Microsoft

# Activate Azure with Application Insights

***LAB***

October 2, 2020

Version 1.01

Microsoft

# Revision and Signoff Sheet

## Change Record

| Date | Author | Version | Change Reference |
|---|---|---|---|
| 29 Sep 2020 | Mubi Ali | 1.0 | First Version |
| | | | |
| | | | |
| | | | |

## Reviewers

| Date | Reviewer | Version | Change Reference |
|---|---|---|---|
| 2 Oct 2020 | Prakash Patel | 1.01 | First Release |
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# Contents

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# 1 Introduction

In this lab you will integrate Azure Application Insights into application.

## 1.1 Objectives

After completing this lab, you will be able to:

- Deploy Azure Application Insights into new ASP.NET Core application

## 1.2 Prerequisites

- Microsoft Azure Subscription
- Internet Connectivity
- Visual Studio 2019
- Access to Azure Portal
- Hands-on experience developing ASP.NET Core applications
- Basic understanding of Azure and its application development model

## 1.3 Estimated Time to Complete

60 Minutes

## 1.4 Scenario

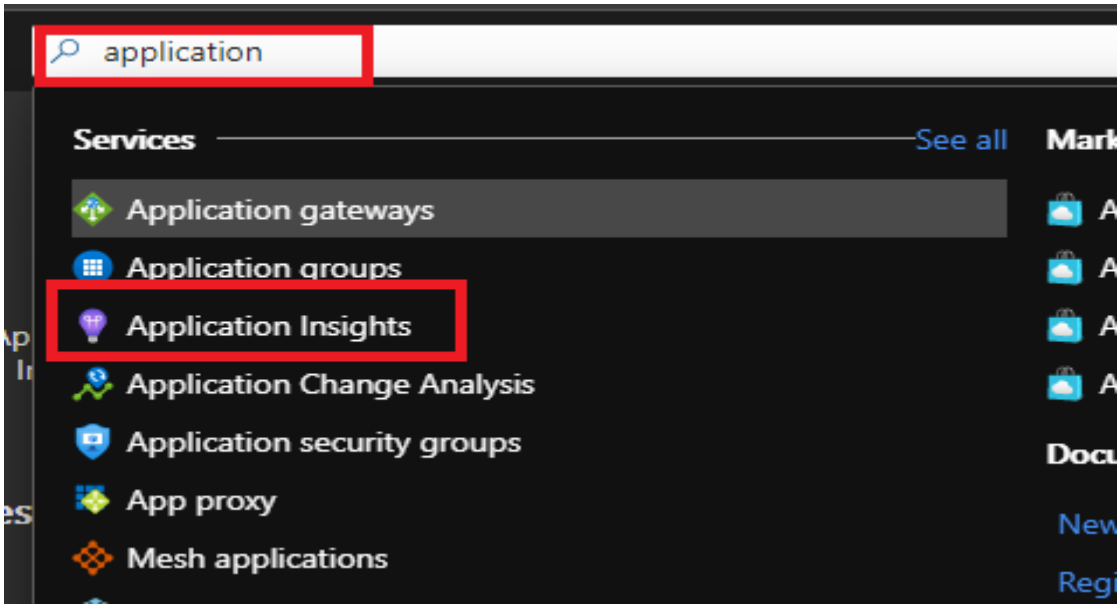
To demonstrate the capabilities of the Azure Application Insights, You will be deploying a number of features that will touch on Azure application monitoring capabilities. This will include creating a new ASP.NET Core application and integrate it with Azure Application Insights.

