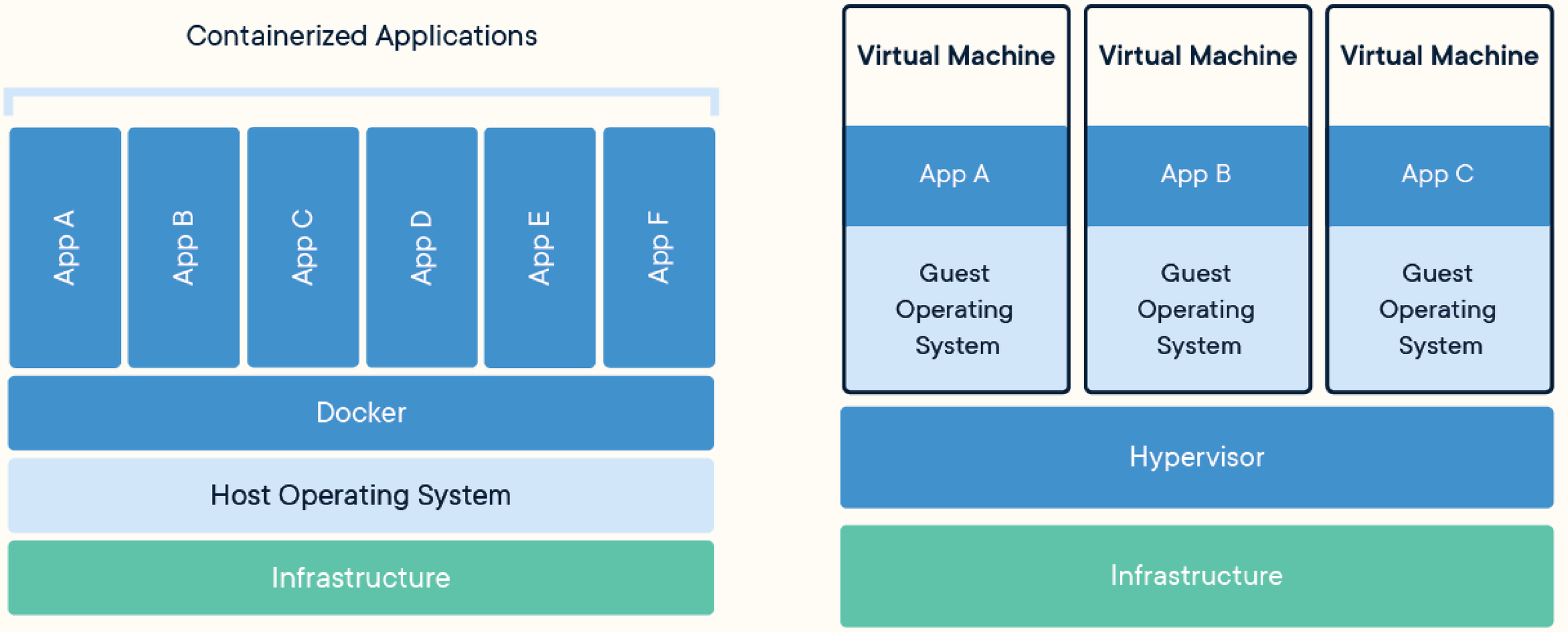
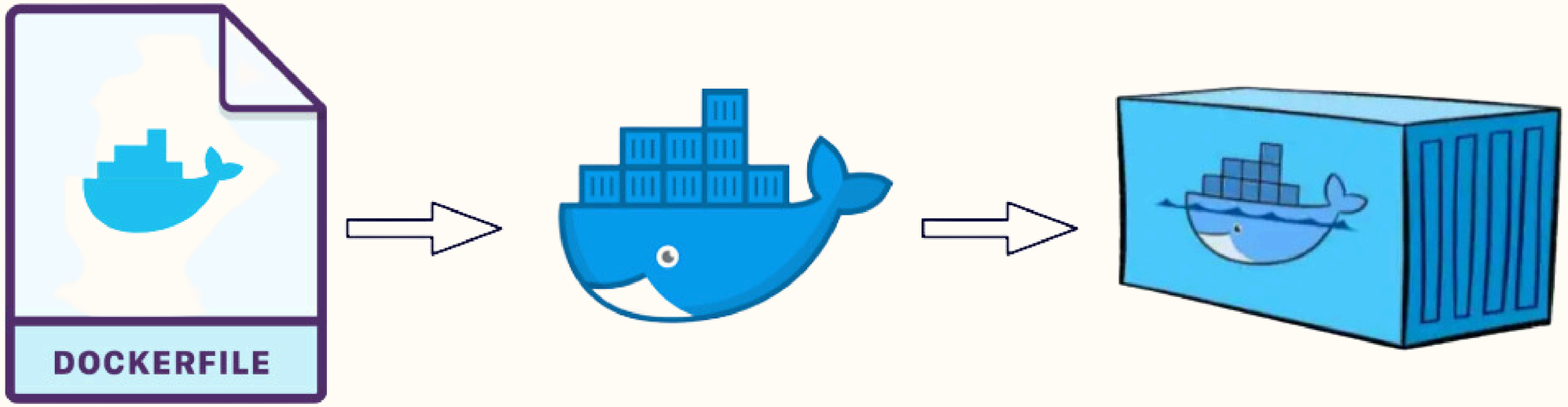


