KAZAKH KBTU BRITISH
T E C H N I C A L
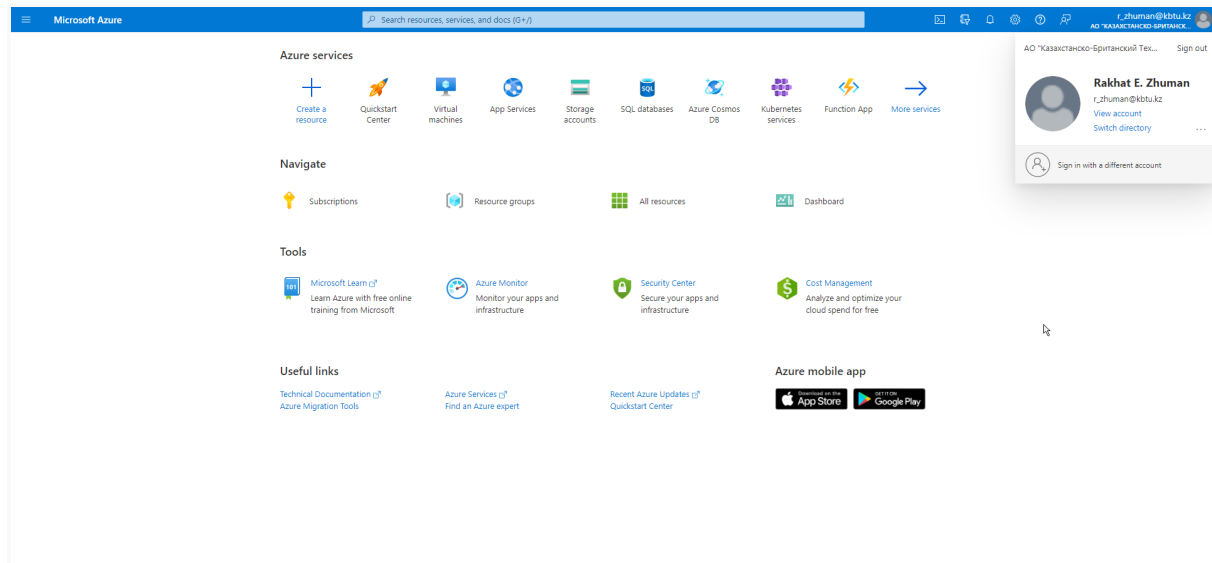U N I V E R S I T Y

Cloud Development, 2021 fall. Lab1
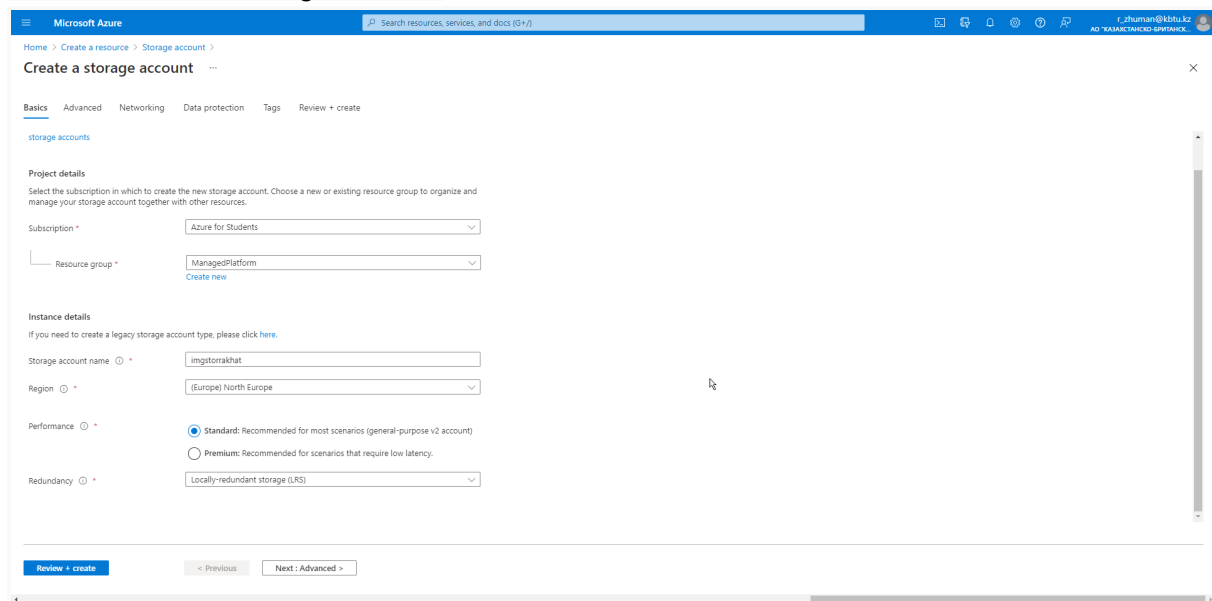
Report