# 2 Exercise 1 – Creating Application Insight

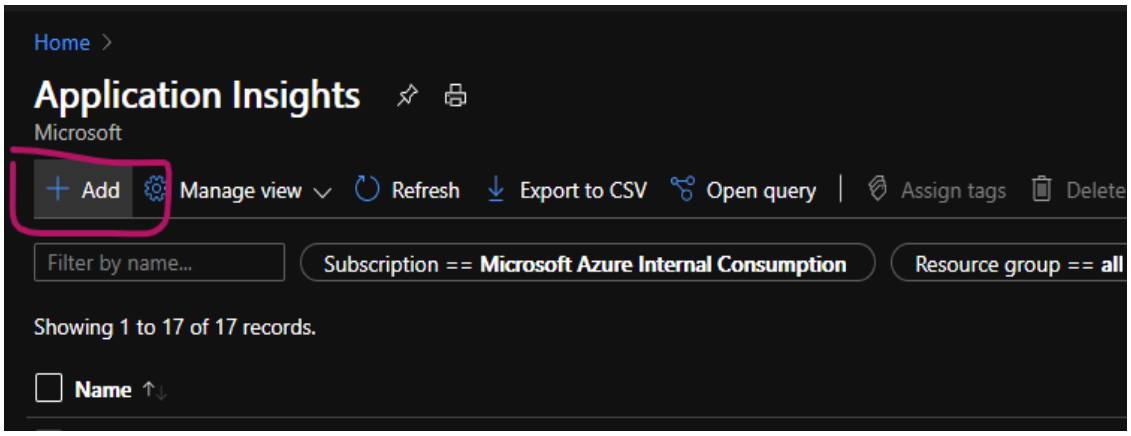
In this exercise we will create App Insight instance.

