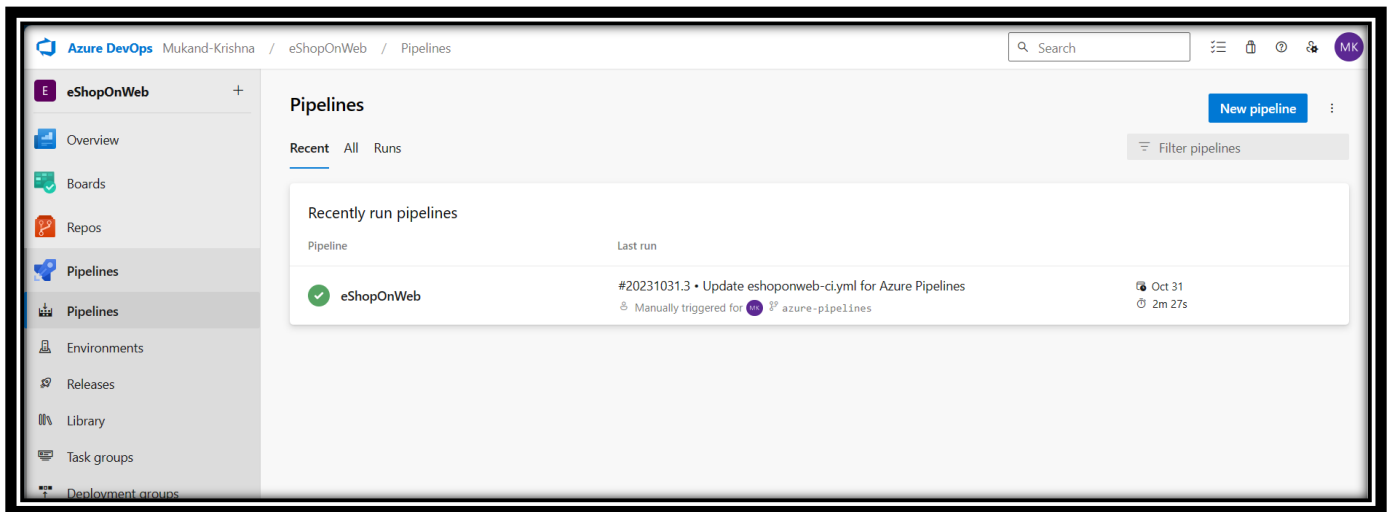


Controlling Deployments – Gates Activity # 6

20K-0409 Mukand

After creating project



```
"vnetContentShareEnabled": false,  
"vnetImagePullEnabled": false,  
"vnetRouteAllEnabled": false  
}  
mukand [ ~ ]$ az webapp create -g $RESOURCEGROUPNAME -p 'DevOps108-sp1' -n RGATES$SUFFIX-Prod  
{  
  "availabilityState": "Normal",  
  "clientAffinityEnabled": true,  
  "clientCertEnabled": false,  
  "clientCertExclusionPaths": null,  
  "clientCertMode": "Required",  
  "cloningInfo": null,  
  "containerSize": 0,  
  "customDomainVerificationId": "7EA2009C554F12622248A62AE81E15C2E2699C1338F7895294A09AA1458170A9",  
  "dailyMemoryTimeQuota": 0,  
  "defaultHostName": "rgates2462314978-prod.azurewebsites.net",  
  "enabled": true
```

Application Insights

Monitor web app performance and usage

designed to help you continuously improve performance and usability. It works for apps on a wide variety of platforms including .NET, Node.js and Java EE, hosted on-premises, hybrid, or any public cloud. [Learn More](#)

PROJECT DETAILS

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

Subscription * ⓘ

Resource Group * ⓘ
[Create new](#)

INSTANCE DETAILS

Name * ⓘ

Region * ⓘ

Resource Mode * ⓘ ☐ Classic ☒ Workspace-based

WORKSPACE DETAILS

Subscription * ⓘ

Log Analytics Workspace * ⓘ

resources, services, and docs (G+)

4978-Canary

Canary | Application Insights

Log Analytics Workspace ⓘ

☒ Select existing resource

select a subscription *

Top 5 relevant resources - Relevance is determined by resource group, location, or in alphabetical order.

