



The Docker Development Template for PHP



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A young boy in a flight suit and helmet is looking out from a cockpit window at night. The city lights below are visible through the window.

Developer's Dream

<https://www.justwatch.com/de/Film/Der-Flug-des-Navigators>

1. Get Code
2. Get Dependencies
3. Start the Engines





zend Expressive
(+ a little JS)



A scene from the movie Deadpool 2. On the left, Deadpool (Ryan Reynolds) is shown from the waist up, wearing his signature red and black suit with his hands clasped near his chin. On the right, Colossus (Michael Fassbender) is shown from the waist up, wearing his silver metal suit. They are standing outdoors with a bridge in the background.

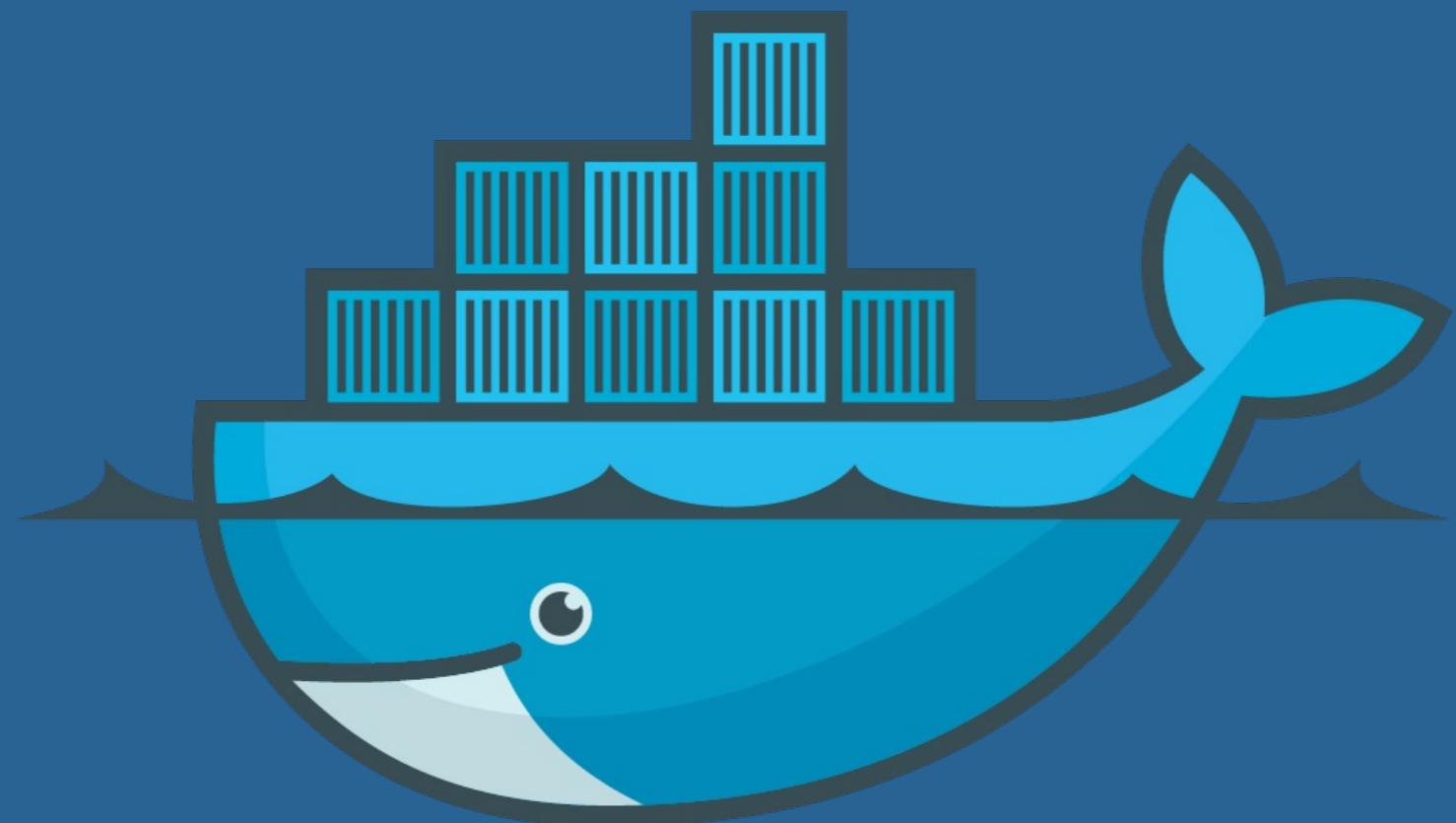
What has
happened?