made by Zhuman Rakhat

Almaty 2021

Exercise 1: Build a back-end API by using Azure Storage and the Web Apps feature of Azure App Service
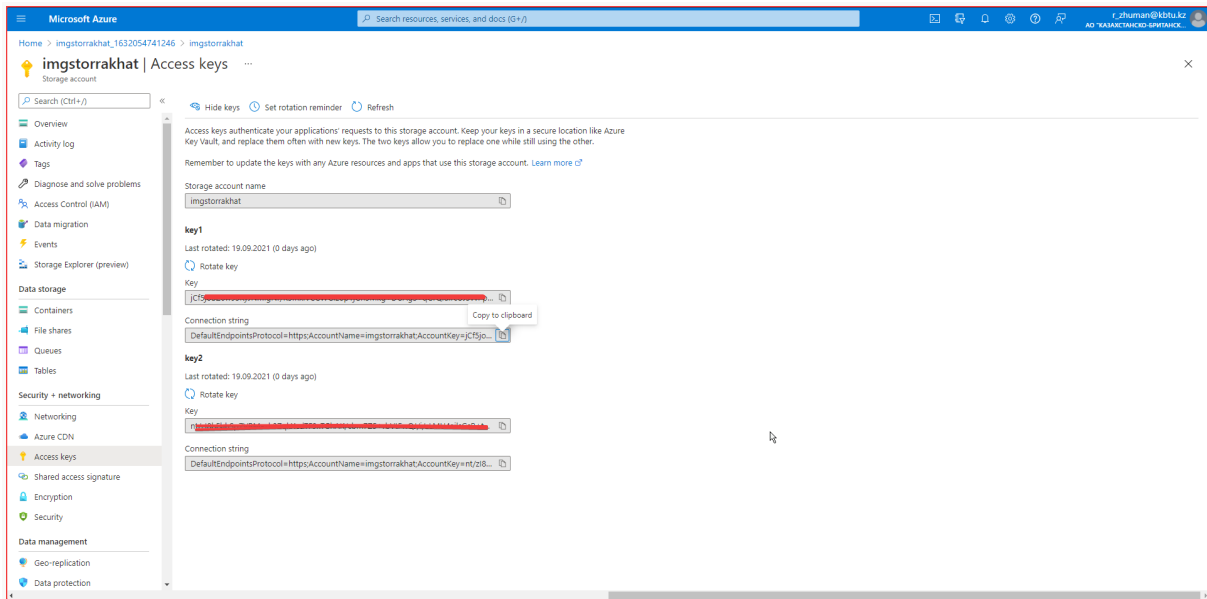
Task 1: Open the Azure portal