Only resources with write permission are selectable here.

Name	Resource Group	Location
Canary	DevOpsI08-RG	Southeast Asia

k200409@nu.edu.pk
FAST NATIONAL UNIVERSITY (N...

Alert rule created

Alert rule RGATESCanary_FailedRequests successfully created. It might take a few minutes for changes to be shown.

[Change user response](#) **Actions** **Refresh**

Home > RGATES2462314978-Canary | Application Insights > Canary | Alerts >

Create an alert rule ...

See all signals

Alert logic

We have set the condition configuration automatically based on popular settings for this metric. Please review and make changes as needed.

Threshold

Static

Dynamic

Aggregation type

Count

Operator

Greater than

Unit

Count

Threshold value

0

Split by dimensions

Use dimensions to monitor specific time series and provide context to the fired alert. Dimensions can be either number or string columns. If you select more than one dimension value, each time series that results from the combination will trigger its own alert and will be charged separately. [About monitoring multiple time series](#)

Dimension name	Operator	Dimension values	Include all future values
----------------	----------	------------------	---------------------------

Preview

\$0.10 USD/m

Whenever the count Failed requests is greater than 0

Time range : Over the last 6 hours

Time series : Aggregate

100

90

80

70

60

50

40

30

20

10

0

7 AM

8 AM

9 AM

10 AM

11 AM

UTC

Failed requests (Count)

Canary

0

Home > RGATES2462314978-Canary | Application Insights > Canary | Alerts >

Create an alert rule ...

Select the subscription and resource group in which to save the alert rule.

Subscription

Azure for Students

Resource group

DevOpsI08-RG

Create new

Alert rule details

Severity

2 - Warning

Alert rule name

RGATESCanary_FailedRequests

Alert rule description

Advanced options

Settings

Enable upon creation

Automatically resolve alerts

Stage

Delete

Move

Canary

Properties

Name and owners of the stage

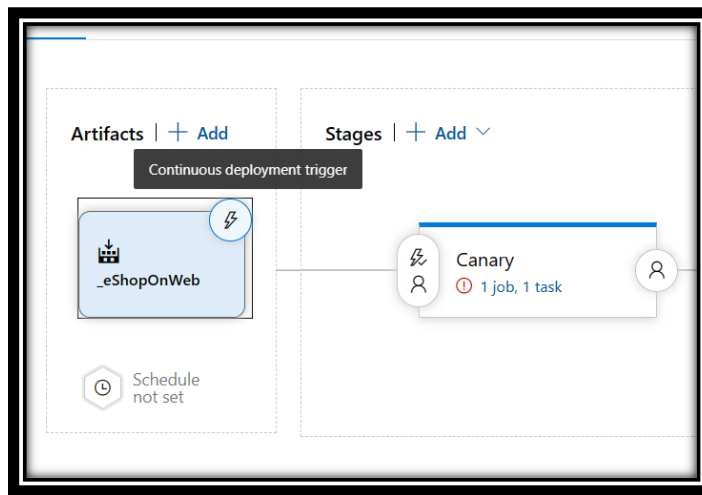
Stage name

Canary

Stage owner

MK

Mukand Krishna



Stage name
Production

Parameters ⓘ | [Unlink all](#)

Azure subscription * [Manage](#)

Azure for Students (89be51bf-cc68-4c1e-9024-d8899936b4a4) [Refresh](#)

ⓘ Scoped to subscription 'Azure for Students'

App type [Manage](#)

Web App on Windows

App service name * [Manage](#)

RGATES2462314978-Prod [Refresh](#)

This field is linked to 1 setting in 'Deploy Azure App Service'

Ops Mukand-Krishna / eShopOnWeb / Pipelines / eShopOnWeb

Web +

← eShopOnWeb

Runs Branches Analytics

Description	Stages
#20231031.3 • Update eshoponweb-ci.yml for Azure Pipelines ↳ Manually triggered for azure-pipelines b56e2f79	
#20231031.2 • Update eshoponweb-ci.yml for Azure Pipelines ↳ Individual CI for azure-pipelines b56e2f79	
#20231031.1 • Merged PR 1: Updated Program.cs ↳ Manually triggered for main a9f4955f	

Run pipeline
Select parameters below and manually run the pipeline

Branch/tag
 main
Select the branch, commit, or tag

Advanced options

Variables
This pipeline has no defined variables

Stages to run
Run as configured

Resources
Use latest version of all resources

← Jobs in run #20231111.1
eShopOnWeb

Build .Net Core Solution

Build43s

Initialize job<1s

Checkout eShopOnWe...1s

Restore32s

Build9s

Test

Publish

Publish Artifacts ADO - W...

