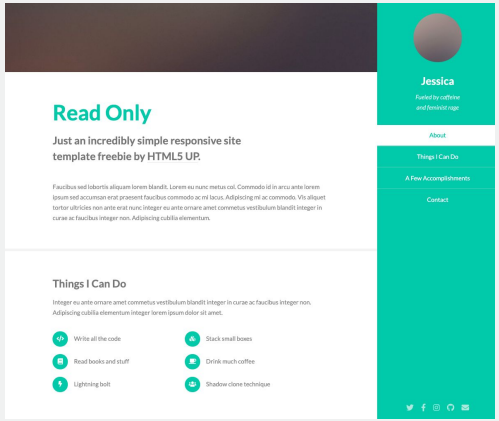
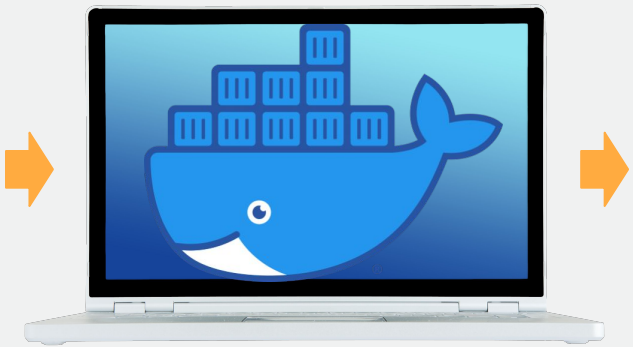
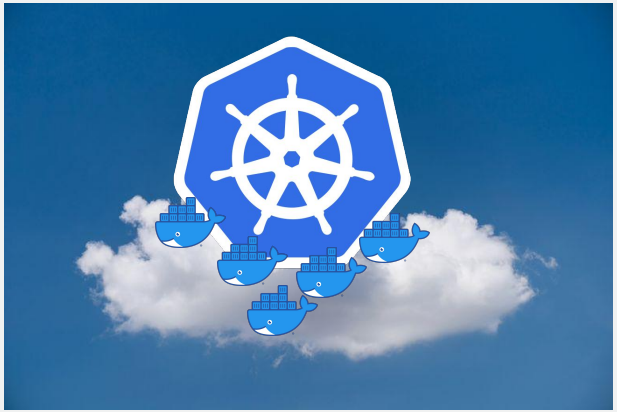
annotell.

Ship it!

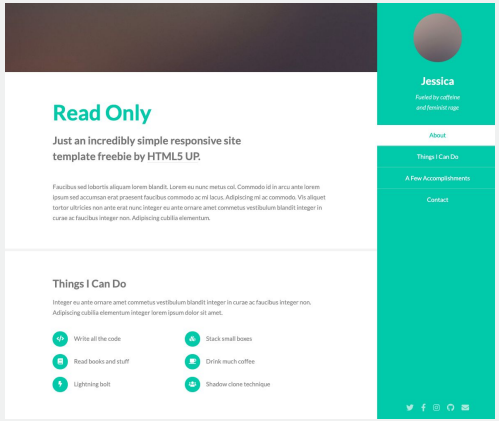
a workshop on how to package and deploy code by Annotell

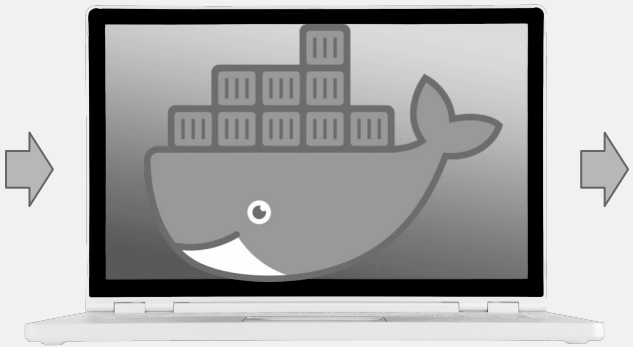

Jessica
Fueled by caffeine and feminist rage
About
Things I Can Do
A Few Accomplishments
Contact
Read Only
Just an incredibly simple responsive site template freebie by HTML5 UP.
Things I Can Do
Write all the code
Stack small boxes
Read books and stuff
Drink much coffee
Lightning bolt
Shadow clone technique