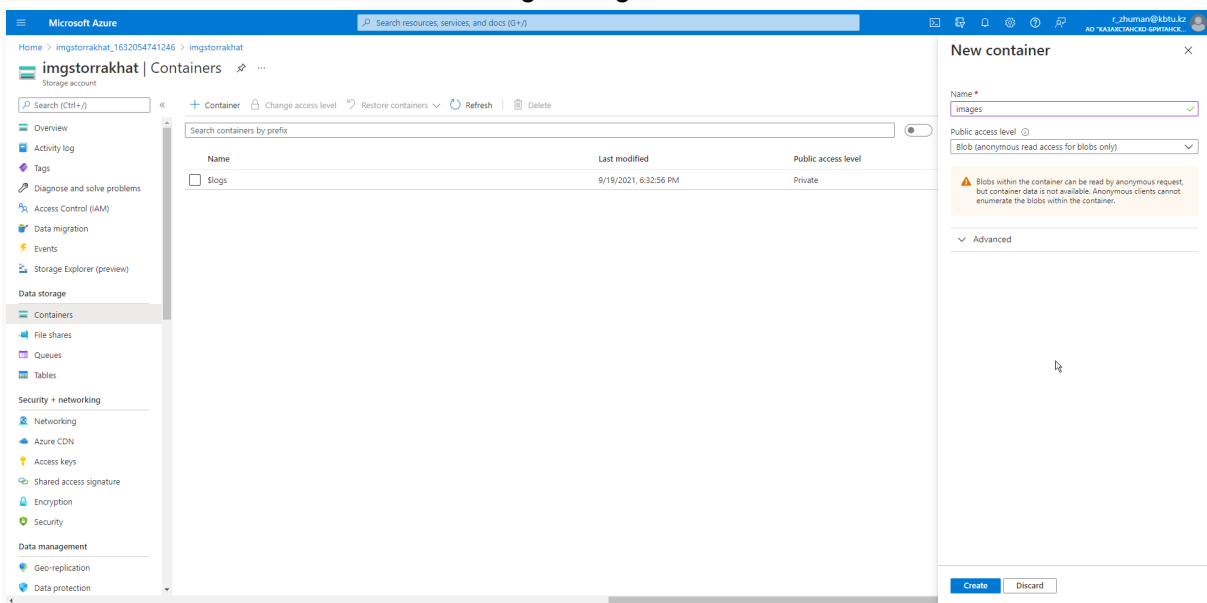## Task 2: Create a Storage account

Record the value of the Connection string text box. You'll use this value later in this lab.
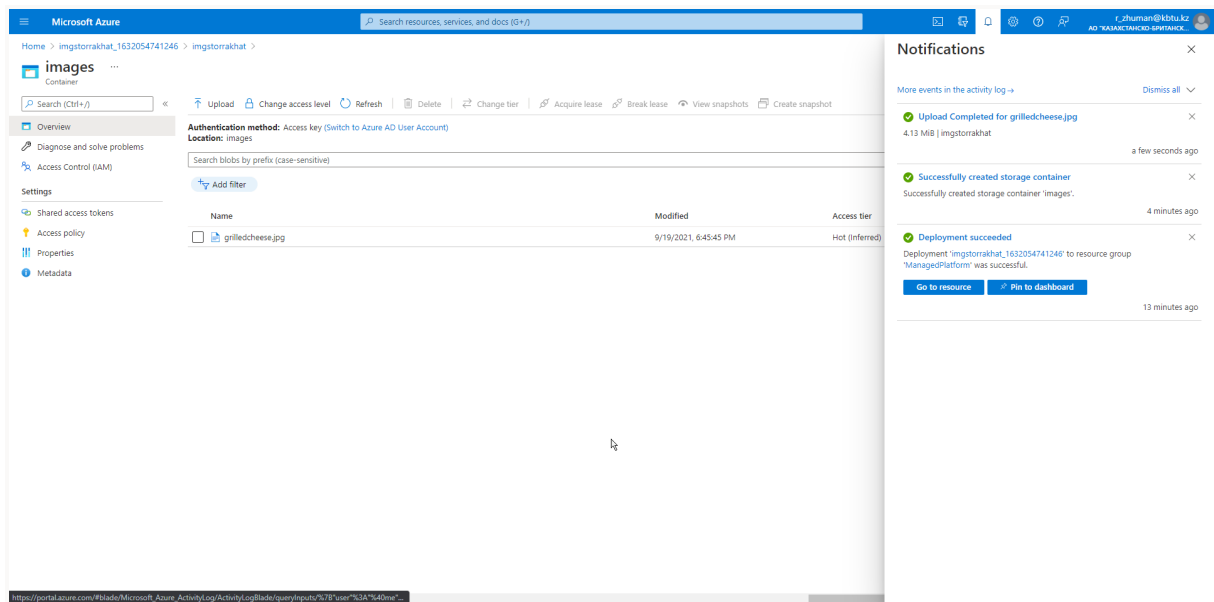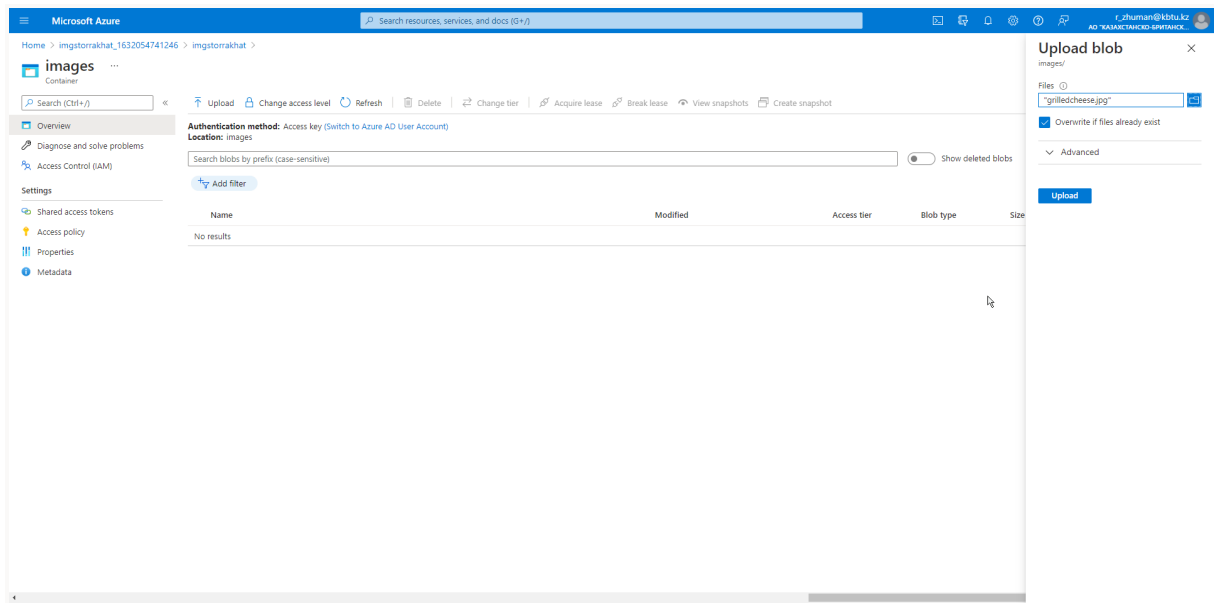
Task 3: Upload a sample blob

Create a new container with the following settings:

Go to the new images container, and then use the Upload button to upload the grilledcheese.jpg file in the Labs\01\Starter\Imagesfolder, downloaded from Teams group.

Task 4: Create a web app

Disabled application insights

Task 5: Configure the web app

Copied URL => http://imgapi-rakhat.azurewebsites.net/

Task 6: Deploy an ASP.NET web application to Web Apps
>>az login

```
>>az webapp list --resource -group ManagedPlatform
```



```
>>az webapp list --resource-group ManagedPlatform --query "[?starts_with(name, 'imgapi')]"
```



```
>> az webapp list --resource-group ManagedPlatform --query "[?starts_with(name, 'imgapi')].{Name:name}" --output tsv
```

```
D:\Source\Azure\Starter\Starter\API\Controllers>cd ..

D:\Source\Azure\Starter\Starter\API>
```

