Deploying a microservice to AKS via GitHub Actions

Start

Let's introduce the final set of updates to our CICD workflow so that it can finally deploy our Identity microservice to Azure Kubernetes Service via Helm.

In GitHub (Play.Identity repo)

1. Edit the ci.yml workflow

2. Add an action to get AKS credentials:

```
- name: Get AKS Credentials
  run: az aks get-credentials --resource-group ${{ env.APP_NAME }} --name ${{ env.APP_NAME }}
```

3. Find the **Helm tool installer** action in the Marketplace

4. Add the action at the end of the yml file

```
- name: Helm tool installer
  uses: Azure/setup-helm@v2.0
```

5. Add an action to login to Helm registry:

```
- name: Login to Helm registry
  run: |
    helmUser="00000000-0000-0000-0000-000000000000"
    helmPassword=$(az acr login --name ${{ env.APP_NAME }} --expose-token --output tsv --query accessToken)
    helm registry login ${{ env.APP_NAME }}.azurecr.io --username $helmUser --password $helmPassword
  env:
    HELM_EXPERIMENTAL_OCI: 1
```

6. Add new environment variables:

```
env:
  APP_NAME: playeconomy
  HELM_CHART_VERSION: 0.1.0
  SERVICE_NAME: identity
```

7. Add an action to deploy the Helm chart (notice additional --set and --wait arguments and the modified -f argument):

```
- name: Deploy Helm chart
  run: |
    helm upgrade \
      ${{ env.SERVICE_NAME }}-service \
      oci://${{ env.APP_NAME }}.azurecr.io/helm/microservice \
      --version ${{ env.HELM_CHART_VERSION }} \
      -f helm/values.yaml \
      -n ${{ env.SERVICE_NAME }} \
      --set image.tag=${{ needs.generate-version.outputs.new_version }} \
      --install \
      --wait
  env:
    HELM_EXPERIMENTAL_OCI: 1
```

8. Commit changes

9. Verify helm upgrade succeeds

Now that you know how to deploy your Identity microservice to AKS via GitHub actions, please move on to the next assignment where you will modify the CICD workflow of each of your other microservices so that they can also be deployed to AKS any time changes are made to their repositories.