

## 第 6 章课程辅助资料

为了便于大家更好地理解课程中的知识，学院教研组配套整理了课程所需的辅助资料，供大家参考使用。

### 1. 指令包

```
# 启动 Docker
ls
- expect to see 2 files: Dockerfile, content.txt
cat content.txt
=====
<div>
<h3>My Book List</h3>
<ul>
  <li><a href="#">Die Hard</a></li>
  <li><a href="#">Secret</a></li>
  <li><a href="#">Html 101</a></li>
  <li><a href="#">Kubernetes 202</a></li>
  <li><a href="#">AWS 303</a></li>
</ul>
</div>
=====

cat Dockerfile
=====
FROM alpine:3.17
ARG whoami
ENV db_user=none
WORKDIR /var/www/localhost/htdocs
RUN apk --update add apache2
RUN rm -rf /var/cache/apk/*
RUN echo "<h3>I'm ${whoami}, and I'm building my first Docker Image 1<h3>" >>
index.html
RUN echo "<h3>I'm ${whoami}, and I'm building my first Docker Image 2<h3>" >>
index.html
RUN echo "<h3>I'm ${whoami}, and I'm building my first Docker Image 3<h3>" >>
index.html
COPY ./content.txt ./
RUN cat ./content.txt >> index.html
ENTRYPOINT ["httpd","-D","FOREGROUND"]
=====
```

```
# 展示 docker container 的硬盘空间是会消失的
docker build -t apache-image-001 .
docker images
docker run -d --name apache-c001 -p 8091:80 apache-image-001
docker container ls
docker exec -it apache-c001 /bin/sh
/ # ls
/ # cat index.html
/ # echo "I was born in 2001." >> index.html
/ # cat index.html
/ # exit
docker container ls
http://localhost:8091
```

```
docker stop apache-c001
docker rm apache-c001
docker container ls -a
docker run -d --name apache-c001 -p 8091:80 apache-image-001
docker container ls
http://localhost:8091
```

```
# 使用自己建立的 Docker Volume 保存首页资讯
docker volume ls
docker volume create v001
docker volume ls
docker volume inspect v001
- expect to see: Linux folder path
docker run -d --name apache-c002 -p 8092:80 -v v001:/var/www/localhost/htdocs apache-
image-001
docker container ls
http://localhost:8092
```

```
docker container ls
docker exec -it apache-c002 /bin/sh
/ # ls
/ # cat index.html
/ # echo "I was born in 2002." >> index.html
/ # cat index.html
/ # exit
```

```
http://localhost:8092
```

```
docker container ls
docker stop apache-c002
docker rm apache-c002
docker container ls
docker run -d --name apache-c002 -p 8092:80 -v v001:/var/www/localhost/htdocs apache-
image-001
docker container ls
http://localhost:8092
```

# 使用自动建立的 Docker Volume 保存首页资讯

```
docker run -d --name apache-c003 -p 8093:80 -v /var/www/localhost/htdocs apache-
image-001
docker container ls
docker volume ls
docker volume inspect [volume_id]
```

```
docker exec -it apache-c003 /bin/sh
/ # ls
/ # cat index.html
/ # echo "I was born in 2003." >> index.html
/ # cat index.html
/ # exit
docker container ls
http://localhost:8093
```

```
docker stop apache-c003
docker rm apache-c003
docker container ls
docker volume ls
docker run -d --name apache-c003 -p 8093:80 -v [volume_id]:/var/www/localhost/htdocs
apache-image-001
docker container ls
http://localhost:8093
```

# 强制清理三指令

```
docker stop $(docker container ls -a -q)
docker rm $(docker container ls -a -q)
docker rmi -f $(docker images -q)
```

# 清理

```
docker volume ls
docker volume remove v001
```

```
docker volume remove [vol_id]
docker volume ls
```

# 使用 Host 本身目录作为来源硬盘空间

```
mkdir my-home-page
```

```
touch my-home-page/index.html
```

```
=====
```

```
<html><body><h1>It works!</h1></body></html>
<h3>I'm , and I'm building my first Docker Image 1</h3>
<h3>I'm , and I'm building my first Docker Image 2</h3>
<h3>I'm , and I'm building my first Docker Image 3</h3>
<div>
<h3>My Language List</h3>
<ul>
  <li><a href="#">Chinese</a></li>
  <li><a href="#">English</a></li>
</ul>
</div>
=====
```

```
cat my-home-page/index.html
```

```
pwd
```

```
docker run -d --name apache-c004 -p 8094:80 -v /Users/stsai/docker-deepblue-dockerfile-
volume/my-home-page:/var/www/localhost/htdocs apache-image-001
```

```
docker container ls
```

```
docker container inspect apache-c004
```

```
http://localhost:8094
```

```
=====
```

```
<html><body><h1>It works!</h1></body></html>
<h3>I'm , and I'm building my first Docker Image 1</h3>
<h3>I'm , and I'm building my first Docker Image 2</h3>
<h3>I'm , and I'm building my first Docker Image 3</h3>
<div>
<h3>My Language List</h3>
<ul>
  <li><a href="#">Chinese</a></li>
  <li><a href="#">English</a></li>
  <li><a href="#">Russian</a></li>
  <li><a href="#">German</a></li>
</ul>
</div>
=====
```

<http://localhost:8094>

```
docker stop apache-c004
```

```
docker rm apache-c004
```

```
docker container ls
```

```
docker run -d --name apache-c004 -p 8094:80 -v /Users/stsai/docker-deepblue-dockerfile-  
volume/my-home-page:/var/www/localhost/htdocs apache-image-001
```

```
docker container ls
```

```
# 完成!
```