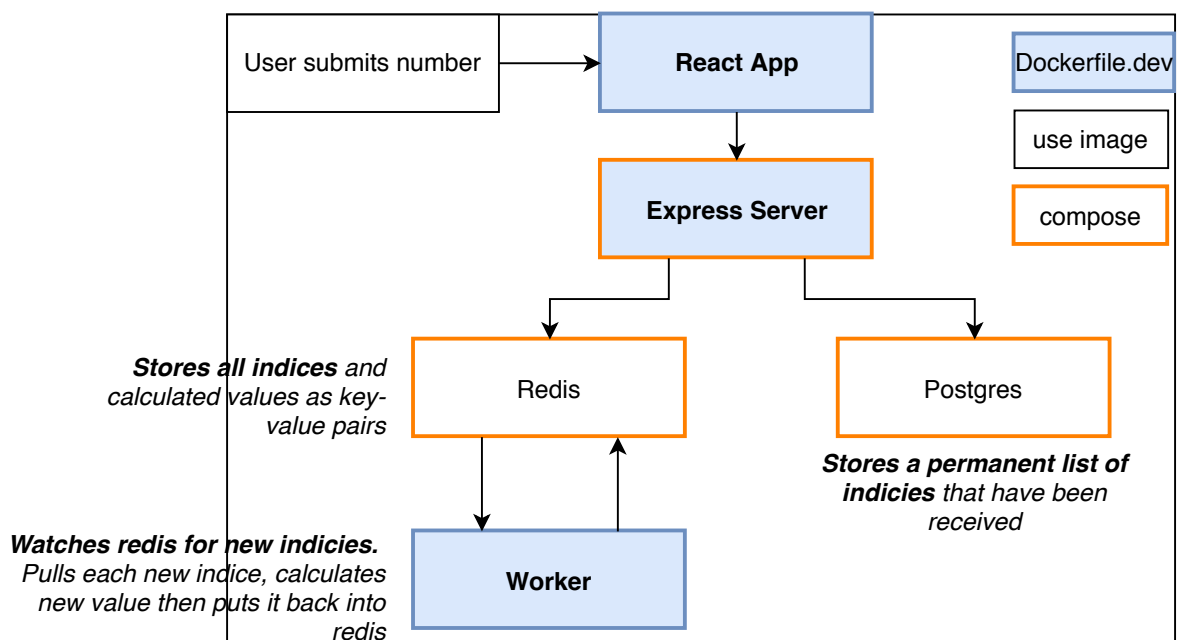
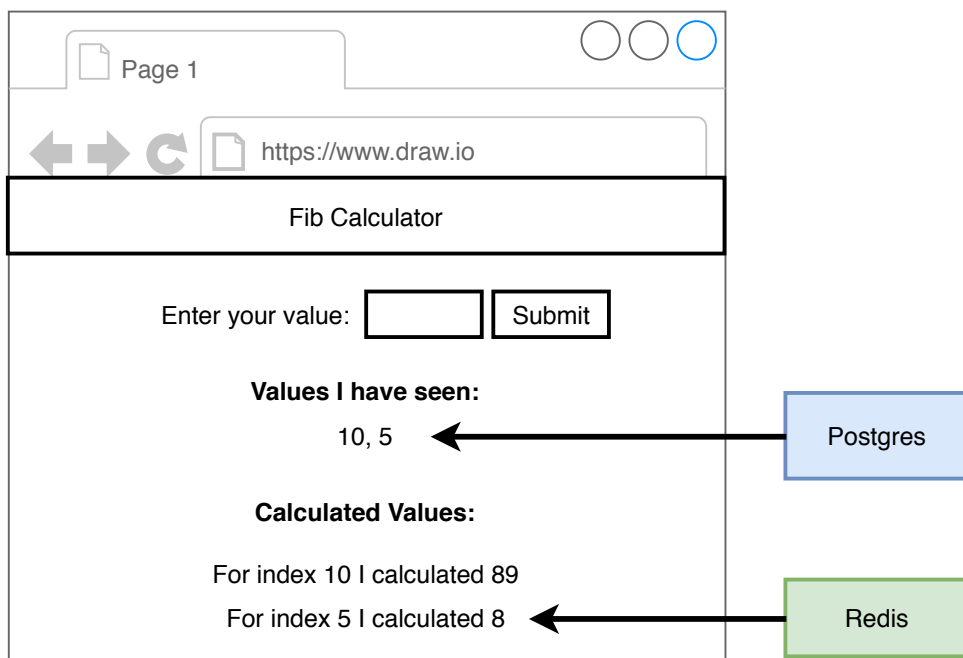
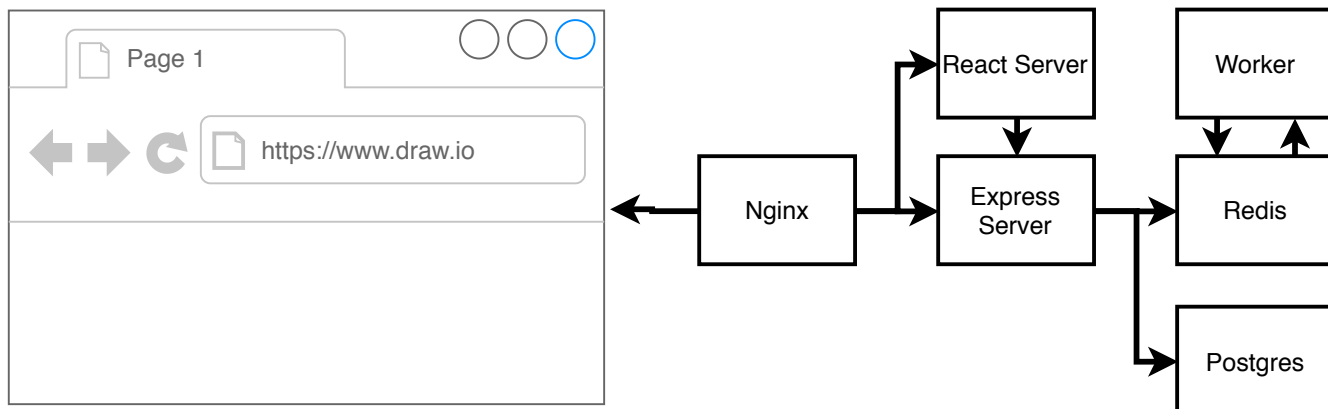


