



Cloud Development, 2021 fall. Homework 7

Report

Events

made by Zhuman Rakhat

Almaty 2021

Tasks

- ☒ Based on the Lab 10, create a new Function App with a function
- ☒ which will react on events, collected by the Event Grid Topic (hrtopic[YourName]).

Report

Create Resource Group & Storage Account & Function App

The screenshot shows the 'Create Function App' wizard in the Microsoft Azure portal. The 'Basics' tab is selected. The form contains the following fields:

Section	Field	Value
Details	Subscription	685e3ba-b439-43a1-a8a8-4b12e242b2f9
	Resource Group	homework7
	Name	functionappkhat
	Image Tag	mcr.microsoft.com/azure-functions/dotnet3.0-appservice-quickstart
Hosting	Server URL	https://mcr.microsoft.com
	Storage (New)	
Plan (New)	Storage account	homework7sa
	Plan type	Functions Premium
	Name	homework7plan
	Operating System	Linux
	Region	North Europe
	SKU	Free
	ACU	Shared infrastructure
	Memory	1 GB memory
Monitoring (New)	Application Insights	Enabled
	Name	functionappkhat
	Region	North Europe

At the bottom, there are buttons for 'Create', '< Previous', 'Next >', and 'Download a template for automation'.

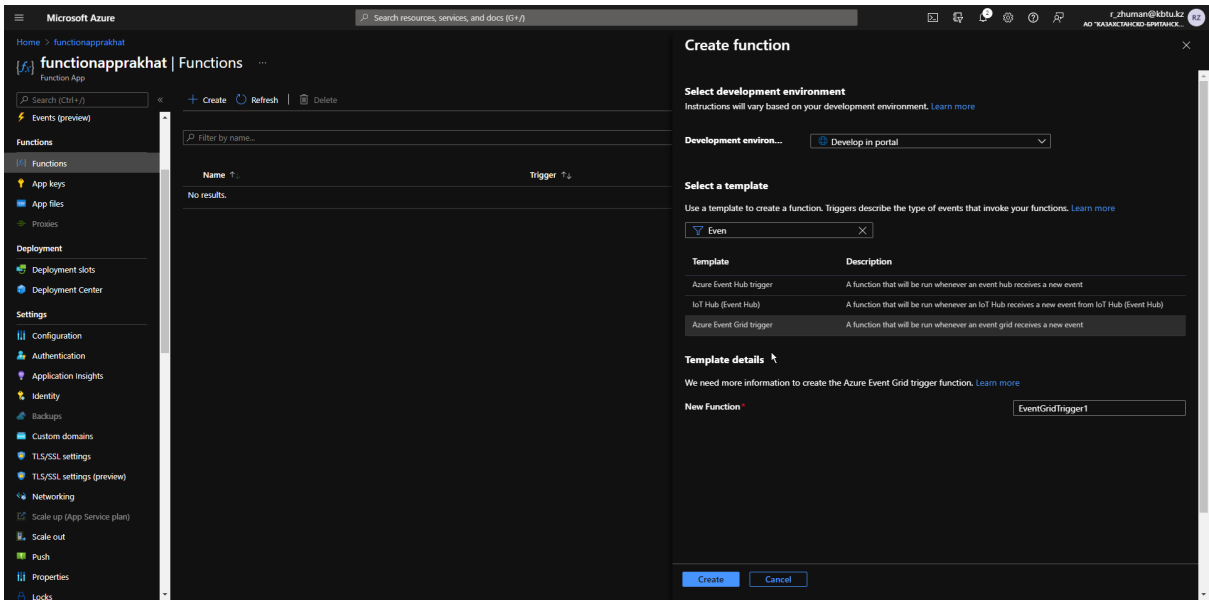
Create Function app again, since an **Error** occurred while deploying

The screenshot shows the 'Create Function App' wizard in the Microsoft Azure portal, at the 'Review + create' step. The 'Summary' tab is selected. The form contains the following fields:

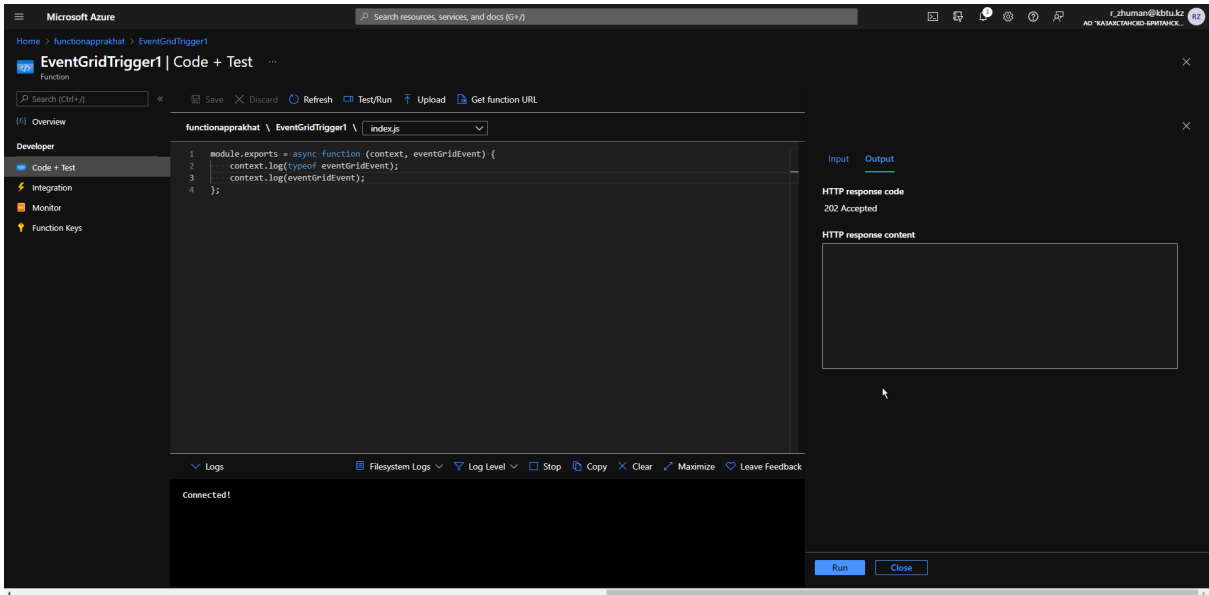
Section	Field	Value
Details	Subscription	685e3ba-b439-43a1-a8a8-4b12e242b2f9
	Resource Group	homework7
	Name	functionappkhat
	Runtime stack	Node.js 14 LTS
Hosting	Storage	
	Storage account	homework7sa
Plan (New)	Plan type	Consumption (Serverless)
	Name	ASP-homework7-app
	Operating System	Windows
	Region	North Europe
	SKU	Dynamic
	Monitoring (New)	
Monitoring (New)	Application Insights	Enabled
	Name	functionappkhat
	Region	North Europe

At the bottom, there are buttons for 'Create', '< Previous', 'Next >', and 'Download a template for automation'.

Create Function for trigger Event Grid



Testing for connectivity



Create Event Grid Topic

Microsoft Azure

Search resources, services, and docs (G+)

Home > Event Grid Topic >

Create Topic

Event Grid

Validation succeeded.

BasicsNetworkingAdvancedTagsReview + create

Event Grid Topic
by Microsoft

Basics

Namehrtopicrakhat

SubscriptionAzure for Students

Resource grouphomework7

LocationNorth Europe

Networking

Connectivity methodPublic access

Schema

Event SchemaEvent Grid Schema

Identity

Enable system assigned identityDisabled

Enable user assigned identityDisabled

Local Authentication

Enable authentication using SAS keysEnabled

CreatePreviousNext

Create Event Subscription

Microsoft Azure

Search resources, services, and docs (G+)

Home > hrtopicrakhat > hrtopicrakhat >

Create Event Subscription

Event Grid

BasicFiltersAdditional FeaturesDelivery PropertiesAdvanced Editor

Event Subscriptions listen for events emitted by the topic resource and send them to the endpoint resource. [Learn more](#)

EVENT SUBSCRIPTION DETAILS

Namebasicsub

Event SchemaEvent Grid Schema

TOPIC DETAILS

Pick a topic resource for which events should be pushed to your destination. [Learn more](#)

Topic TypeEvent Grid Topic

Source Resourcehrtopicrakhat

EVENT TYPES

Pick which event types get pushed to your destination. [Learn more](#)

Filter to Event TypesAdd Event Type

ENDPOINT DETAILS

Pick an event handler to receive your events. [Learn more](#)

Endpoint TypeAzure Function (change)