Container


Containerized Applications
App A
App B
App C
App D
App E
App F
Docker
Host Operating System
Infrastructure
Virtual Machine
App A
Guest Operating System
Virtual Machine
App B
Guest Operating System
Virtual Machine
App C
Guest Operating System
Hypervisor
Infrastructure

Process



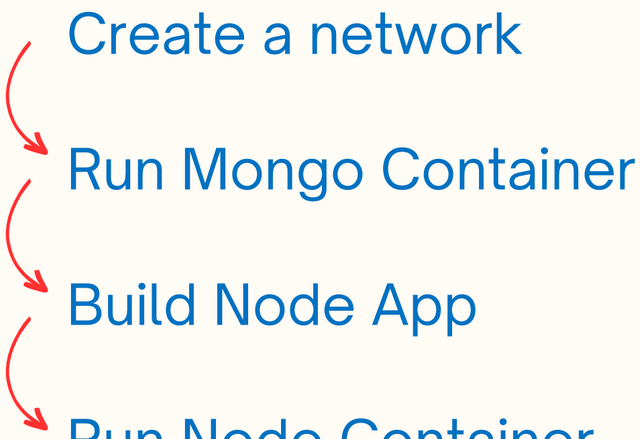
Docker file

Docker Image

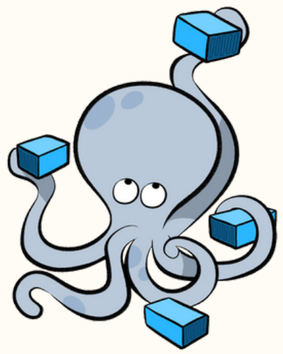
Docker Container

Let's see in action

Feel a little tedious and complex?

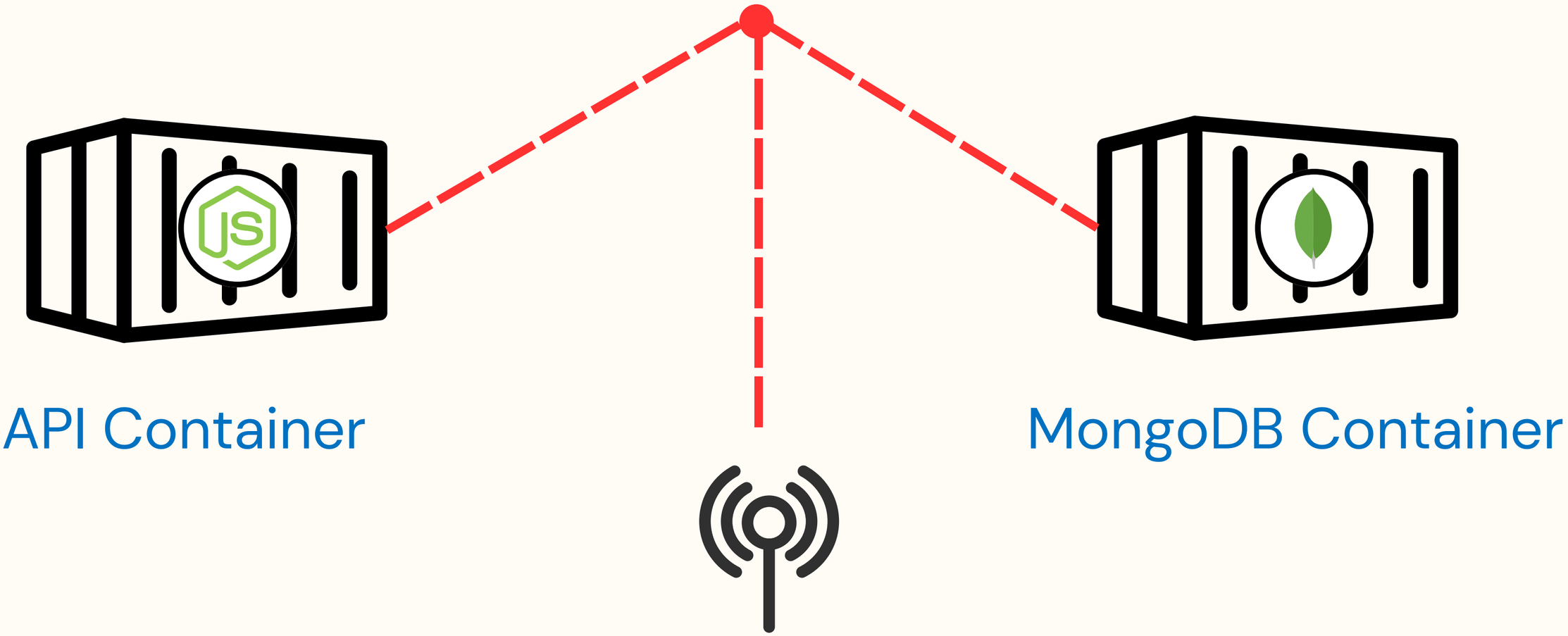


- Long commands
- Time-consuming
- Hard to replicate
- What about when we have 50 containers?
- Room for ERRORS



Docker Compose

Compose File



```yaml
version: "3.2"

services:
  node-app:
    container_name: node-app
    build: .
    image: node-docker-app
    ports:
      - 3000:3000
    environment:
      - MONGO_URL=mongodb://mongodb:27017/myapp

  mongo:
    container_name: mongodb
    image: mongo:5.0
```

Let's see in action

Connect With Me

Pradumna Saraf