>> az webapp deployment source config-zip --resource-group ManagedPlatform --src api.zip --name imgapi-rakhat

```
D:\Source\Azure\Starter\Starter\API>az webapp deployment source config-zip --resource-group ManagedPlatform --src api.zip --name imgapi-rakhat
Getting scm site credentials for zip deployment
Starting zip deployment. This operation can take a while to complete ...
Deployment endpoint responded with status code 202
{
  "active": true,
  "author": "N/A",
  "author_email": "N/A",
  "complete": true,
  "deployer": "ZipDeploy",
  "end_time": "2021-09-19T13:25:29.392692Z",
  "id": "35c9cd23d645411ea50bb1cd3c4dadf6",
  "is_readonly": true,
  "is_temp": false,
  "last_success_end_time": "2021-09-19T13:25:29.392692Z",
  "log_url": "https://imgapi-rakhat.scm.azurewebsites.net/api/deployments/latest/log",
  "message": "Created via a push deployment",
  "progress": "",
  "provisioningState": "Succeeded",
  "received_time": "2021-09-19T13:25:22.403054Z",
  "site_name": "imgapi-rakhat",
  "start_time": "2021-09-19T13:25:22.670367Z",
  "status": 4,
  "status_text": "",
  "url": "https://imgapi-rakhat.scm.azurewebsites.net/api/deployments/latest"
}
```
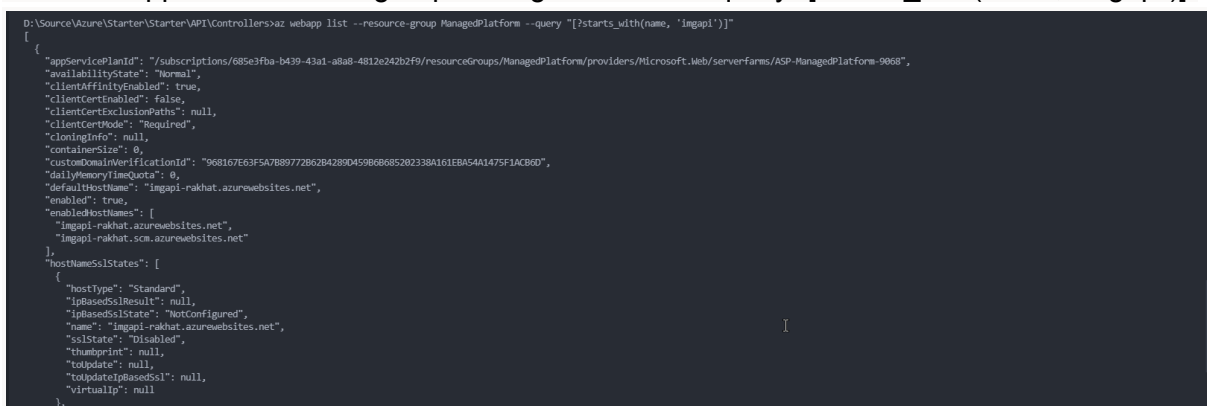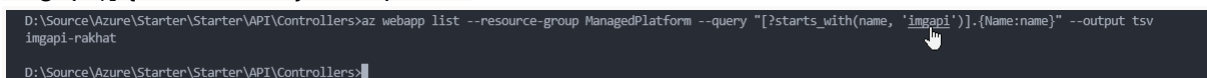
GET ∨	https://imgapi-rakhat.azurewebsites.net/

Params   Authorization   Headers (6)   Body   Pre-request Script   Tests   Settings

Query Params

KEY	VALUE
Key	Value

Body   Cookies (2)   Headers (9)   Test Results

Pretty   Raw   Preview   Visualize   JSON ∨

```
1  [
2      "https://imgstorrakhat.blob.core.windows.net/images/grilledcheese.jpg"
3  ]
```

Exercise 2: Build a front-end web application by using Azure Web Apps
Task 1: Create a web app

Search resources, services, and docs (G+/)

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АО "КАЗАХСТАНСКО-БРИТАНСК...