EndpointSelect an endpoint

Create

Select Azure Function

Event Grid

SubscriptionAzure for Students

Resource grouphomework7

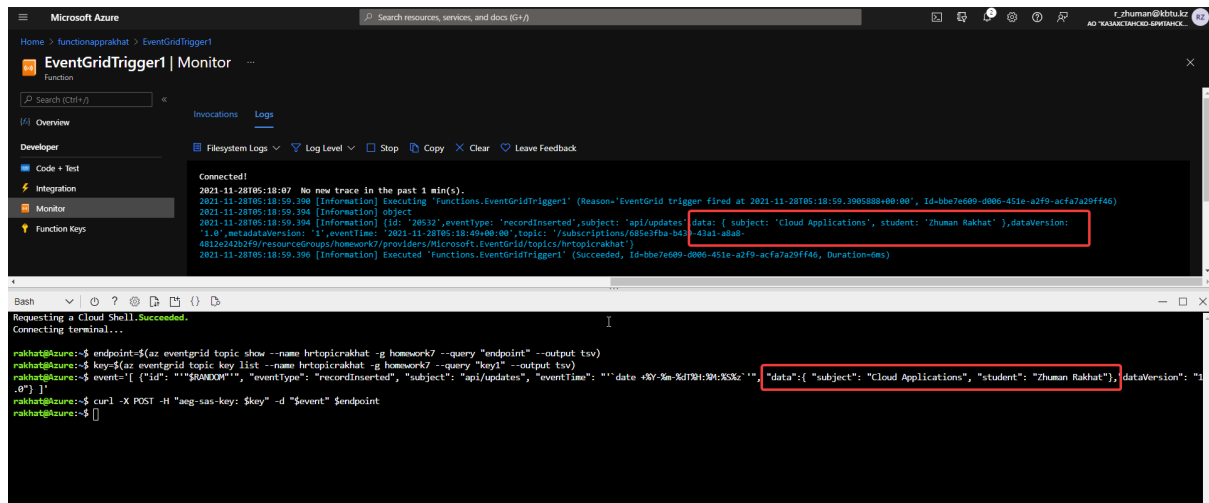
Function appfunctionapprakhat

SlotProduction

FunctionEventGridTrigger1

Confirm Selection

Verifying that function received the event

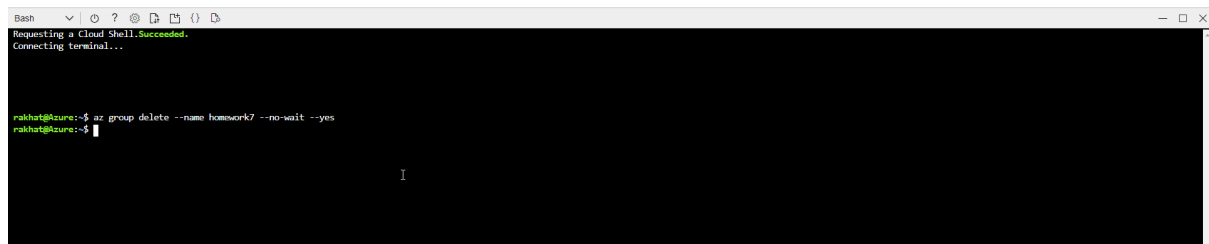


The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the Azure logo, a search bar, and the user profile. The main content area displays the 'EventGridTrigger1' function under the 'Monitor' tab. The 'Logs' section shows a log entry for the function execution, which includes the event data. The event data is highlighted with a red box, showing the subject 'Cloud Applications', student 'Zhuman Rakhat', and data version '1.0'. Below the logs, a terminal window is open, showing the command used to trigger the function and the output of the curl command, which also highlights the event data.

```
Microsoft Azure
Search resources, services, and docs (Ctrl+J)
Home > functionappkrakhat > EventGridTrigger1
Function
Overview Invocations Logs
Developer
Code + Test
Integration
Monitor
Function Keys
Filesystem Logs Log Level Stop Copy Clear Leave Feedback
Connected!
2021-11-28T05:18:07 No new trace in the past 1 min(s).
2021-11-28T05:18:59.390 [Information] Executing 'Functions.EventGridTrigger1' (Reason='EventGrid trigger fired at 2021-11-28T05:18:59.3905888+00:00', Id=bbe7e609-d006-451e-a2f9-acfa7a29ff46)
2021-11-28T05:18:59.394 [Information] object
2021-11-28T05:18:59.394 [Information] [id: '20532', eventType: 'recordInserted', subject: 'api/updates', data: { subject: 'Cloud Applications', student: 'Zhuman Rakhat' }, dataVersion: '1.0', metadataVersion: '1', eventTime: '2021-11-28T05:18:49+00:00', topic: '/subscriptions/685e3fba-b431-43a1-a8a8-4812e242b2f9/resourceGroups/homework7/providers/Microsoft.EventGrid/topics/hrtpicrakhat')
2021-11-28T05:18:59.396 [Information] Executed 'Functions.EventGridTrigger1' (Succeeded, Id=bbe7e609-d006-451e-a2f9-acfa7a29ff46, Duration=6ms)

Bash
Requesting a Cloud Shell.Succeeded.
Connecting terminal...
rakhat@Azure:~$ endpoint=$(az eventgrid topic show --name hrtpicrakhat -g homework7 --query "endpoint" --output tsv)
rakhat@Azure:~$ key=$(az eventgrid topic key list --name hrtpicrakhat -g homework7 --query "key" --output tsv)
rakhat@Azure:~$ event="{\"id\": \"${RANDOM}\", \"eventType\": \"recordInserted\", \"subject\": \"api/updates\", \"eventTime\": \"${date +%Y-%m-%dT%H:%M:%S%Z}\"}"
rakhat@Azure:~$ curl -X POST -H "aeg-sas-key: $key" -d "$event" $endpoint
rakhat@Azure:~$
```

Clean up subscription



The screenshot shows a terminal window with the command to delete the 'homework7' resource group. The command is executed successfully, and the terminal shows the prompt again.

```
Bash
Requesting a Cloud Shell.Succeeded.
Connecting terminal...
rakhat@Azure:~$ az group delete --name homework7 --no-wait --yes
rakhat@Azure:~$
```

The easiest of all homework, thanks!