My example project

particulum-mobile

<https://bitbucket.org/account/user/janatzendteam/projects/PAR>

What do I need?



docker

Docker ≠ VirtualBox



One Daemon

=

One Container

"In almost all cases, you should only run a single process in a single container. Decoupling applications into multiple containers makes it much easier to scale horizontally and reuse containers."

Docker Compose

"Compose is a tool for defining and running multi-container Docker applications."



Challenge

```
docker run -d -i -t -p 80:80 -p \  
3000:3000 -p 3001:3001 -p \  
2222:22 --name gsd alankent/gsd
```

```
docker run -it --name my-running-script  
\  
-v "$PWD":/usr/src/myapp \  
/bin/bash -c "cd /usr/src/myapp & npm start"
```

```
3000:3000 -p 3001:3001 -p \  
2222:22 --name gsd alankent/gsd
```

```
docker run -it --rm --name my-running-script  
\  
-v "$PWD":/usr/src/myapp \  
-w /usr/src/myapp php:7.0-cli \  
php your-script.php
```



Duct tape works anywhere.
Duct tape is magic and
should be worshipped.

Andy Weir, The Martian

docker-compose.yml
docker-compose-setup.yml
(.env)

<https://bitbucket.org/janatzendteam/particulum-mobile-master/src/masterbitbu/docker-compose.yml>

docker-compose:
helps me defining (dev)
infrastructure

A close-up, slightly blurred photograph of Ferris Bueller, played by Matthew Broderick. He is looking directly at the camera with a neutral expression. He has dark hair and is wearing a light-colored button-down shirt. The background is out of focus.

Makefile

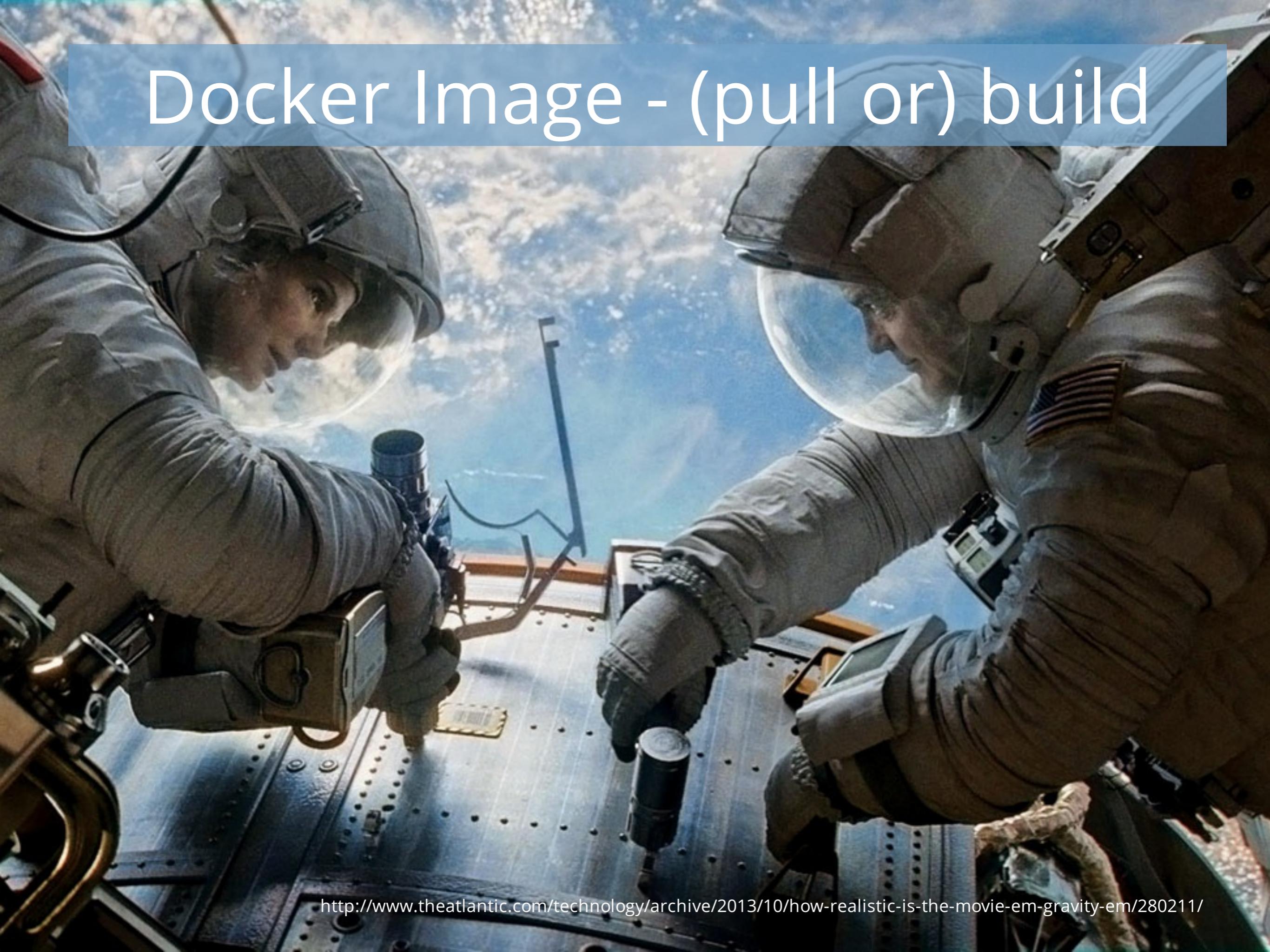
<https://bitbucket.org/janatzendteam/particulum-mobile-master/src/master/Makefile>