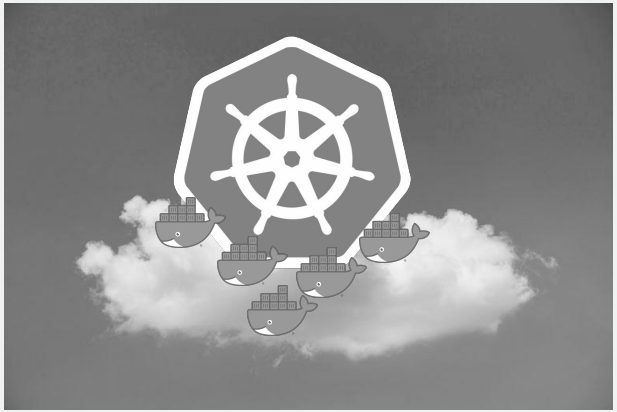




What is our code in this case?

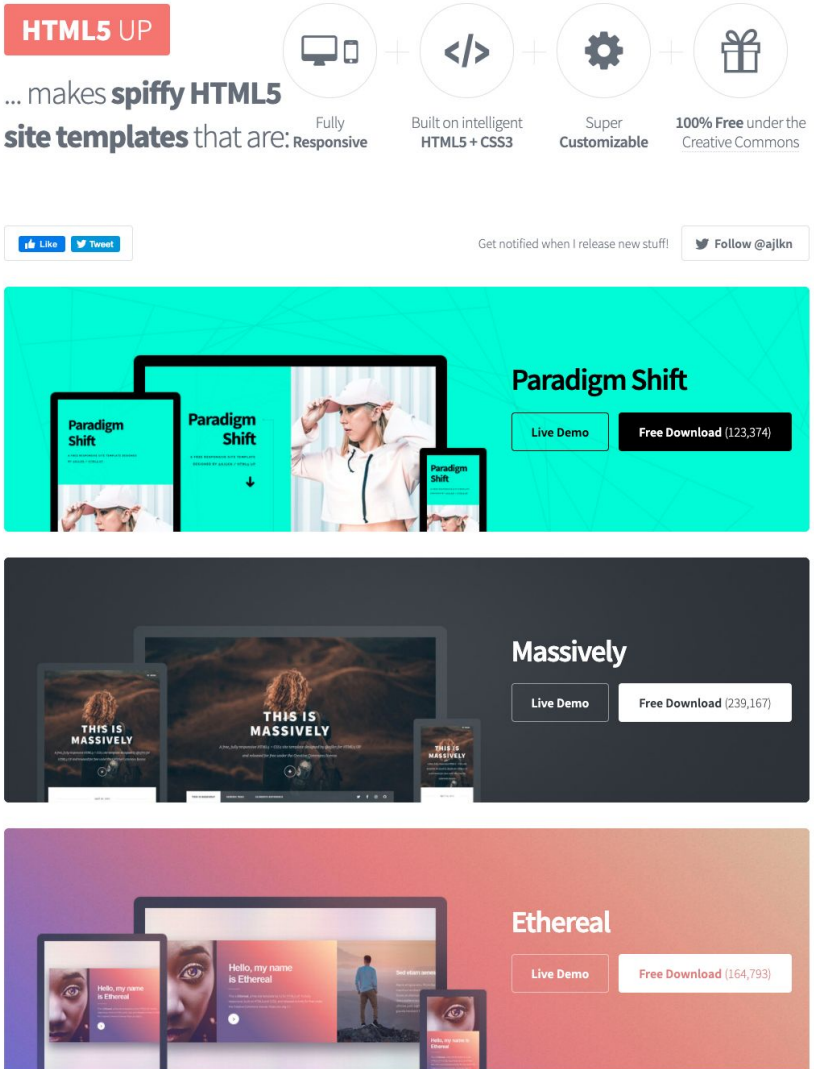


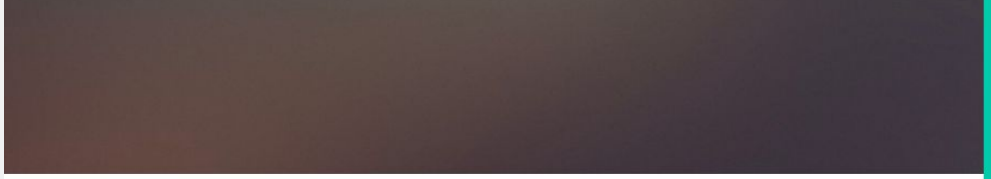




Our Code

- Static Webpage - https://html5up.net/
- This method could be applied to any sort of program





Read Only

Just an incredibly simple responsive site template freebie by HTML5 UP.

