Multi-container pods provide an opportunity to enhance containers with helper containers that provide additional functionality. This lesson covers the basics of what multi-container pods are and how they are created. It also discusses the primary ways that containers can interact with each other within the same pod, as well as the three main multi-container pod design patterns: sidecar, ambassador, and adapter.

Be sure to check out the hands-on labs for this course (including the practice exam) to get some hands-on experience with implementing multi-container pods.

## **Relevant Documentation**

- https://kubernetes.io/docs/concepts/cluster-administration/logging/#using-a-sidecar-container-with-the-logging-agent
- https://kubernetes.io/docs/tasks/access-application-cluster/communicate-containers-same-pod-shared-volume/
- https://kubernetes.io/blog/2015/06/the-distributed-system-toolkit-patterns/

## **Lesson Reference**

Here is the YAML used to create a simple multi-container pod in the video:

```
apiVersion: v1
kind: Pod
metadata:
   name: multi-container-pod
spec:
   containers:
   - name: nginx
    image: nginx:1.15.8
   ports:
   - containerPort: 80
   - name: busybox-sidecar
   image: busybox
   command: ['sh', '-c', 'while true; do sleep 30; done;']
```