**Case Study**

In this task, you will need to create 2 services / Git Repositories, a backend and a frontend.

You can write code in any language. You just need to commit all the code and manifest in your own GitHub public repositories.

**Services**

1. **Backend:** API call that returns the current Hello ‘Name’. ‘Name’ should be set from an environment variable. E.g. If $NAME = Faran so it should print “Hello Faran”
2. **Frontend:** Calls the backend and prints the string returned from the backend and appends the date and time. E.g. it should print “01/01/2023 12:00 Hello Faran” when curled from the frontend service’s pod or if open in the browser.

Each git repo should contain:

* A **Dockerfile** for that service
* Kubernetes folder containing Kubernetes deployment YAML files (In the deployment file, the environment variable “Name” to “Your Name”)

For **Kubernetes** Deployment, you can use AKS, minikube or any other Kubernetes cluster.

Create a **CI/CD** pipeline using the tool of your choice that would automatically deploy new updates to the Kubernetes cluster. Whenever you commit into git repo it should trigger pipeline and further pipeline should build Docker image and deploy it to kubernetes.

Create a **helm chart** for templating the above Kubernetes manifests. Things to be templatized : image name, replicas, the environment variable, labels and any other field that you believe should be templatized.