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Things I Can Do

Integer eu ante ornare amet commetus vestibulum blandit integer in curae ac faucibus integer non. Adipiscing cubilia elementum integer lorem ipsum dolor sit amet.

- Write all the code
- Stack small boxes
- Read books and stuff
- Drink much coffee
- Lightning bolt
- Shadow clone technique

Jessica

Fueled by caffeine and feminist rage

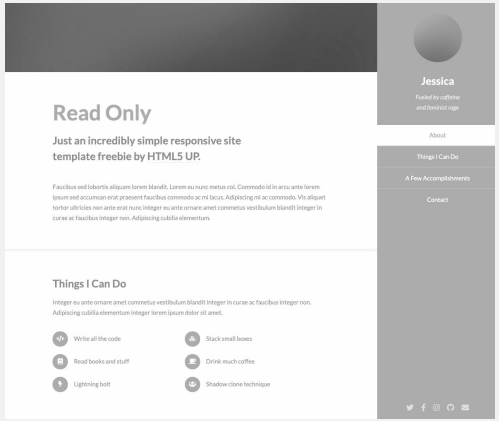
Speaker notes for previous slide

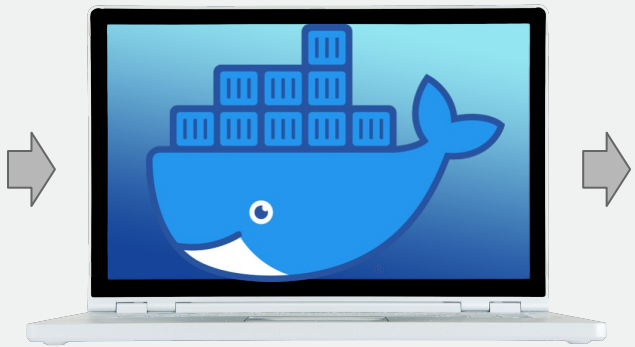
We would like to know that the code will **behave in a similar way** when we **deploy it to production**, as it does on our computer. But right now we're looking at a **file on my laptop**! And that file **references images** also on my laptop. How can I be sure that all parts will be **available and work in a similar way** once I'm ready to **deploy to production**?

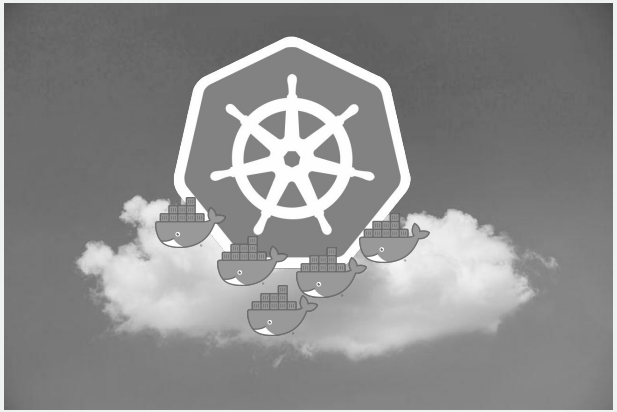
CONCLUSION: **We'd like to package our code in some way**