Docker for Multi Container Application

Multi Container Development Architecture



Docker-compose.yml

postgres

What image to use?

redis

What image to use?

server(express : api)

- Specify build
- Specify volumes
- Specify env variables

nginx

- Route a client request
- Specify build
- Ports setting
- depends_on

worker

- Calculate numbers
- Specify build
- Specify volumes

client

- send user request
- Specify build
- Specify volumes

version: '3'

services:

postgres:

image: 'postgres:latest'

redis:

image: 'redis:latest'

api:

build:

dockerfile: Dockerfile.dev
context: ../server

volumes:

- /app/node_modules
- ../server:/app

depends_on:

- postgres

environment:

- REDIS_HOST=redis
- REDIS_PORT=6379
- PGUSER=postgres
- PGHOST=postgres
- PGDATABASE=postgres
- PGPASSWORD=postgres_password
- PGPORT=5432

nginx:

restart: always

build:

dockerfile: Dockerfile.dev
context: ../nginx

ports:

- '3050:80'

depends_on:

- api
- client

worker:

build:

dockerfile: Dockerfile.dev
context: ../worker

volumes:

- /app/node_modules
- ../worker:/app

environment:

- REDIS_HOST=redis
- REDIS_PORT=6379

client:

build:

dockerfile: Dockerfile.dev
context: ../client

volumes:

- /app/node_modules
- ../client:/app

Environment Variables

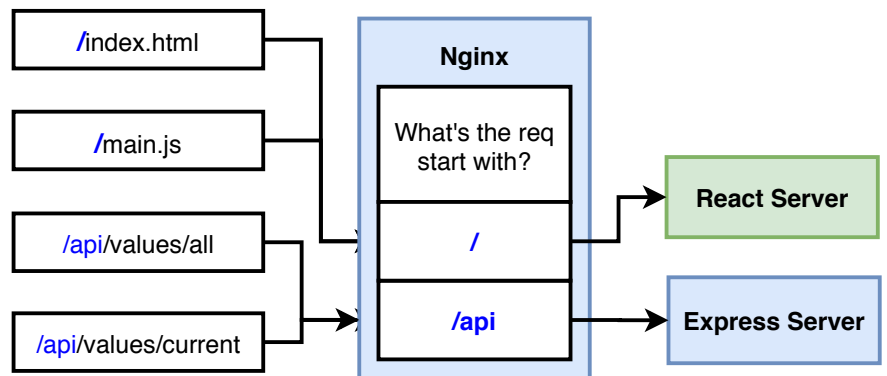
variableName=value

variableName

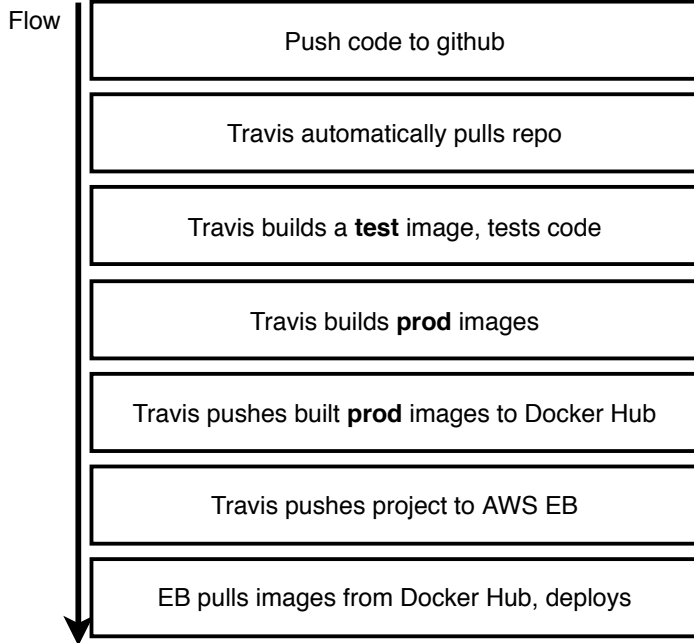
Sets a variable in the container at *run time*

Sets a variable in the container at *run time*

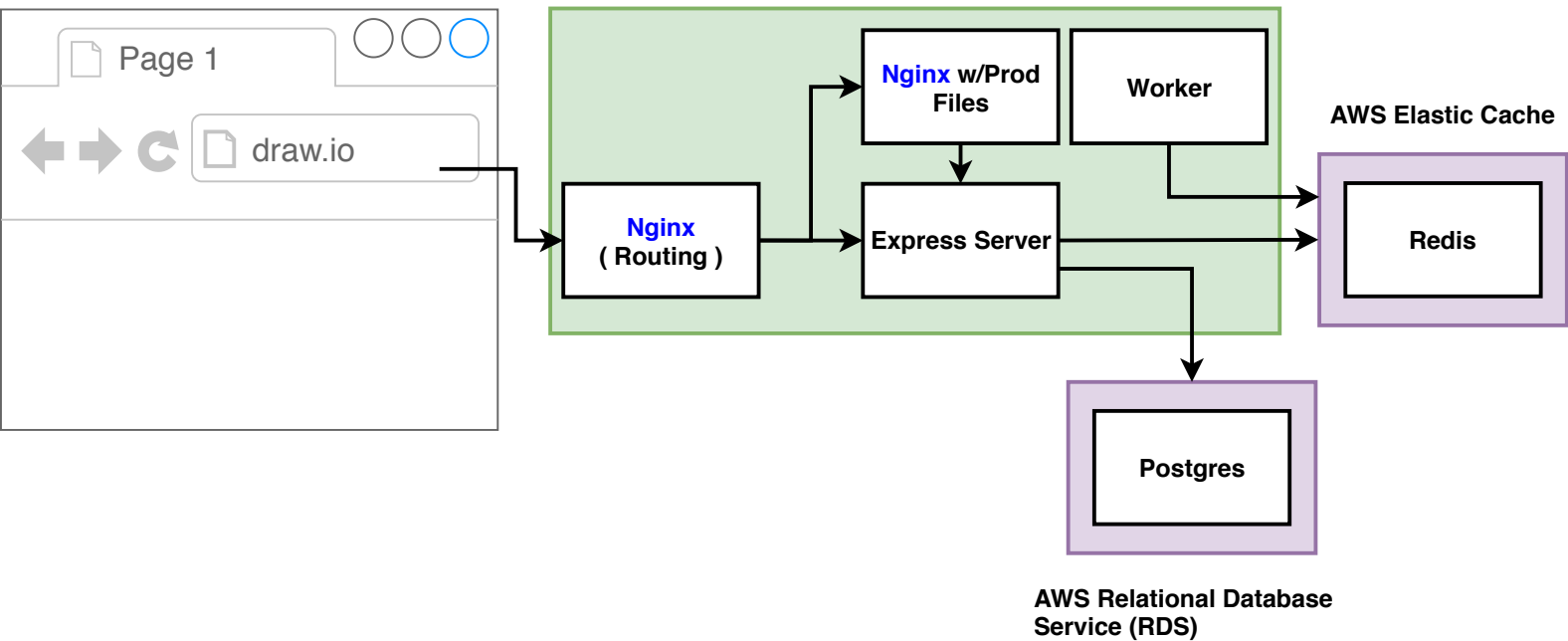
Value is taken from *your computer*



Multi Container Setup



Production



Travis Configuration (.travis.yml)

sudo: required

services:

- docker

before_install:

- **docker build -t jsmile/complex -f ./client/Dockerfile.dev**

script:

- **docker run jsmile/complex npm test -- --coverage**

after_success:

- **docker build jsmile/multi-client ./client**

- **docker build jsmile/multi-nginx ./nginx**

- **docker build jsmile/multi-server ./server**

- **docker build jsmile/multi-worker ./worker**

Login docker CLI

- **echo "\$DOCKER_PASSWORD" | docker login -u "\$DOCKER_ID" --password-stdin**

Login docker CLI

- **docker push jsmile/multi-client**

- **docker push jsmile/multi-nginx**

- **docker push jsmile/multi-server**

- **docker push jsmile/multi-worker**