Home > Create a resource >

Create Web App

Project Details

Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ   Azure for Students

Resource Group * ⓘ   ManagedPlatform
                              Create new

Instance Details

Need a database? Try the new Web + Database experience. ↗

Name *   imgweb-rakhat
                              .azurewebsites.net

Publish *   ● Code   ○ Docker Container

Runtime stack *   .NET Core 3.1 (LTS)

Operating System *   ○ Linux   ● Windows

Region *   North Europe
                              ⓘ Not finding your App Service Plan? Try a different region.

App Service Plan

App Service plan pricing tier determines the location, features, cost and compute resources associated with your app.
Learn more ↗

Windows Plan (North Europe) * ⓘ   ASP-ManagedPlatform-9068 (S1)
                                   Create new

Sku and size *   Standard S1
                              100 total ACU, 1.75 GB memory

[Review + create]   [< Previous]   [Next : Deployment >]

Search resources, services, and docs (G+/)

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АО "КАЗАХСТАНСКО-БРИТАНСК...

Home > Create a resource >

Create Web App

Basics   Deployment   **Monitoring**   Tags   Review + create

Azure Monitor application insights is an Application Performance Management (APM) service for developers and DevOps professionals. Enable it below to automatically monitor your application. It will detect performance anomalies, and includes powerful analytics tools to help you diagnose issues and to understand what users actually do with your app. Learn more ↗

Application Insights

Enable Application Insights *   ● No   ○ Yes

[Review + create]   [< Previous]   [Next : Tags >]

Search resources, services, and docs (G+/)

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АО "КАЗАХСТАНСКО-БРИТАНСК...

Home >

⚛ Microsoft.Web-WebApp-Portal-6d3b177a-add2 | Overview
Deployment

🔍 Search (Ctrl+/)   « 🗑 Delete ⊘ Cancel ⬆ Redeploy 🔄 Refresh

⚛ Overview
📥 Inputs
≡ Outputs
📄 Template

💬 We'd love your feedback! →

✅ Your deployment is complete

Deployment name: Microsoft.Web-WebApp-Portal-6d3b177a-add2   Start time: 9/21/2021, 7:42:25 PM
Subscription: Azure for Students   Correlation ID: 3be0a7c9-9d5c-4110-b245-11515affe5e4
Resource group: ManagedPlatform

⌄ Deployment details (Download)

Resource	Type	Status	Operation details
✅ imgweb-rakhat	Microsoft.Web/sites	OK	Operation details

⌄ Next steps

Manage deployments for your app.   Recommended
Protect your app with authentication.   Recommended

[Go to resource]

🛡 Security Center
Secure your apps and infrastructure
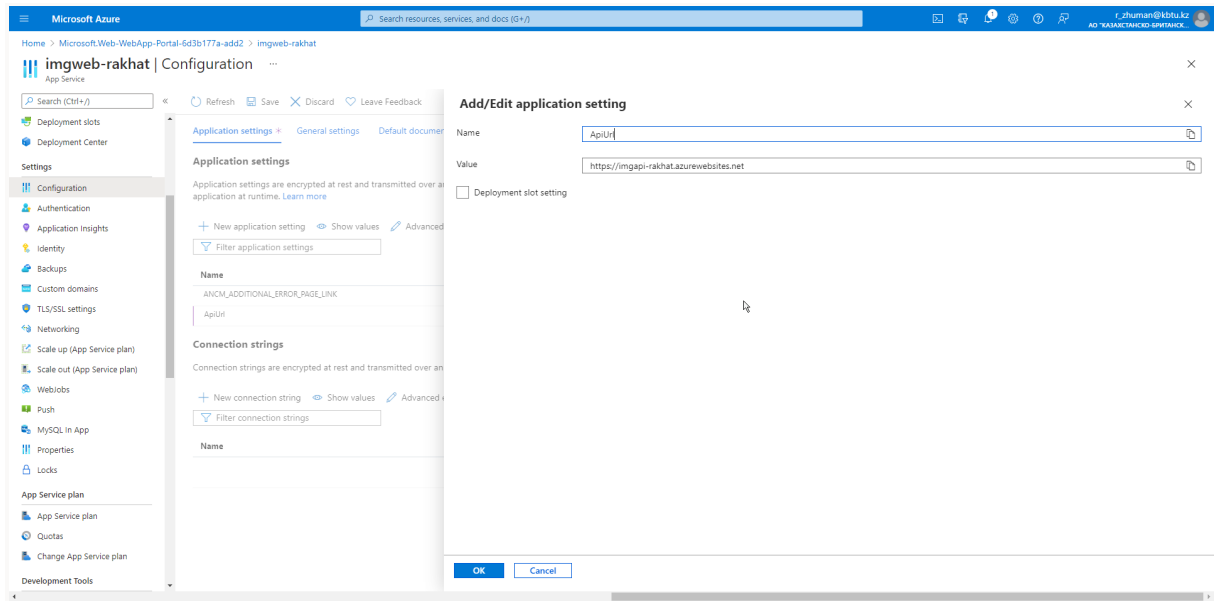Go to Azure security center >