Publish Artifacts ADO - Bi...

Post-job: Checkout eShop...

Build

```
1 Starting: Build
2 =====
3 Task      : .NET Core
4 Description : Build, test, package, or publish a dotnet application, or run a custom dotnet command
5 Version    : 2.221.0
6 Author     : Microsoft Corporation
7 Help       : https://docs.microsoft.com/azure/devops/pipelines/tasks/build/dotnet-core-cli
8 =====
9 Info: .NET Core SDK/runtime 2.2 and 3.0 are now End of Life(EOL) and have been removed from all host
10 /usr/bin/dotnet build /home/vsts/work/1/s/eShopOnWeb.sln -dl:CentralLogger,"/home/vsts/work/_tasks/I
11 MSBuild version 17.7.344fca21998 for .NET
12 Determining projects to restore...
13 Restored /home/vsts/work/1/s/tests/FunctionalTests/FunctionalTests.csproj (in 878 ms).
14 Restored /home/vsts/work/1/s/src/Web/Web.csproj (in 1.01 sec).
15 Restored /home/vsts/work/1/s/tests/PublicApiIntegrationTests/PublicApiIntegrationTests.csproj (in
16 Restored /home/vsts/work/1/s/tests/UnitTests/UnitTests.csproj (in 393 ms).
17 Restored /home/vsts/work/1/s/tests/FunctionalTests/FunctionalTests.csproj (in 118 ms).
18 Restored /home/vsts/work/1/s/tests/IntegrationTests/IntegrationTests.csproj (in 211 ms).
19 Restored /home/vsts/work/1/s/src/Infrastructure/Infrastructure.csproj (in 31 ms).
20 Restored /home/vsts/work/1/s/src/BlazorShared/BlazorShared.csproj (in 4 ms).
21 Restored /home/vsts/work/1/s/src/PublicApi/PublicApi.csproj (in 93 ms).
22 Restored /home/vsts/work/1/s/src/ApplicationCore/ApplicationCore.csproj (in 9 ms).
23 Restored /home/vsts/work/1/s/src/BlazorAdmin/BlazorAdmin.csproj (in 50 ms).
24
25 Restore operation started
```

Azure DevOpsMukand-Krishna / eShopOnWeb / Pipelines / Releases / New release pipeline / Release-1

Search

eShopOnWeb +

OverviewBoardsReposPipelinesPipelinesEnvironmentsReleasesLibraryTask groupsDeployment groups

New release pipeline > Release-1

PipelineVariablesHistory+ DeployCancelRefreshEdit...

