

Add docker to the ruby project

Installation of docker in ubuntu

Prerequisites

- To install Docker Engine, you need the 64-bit version of one of these Ubuntu versions:

We installed the docker using the repository. Before you install Docker Engine for the first time on a new host machine, you need to set up the Docker repository. Afterward, you can install and update Docker from the repository.

Set up the repository

1. Update the apt package index and install packages to allow apt to use a repository over HTTPS:

```
sudo apt-get update
sudo apt-get install \
    ca-certificates \
    curl \
    gnupg \
    lsb-release
```

2. Add Docker's official GPG key:

```
sudo mkdir -p /etc/apt/keyrings
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /etc/apt/keyrings/docker.gpg
```

3. Use the following command to set up the repository:

```
echo \
"deb [arch=$(dpkg --print-architecture) signed-
by=/etc/apt/keyrings/docker.gpg] \
https://download.docker.com/linux/ubuntu\
$(lsb_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list >
/dev/null
```

Install Docker Engine

1. Update the apt package index, and install the latest version of Docker Engine, containerd, and Docker Compose, or go to the next step to install a specific version:

```
sudo apt-get update
sudo apt-get install docker-ce docker-ce-cli containerd.io docker-compose-
plugin
```

2. Check Docker Engine is installed correctly by running the:

```
sudo service docker start
sudo service docker status
```

Install Docker Compose

1. Update the apt package index, and install the latest version of Docker Compose:

```
sudo apt-get update
sudo apt-get install docker-compose-plugin
```

2. Verify that Docker Compose is installed correctly by checking the version.

```
docker compose version
```

Setup files in rails project

1. Create a 'Dockerfile' in the root directory and add following commands -

```
FROM ruby:2.6.1
RUN apt-get update -qq && apt-get install curl -yq && \
    curl -sL https://deb.nodesource.com/setup_10.x | bash && \
    apt-get install -y nodejs && \
    gem install bundler && \
    apt-get install -y build-essential libpq-dev mysql-server mysql-client
default-libmysqlclient-dev && \
    gem install rails -v 5.2.1

WORKDIR /app
COPY ./Gemfile* ./

RUN bundle install
RUN rails db:migrate
CMD ["bundle", "exec", "rails", "server", "-p", "3000", "-b", "0.0.0.0"]
```

2. Create a 'docker-compose.yml' in the root directory and add following commands -

```
version: '3'
services:
  web:
    build: .
    volumes:
      - ./:/app
    ports:
      - "3000:3000"
```

3. Now to start the server run

```
docker compose build #Builds project images.
docker compose up #Boots up the app.
```