Show off in the browser

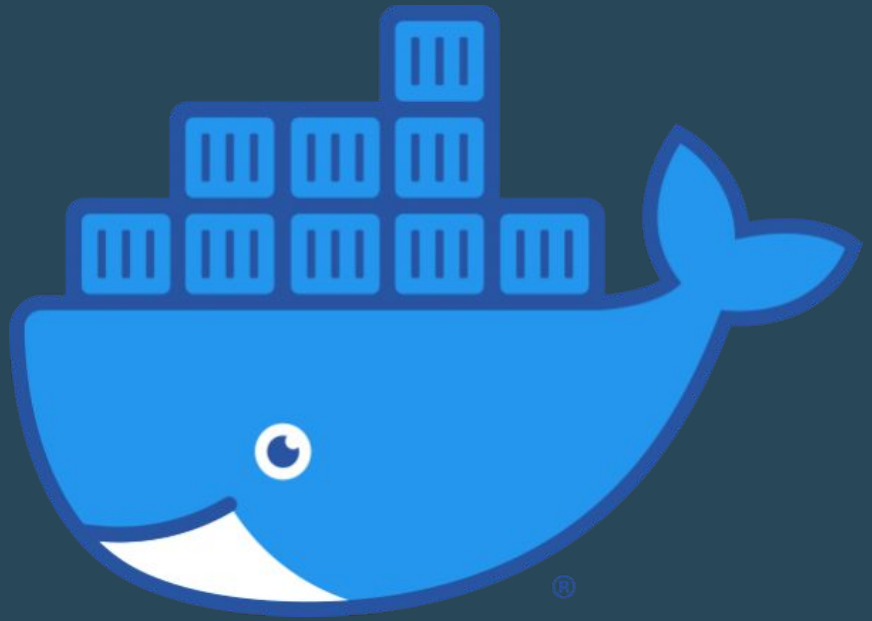
What do we mean when we say “package our code”?







Why containers?



Some pros with containers

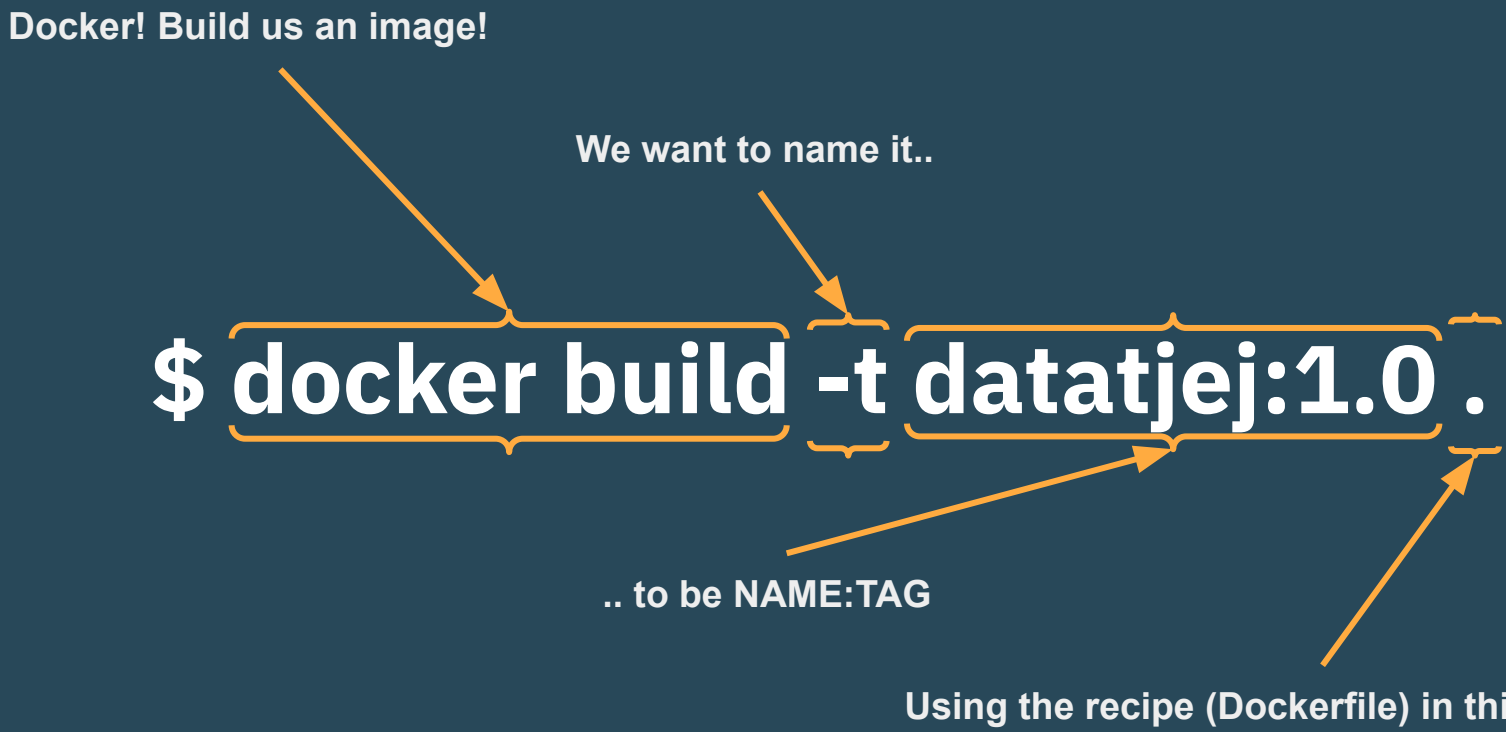
- Works on my machine == works on your machine == works in production
- Isolated environments for each application
- Many different types of workloads can run on every ship (worker node)