Release

Continuous deployment
for Mukand Krishna
11/11/2023, 12:58 PM

Artifacts
eShopOnWeb
20231111.2
azure-pipelines

Stages

Canary
In progress
Deploy Azure App Service
4/4 tasks
00:48

Production
Not deployed

Release

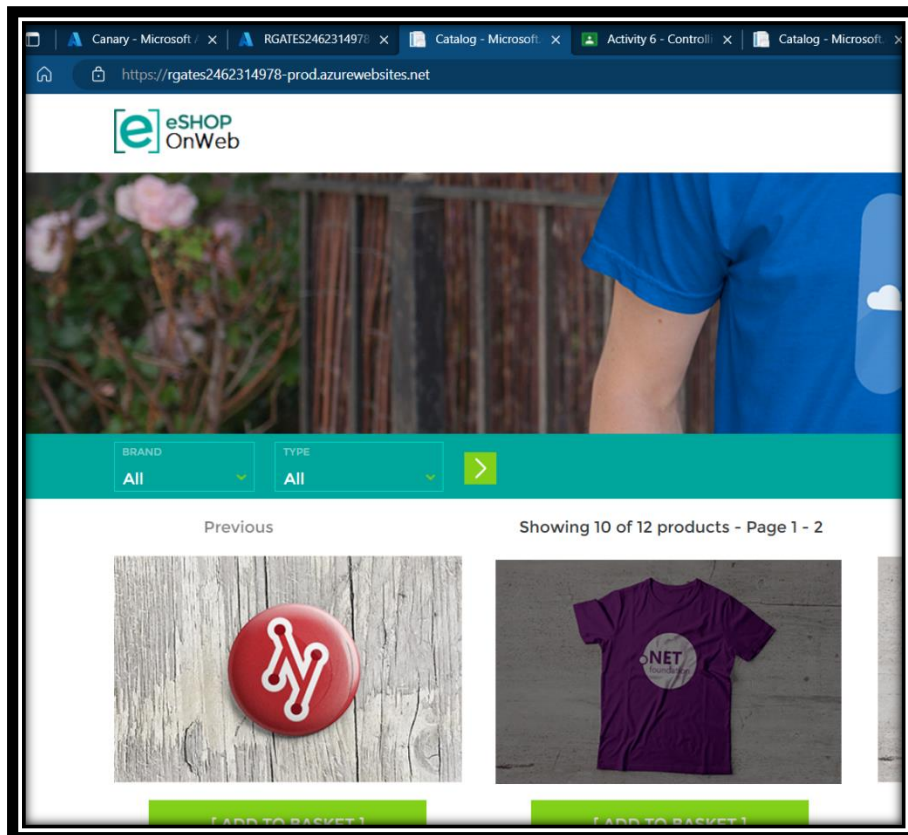
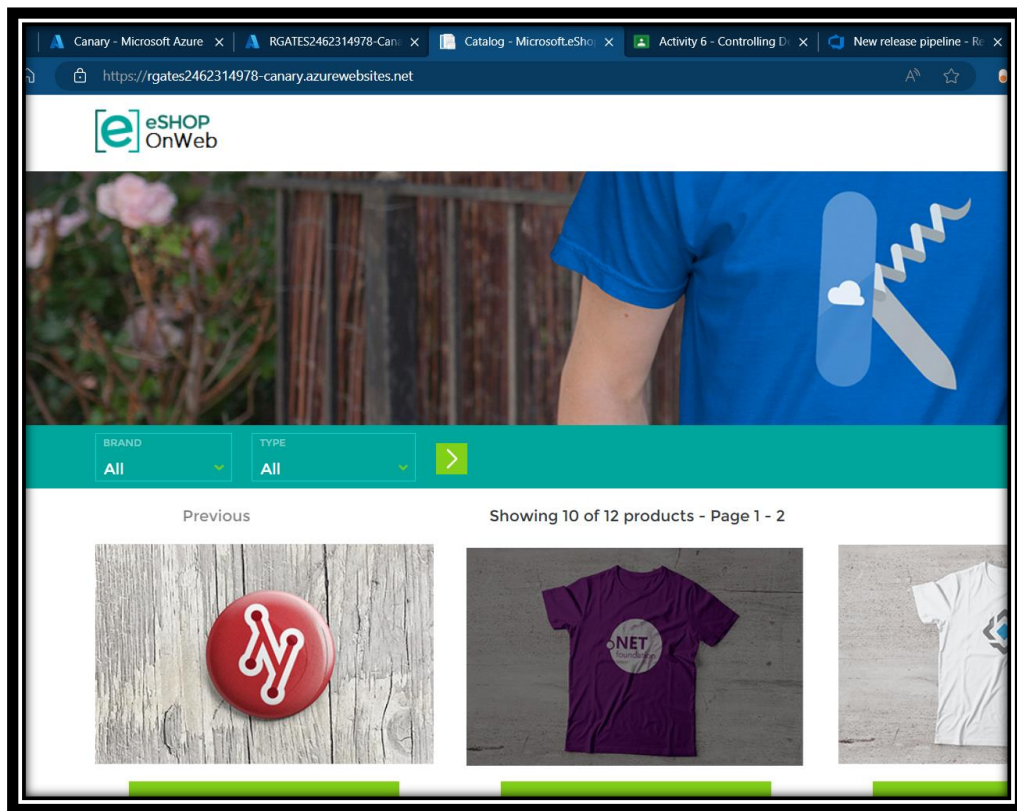
Continuous deployment
for Mukand Krishna
11/11/2023, 12:58 PM