1. Go to Azure Portal https://portal.azure.com

2. Search for Application Insights on the main search bar in Azure Portal

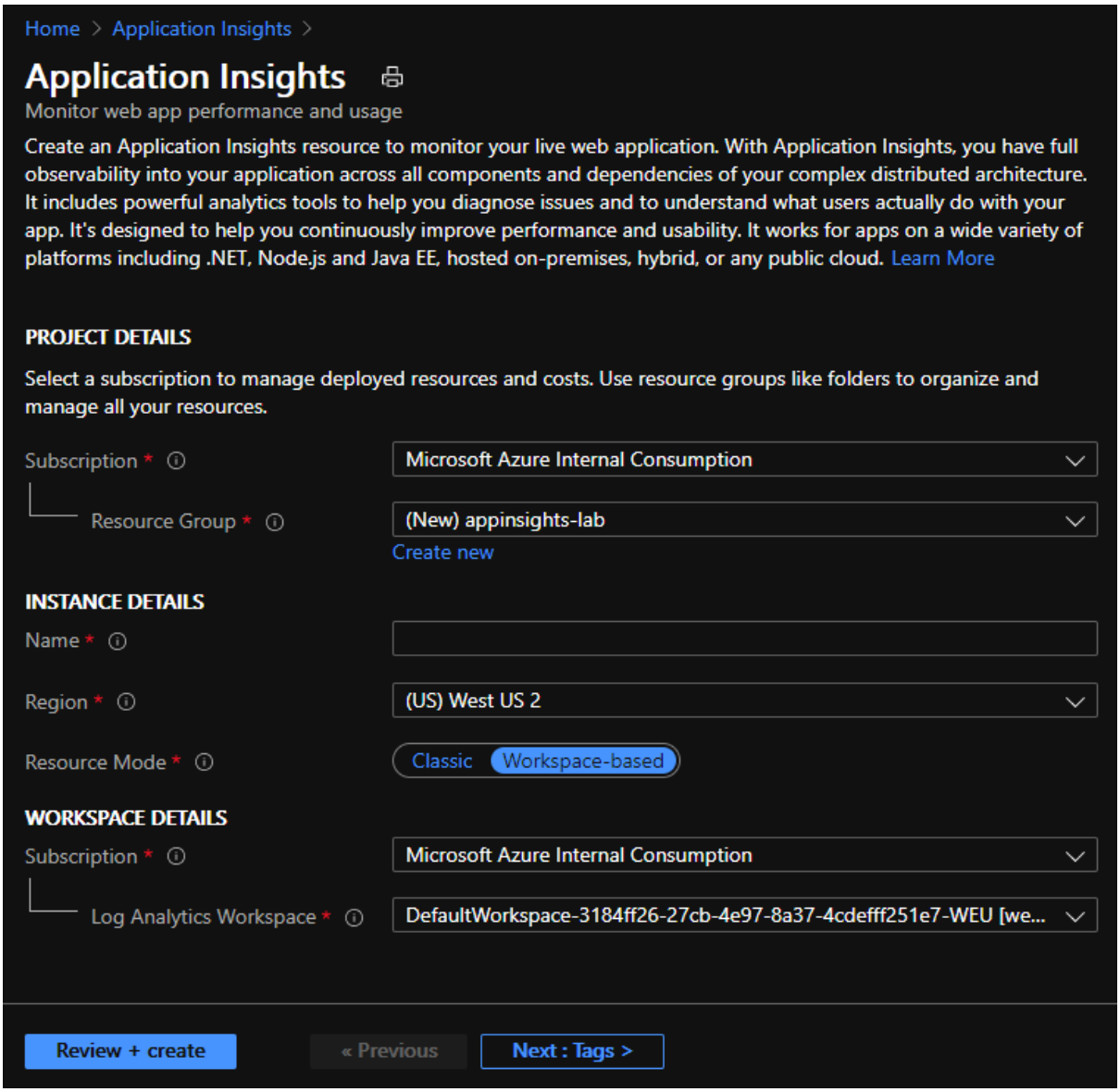



3. Click + Add

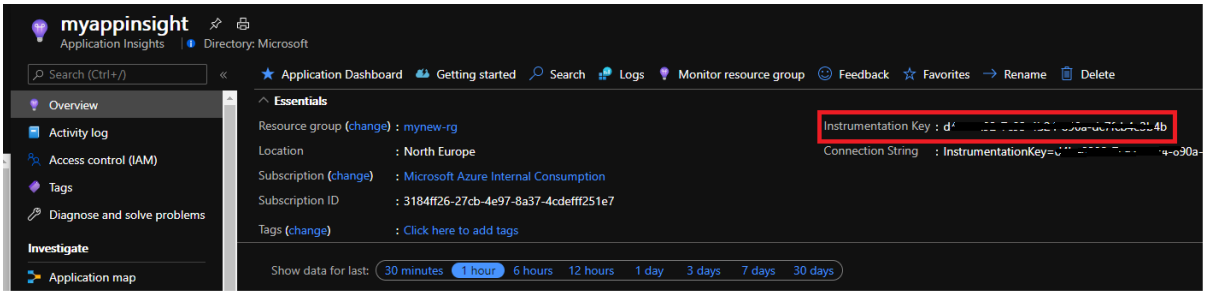



4. Provide the details
   - Select subscription you want to use for this resource
   - Provide name of resource group, you can select existing one or create new by clicking at create new
   - Provide name of Application Insights Resource e.g AppInsights-Lab
   - Select Regions, select nearest e.g. North Europe (Dublin)

- Select Classic, unless you want to retain data for longer period in that case select workspace-based