How does it work?

dockerfile


ship-it > Dockerfile > ...
1 FROM nginx:alpine
2 ADD src /usr/share/nginx/html
3

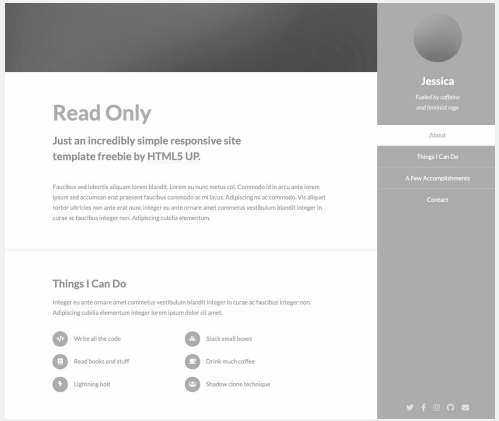
```
$ docker build -t datatjej:1.0 .
```

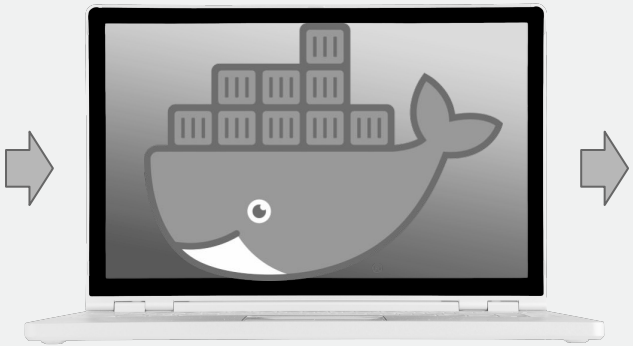

Docker! Build us an image!
We want to name it..
$ docker build -t datatjej:1.0 .
.. to be NAME:TAG
Using the recipe (Dockerfile) in this folder

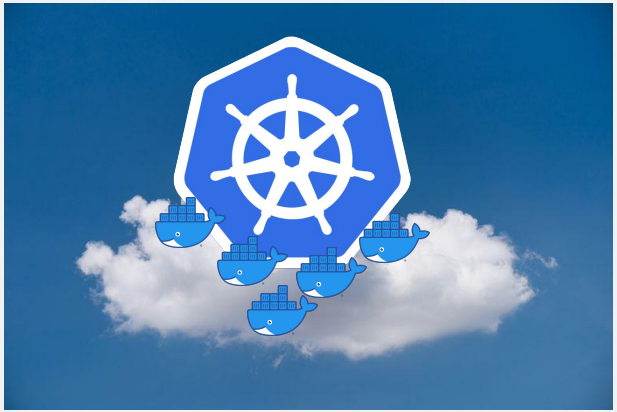
```
$ docker build -t datatjej:1.0 .
Sending build context to Docker daemon  3.235MB
Step 1/2 : FROM nginx:alpine
alpine: Pulling from library/nginx
ba3557a56b15: Pull complete
1a18b9f93d41: Pull complete
38ceab6c6432: Pull complete
6104f3bd82cc: Pull complete
750e0e12d70c: Pull complete
d7c38a871210: Pull complete
Digest: sha256:14536d83ca3128923ee7c2f7f4f285e023abd40f3ccdc8911f56cd4119558506
Status: Downloaded newer image for nginx:alpine
 ---> eb9291454164
Step 2/2 : ADD src /usr/share/nginx/html
 ---> 2452fe5bb82c
Successfully built 2452fe5bb82c
Successfully tagged datatjej:1.0
```

Okay, so we have a container, now what?

