Please refer to tutorials and links in previous assignments. Here are some additional links that can help you with the technologies introduced in A3.

- Install the AWS CLI
- Add self-managed nodes to an EKS cluster
- Deploy a sample application - Amazon EKS
- Mounting an emptyDir K8S volume: https://cloud.google.com/kubernetes-engine/docs/how-to/volumes

Additional Tutorials:

- Explanation of K8S ingress and service.

Getting Started

In A3 you need to interact with K8S/EKS. There are three basic approaches to interact with this kind of infrastructure:

1) Using a command line interface (CLI). In this case, CLI tools are `kubectl` and `eksctl`.
2) Using a web console provided by the vendor of the container orchestration platform.
3) Creating scripts that use an Infrastructure as Code (IaC) tool, such as terraform and kustomize.

In these assignments, the recommended approach is (1). It takes some effort to learn the CLI arguments, but you can get help from your favorite LLM and also on Piazza if necessary.
As a suggestion, keep a journal on a text file with all the CLI commands you use to set up, validate, configure, and shutdown resources. Add comments so you know what each command is used for.

Submission

- For this project, you'll submit a zip file or git repo of the implementation artifacts (source code, Dockerfile, config files) to Gradescope. Ensure that your project directory contains only the necessary implementation files. Remove any unnecessary files or directories, such as "node_modules" for Node.js projects, build artifacts, and temporary files.
- The K8S yaml configuration files must be submitted along with the other implementation files.
- url.txt:
  - The file should contain four lines in the following format:

```
{base_url_web_app_bff}
{base_url_mobile_app_bff}
{andrew_id}
{email_address}
```