Free Microsoft tutorials
Start learning today >

Work with an expert
Azure experts are service provider partners who can help manage your assets on Azure and be your first line of support.
Find an Azure expert >

Task 2: Configure a web app


```
>>az login
>>az webapp list --resource -group ManagedPlatform
```



```
>>az webapp list --resource -group ManagedPlatform --query
"[?starts_with(name, 'imgweb')]"
```

```
PROBLEMS    OUTPUT    TERMINAL    DEBUG CONSOLE

D:\Source\Azure\Starter\Starter\API>az webapp list --resource-group ManagedPlatform --query "[?starts_with(name, 'imgweb')]"
[
  {
    "appServicePlanId": "/subscriptions/685e3fba-b439-43a1-a8a8-4812e242b2f9/resourceGroups/ManagedPlatform/providers/Microsoft.Web/serverfarms/ASP-ManagedPlatform-9068",
    "availabilityState": "Normal",
    "clientAffinityEnabled": true,
    "clientCertEnabled": false,
    "clientCertExclusionPaths": null,
    "clientCertMode": "Required",
    "cloningInfo": null,
    "containerSize": 0,
    "customDomainVerificationId": "968167E63F5A7B89772B62B4289D459B6B685202338A161EBA54A1475F1ACB6D",
    "dailyMemoryTimeQuota": 0,
    "defaultHostName": "imgweb-rakhat.azurewebsites.net",
    "enabled": true,
    "enabledHostNames": [
      "imgweb-rakhat.azurewebsites.net",
      "imgweb-rakhat.scm.azurewebsites.net"
    ],
    "hostNameSslStates": [
      {
        "hostType": "Standard",
        "ipBasedSslResult": null,
        "ipBasedSslState": "NotConfigured",
        "name": "imgweb-rakhat.azurewebsites.net",
        "sslState": "Disabled",
        "thumbprint": null,
        "toUpdate": null,
        "toUpdateIpBasedSsl": null,
        "virtualIp": null
      },
      {
        "hostType": "Repository",
        "ipBasedSslResult": null,
        "ipBasedSslState": "NotConfigured",
        "name": "imgweb-rakhat.scm.azurewebsites.net",
        "sslState": "Disabled",
        "thumbprint": null,
        "toUpdate": null,
        "toUpdateIpBasedSsl": null,
        "virtualIp": null
      }
    ],
    "hostNames": [
      "imgweb-rakhat.azurewebsites.net"
    ],
    "hostNamesDisabled": false,
    "hostingEnvironmentProfile": null,
    "httpsOnly": false,
    "hyperV": false,
```

>>az webapp list --resource -group ManagedPlatform --query "[?starts_with(name,'imgweb')].{Name:name}" --output tsv

```
D:\Source\Azure\Starter\Starter\API>az webapp list --resource-group ManagedPlatform --query "[?starts_with(name, 'imgweb')].{Name:name}" --output tsv
imgweb-rakhat
```