What do we mean when we say “package our code”?

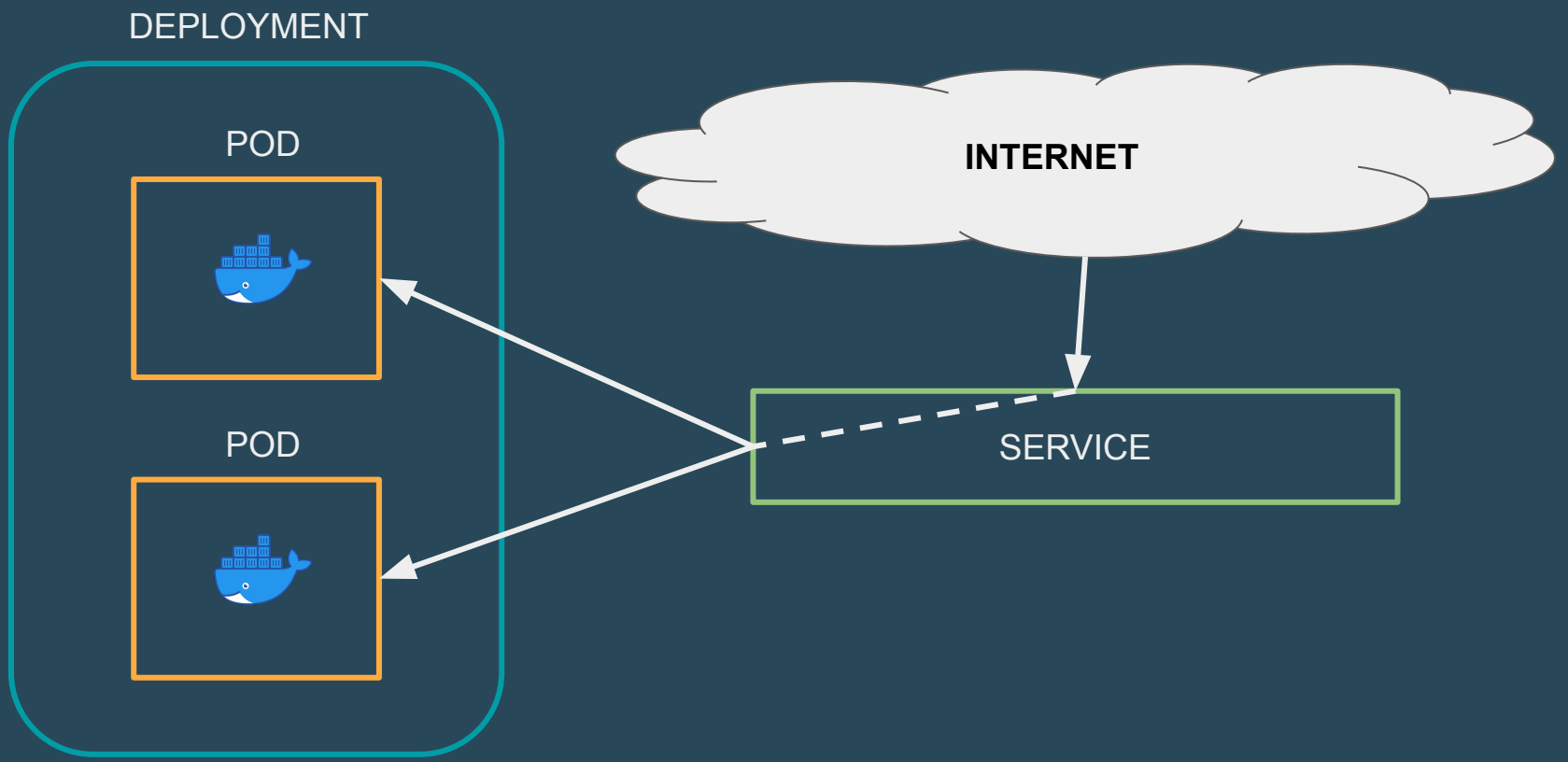






How can a production env for containers look?

Okay, cool!
How do I tell Kubernetes to run my application?


DEPLOYMENT
POD
POD
INTERNET
SERVICE

Minikube vs kubernetes
local vs cloud

Questions?