Artifacts
eShopOnWeb
20231111.2
azure-pipelines

Stages

Canary
Succeeded
on 11/11/2023, 1:00 PM

Production
Succeeded
on 11/11/2023, 1:02 PM



Exercise # 4

The screenshot shows the 'New release pipeline' configuration page in Azure DevOps. The breadcrumb trail is 'Mukand-Krishna / eShopOnWeb / Pipelines / Releases / New release pipeline'. The main heading is 'All pipelines > New release pipeline'. Below this are tabs for 'Pipeline', 'Tasks', 'Variables', 'Retention', 'Options', and 'History'. The 'Pipeline' tab is active, showing a visual representation of the release pipeline. On the left, under 'Artifacts | + Add', there is a box for '_eShopOnWeb' with a 'Schedule not set' icon. On the right, under 'Stages | + Add', there is a 'Canary' stage with '1 job, 1 task'. To the right of the pipeline view is a 'Create a new release' panel. It has a 'Pipeline' section with a dropdown showing 'Canary' and 'Production'. Below this is a note: 'Click on a stage to change its trigger from automated to manual.' Then, there is a section for 'Stages for a trigger change from automated to manual.' with a search box. Below that is an 'Artifacts' section with the text 'Select the version for the artifact sources for this release'. It contains a table with two columns: 'Source alias' and 'Version'. The table has one row with '_eShopOnWeb' as the source alias and '20231111.2' as the version. At the bottom of the panel is a 'Release description' text area.

Mukand-Krishna / eShopOnWeb / Pipelines / Releases / New release pipeline

All pipelines > New release pipeline

Pipeline Tasks Variables Retention Options History

Artifacts | + Add

_eShopOnWeb

Schedule not set

Stages | + Add

Canary

1 job, 1 task

Create a new release

New release pipeline

Pipeline ^

Click on a stage to change its trigger from automated to manual.

Canary Production

Stages for a trigger change from automated to manual. ⓘ

Artifacts ^

Select the version for the artifact sources for this release

Source alias	Version
_eShopOnWeb	20231111.2

Release description

The screenshot shows the 'Release' overview page in Azure DevOps. It is divided into two main sections: 'Release' and 'Stages'. The 'Release' section on the left shows that the release was 'Manually triggered' by 'Mukand Krishna' on '11/11/2023, 1:14 PM'. Below this, under 'Artifacts', it lists '_eShopOnWeb' with version '20231111.2' and the source 'azure-pipelines'. The 'Stages' section on the right shows a 'Canary' stage that is 'Pending approval' by 'Mukand Krishna'. There is an 'Approve' button below the 'Canary' stage. To the right of the 'Canary' stage is a 'Production' stage which is 'Not deployed'.

Release

Manually triggered

by Mukand Krishna

11/11/2023, 1:14 PM

Artifacts

_eShopOnWeb

20231111.2

azure-pipelines

Stages

Canary

Pending approval

On Mukand Krishna

Approve

Production

Not deployed

The screenshot shows the 'Canary' stage approval details. At the top, it says 'Canary' and 'Pre-deployment conditions • Succeeded'. Below this are two links: 'Approvers' and 'View logs'. The 'Approvers' link is active. Below the links, there is a green bar with a checkmark and the text 'Approved on 11/11/2023, 1:16 PM'. At the bottom, there is a user profile for 'Mukand Krishna' with the initials 'MK' and a green checkmark, indicating they approved the release on '11/11/2023, 1:16 PM'.