>>az webapp deployment source config -zip --resource -group ManagedPlatform --src web.zip --name imgweb-rakhat

```
D:\Source\Azure\Starter\Starter\Web>az webapp deployment source config-zip --resource-group ManagedPlatform --src web.zip --name imgweb-rakhat
Getting scm site credentials for zip deployment
Starting zip deployment. This operation can take a while to complete ...
Deployment endpoint responded with status code 202
{
  "active": true,
  "author": "N/A",
  "author_email": "N/A",
  "complete": true,
  "deployer": "ZipDeploy",
  "end_time": "2021-09-21T15:29:38.1462081Z",
  "id": "08d0ccfa9dc5413698651a4dd110dcef",
  "is_readonly": true,
  "is_temp": false,
  "last_success_end_time": "2021-09-21T15:29:38.1462081Z",
  "log_url": "https://imgweb-rakhat.scm.azurewebsites.net/api/deployments/latest/log",
  "message": "Created via a push deployment",
  "progress": "",
  "provisioningState": "Succeeded",
  "received_time": "2021-09-21T15:29:30.7481957Z",
  "site_name": "imgweb-rakhat",
  "start_time": "2021-09-21T15:29:31.0138297Z",
  "status": 4,
  "status_text": "",
  "url": "https://imgweb-rakhat.scm.azurewebsites.net/api/deployments/latest"
}
```
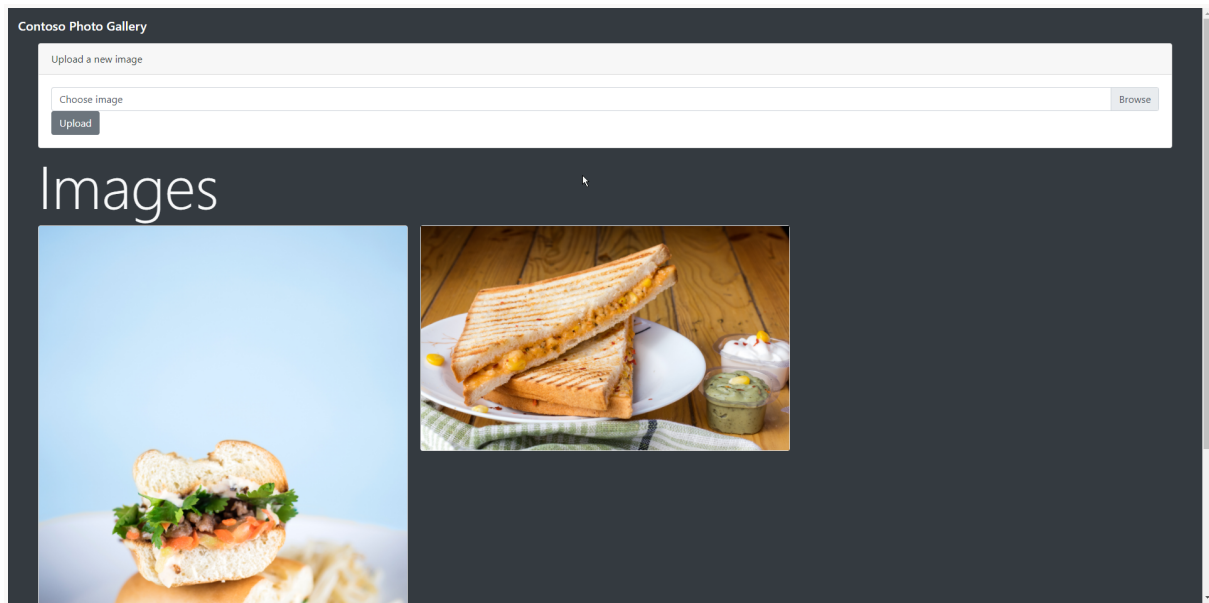
Exercise 3: Clean up your subscription

Task 1: Open Azure Cloud Shell & Task 2: Delete resource groups & Task 3: Close the active applications