Create the namespaces:

Start by defining the namespaces that will house your deployment and service. This ensures your resources are separated as required.

Define the deployment:

Use apiVersion: apps/v1 for the deployment.

The deployment should include at least one container (you can use any sample image like nginx).

Ensure the deployment is placed in the first namespace.

Define the service:

Use apiVersion: v1 for the service.

The service will expose the deployment.

Ensure that the service is placed in the second namespace.

Use labels to make sure the service can communicate with the deployment (the label app: my-app in both the deployment and service selector).

Namespace awareness:

Remember to specify the namespace field in the metadata for both the deployment and service to ensure they are created in different namespaces.

Apply the YAML files:

Once you have your YAML files, use kubectl apply to create the namespaces, deployment, and service.

Run curl with the cluster IP to get the nginx web interface.

Put all the yamls in the air repo include screenshots