make:
helps me controlling the
infrastructure

Important Commands:

- make start
- make up
- make down
- make clean
- make build-dev

Docker Image - (pull or) build



- Docker Hub
- Private Docker Repository
- Local Dockerfile
- Remote Dockerfile



FAIL

- Missing Best Practices
- Docker Updates
- Docker Compose Updates
- Permissions
- Persistent Data

Permissions?

What's the problem?

- webserver writes files
- write access for www-data
- www-data not available on host
- use uid and gid of local user (#)

Database
or
Where to store my
persistent Data?

- Volumes
- map local dir to /var/lib/mysql

```
mysql:  
image: mysql:5.6  
volumes:  
  # mda = mysql_data_archive  
  - ./mda:/mda  
environment:  
  MYSQL_PASS: admin  
command: bash -c "cd / \  
  && tar xvf /mda/backup.tar \  
  && /run.sh"
```

A scene from the movie Guardians of the Galaxy. The characters Star-Lord (Peter Quill), Gamora, Drax, Groot, and Rocket Raccoon are standing in a dark, star-filled space. They are all looking upwards towards a bright, glowing light source that appears to be a planet or a star. The characters are dressed in their iconic costumes: Star-Lord in his flight suit, Gamora in her green suit, Drax in his orange vest, Groot in his tree-like form, and Rocket in his yellow suit.

Benefits

- no huge files to handle
- exchange images
- every step is documented
- no less networking issues

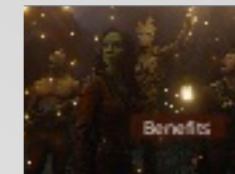
Danke schön

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<https://bitbucket.org/account/user/janatzendteam/projects/PAR>

<http://5square.de/talks/>



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docker-compose.yml
 docker-compose-setup.yml
 (**gitignore**)

• New legislation & environmental performance: the environmental dimension of climate & energy policy

make:
helps me controlling the
infrastructure

Journal of Health Politics, Policy and Law

- Docker Hub
- Private Docker Repository
- Local Dockerfile
- Dockerize Dockerfile

10.1002/anie.201907002

- Missing Best Practices
- Docker Updates
- Docker Compose Updates
- Permissions

Journal of Oral Rehabilitation 2006 33: 103–109

- no huge files to handle
- exchange images
- every step is documented
- no file networking issues

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`docker-compose`
helps me defining (dev)
infrastructure

- Important Commands
 - make start
 - make up
 - make down
 - make dean
 - make build-dev

Permissions? What's the problem?

Database

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```
my $all  
images = images($1,$2,$3,$4);  
$all = $all . "\n";  
for my $image (@{$images}) {  
    my ($name, $width, $height) = split(/ /, $image);  
    $all = $all . $name . " " . $width . "x" . $height . "\n";  
}  
print $all;
```