Canary

Pre-deployment conditions • Succeeded

Approvers | View logs

Approved on 11/11/2023, 1:16 PM

MK Mukand Krishna

Approved on 11/11/2023, 1:16 PM

Task 2: Configure post-deployment gates for Azure Monitor

Deployment gates ⓘ + Add ▾

Query Azure Monitor alerts

Enabled ⓘ


🗑️

Query Azure Monitor alerts ⓘ

Task version 1.* ▾


Display name *

Azure subscription * ⓘ | [Manage](#) 🔗

▾ 

ⓘ Scoped to subscription 'Azure for Students'

Resource group * ⓘ

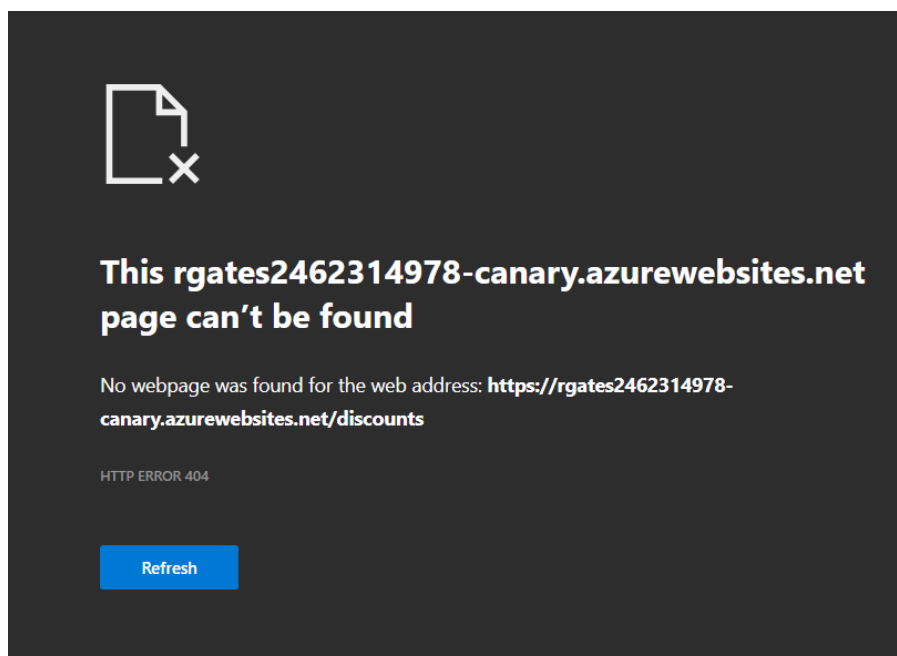
▾ 

Advanced ▾

Output Variables ▾

Exercise 5: Test release gates

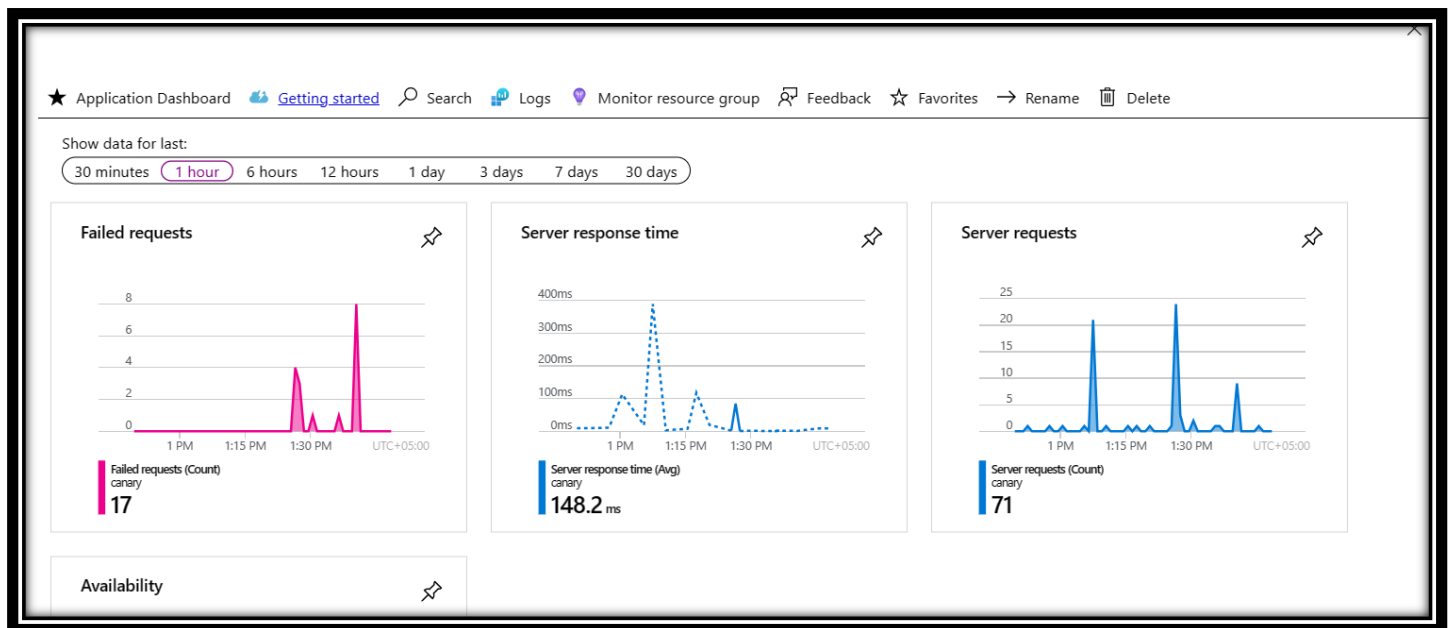
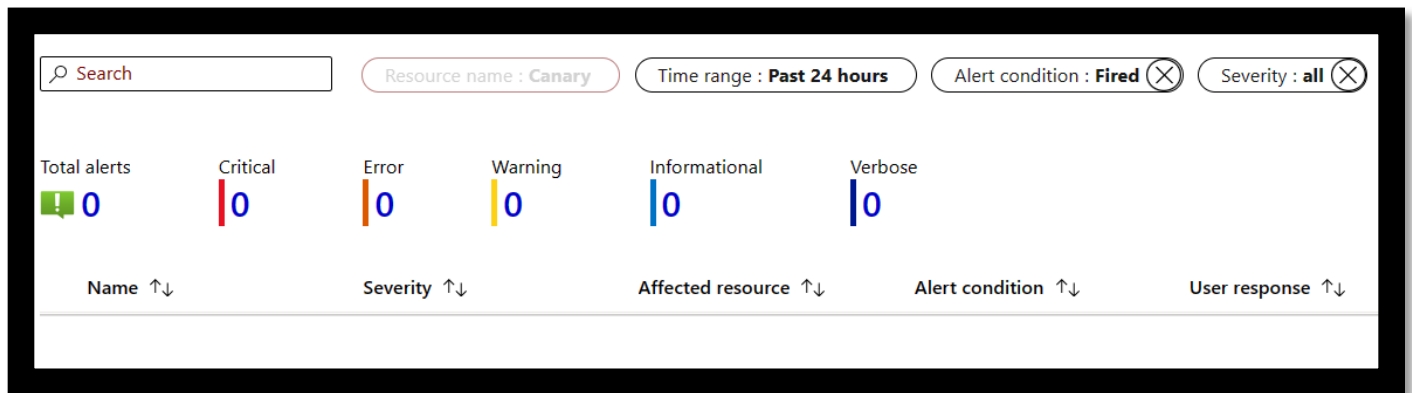
Task 1: Update and deploy application after adding release gates

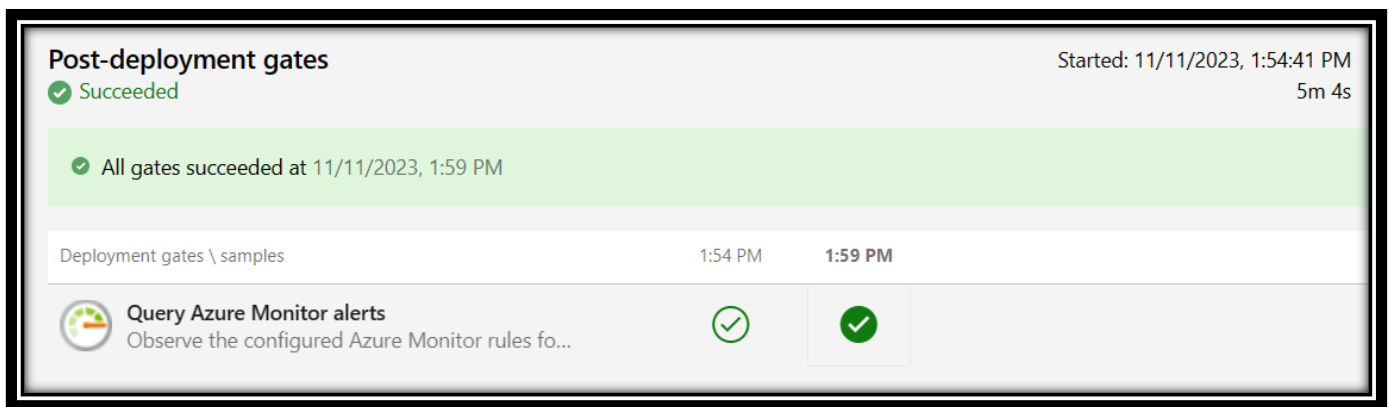
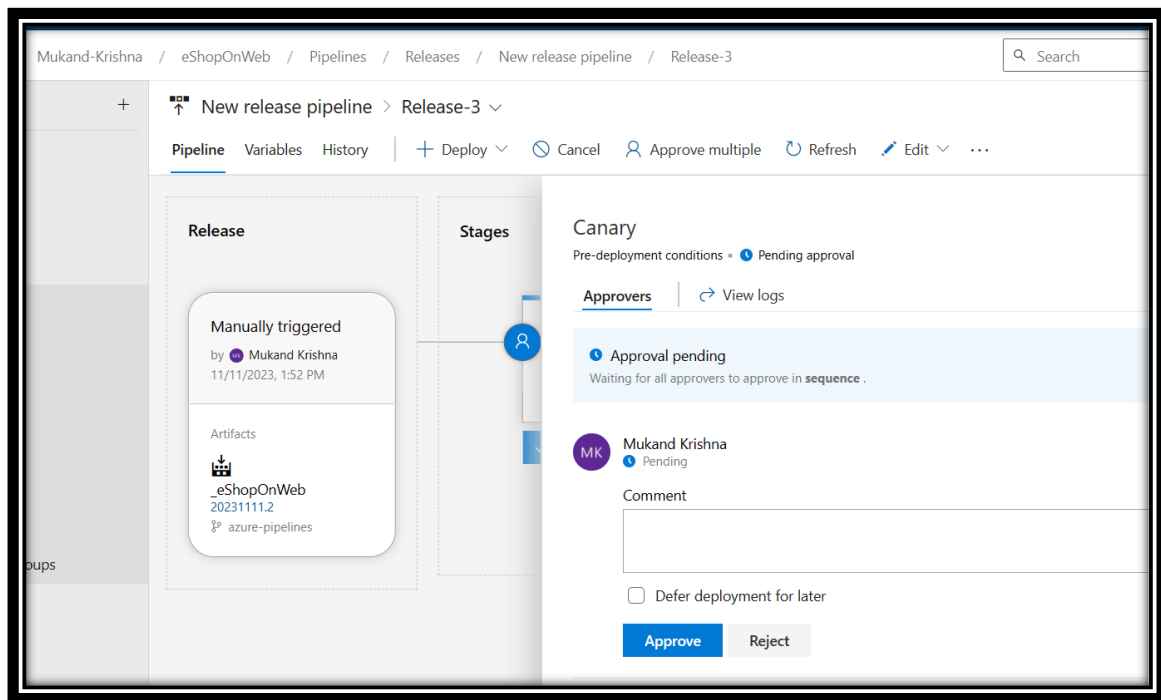


6. Notice there should be at least 1 Failed_Alert** with Severity 2 -Warning showing up in the list. This got trigger when you validated the non- existing website URL address in the previous exercise.

**** Note:**** If no Alert shows up yet, wait another few minutes.

Waited, refreshed etc., but wasn't showing any warning.





Exercise 6: Remove the Azure lab resources.

```

"virtualNetworkSubnetId": null,
"vnetContentShareEnabled": false,
"vnetImagePullEnabled": false,
"vnetRouteAllEnabled": false
}
mukand [ ~ ]$ az group list --query "[?starts_with(name,'DevOps108-RG')].name" --output tsv
DevOps108-RG
mukand [ ~ ]$ az group list --query "[?starts_with(name,'DevOps108-RG')].name" --output tsv | xargs -L1 bash -c 'az group delete --name $0 --no-wait --yes'
mukand [ ~ ]$

```