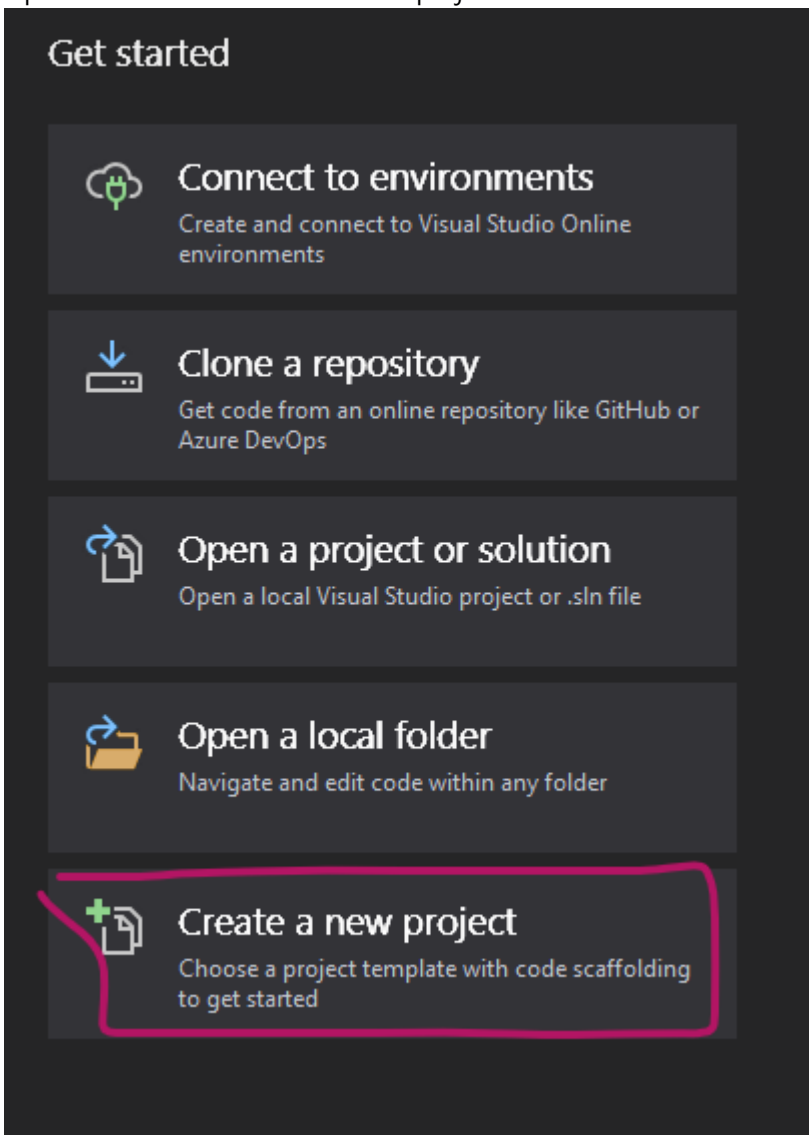

5. Instrument key will be displayed in the Overview tab, this is key which is needed for SDK integration.



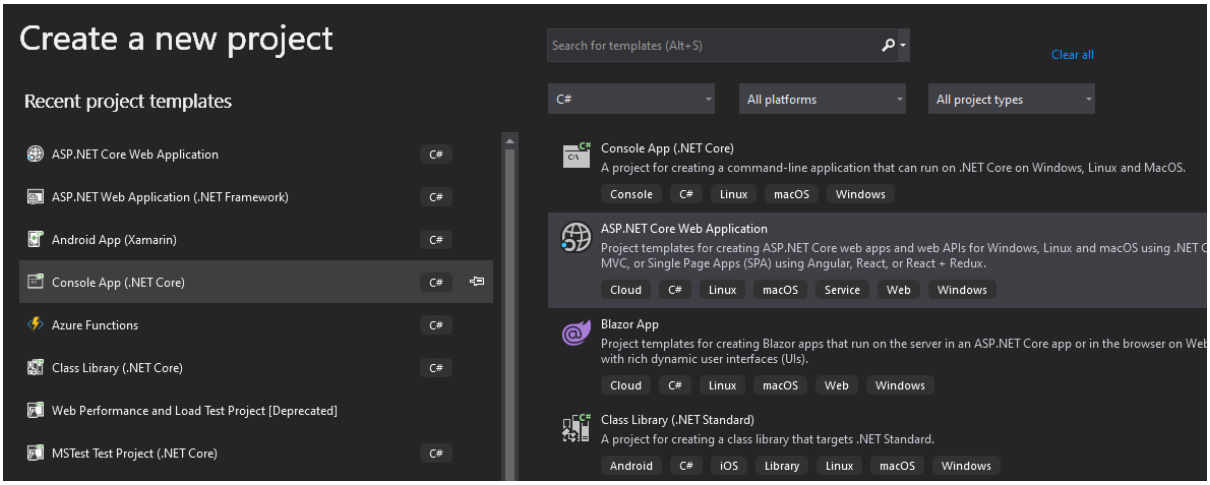
# 3 Exercise 2 – Add App Insights to .Net Core Project

In this exercise we will create a new ASP.NET Core Project and link it with App Insight created earlier.

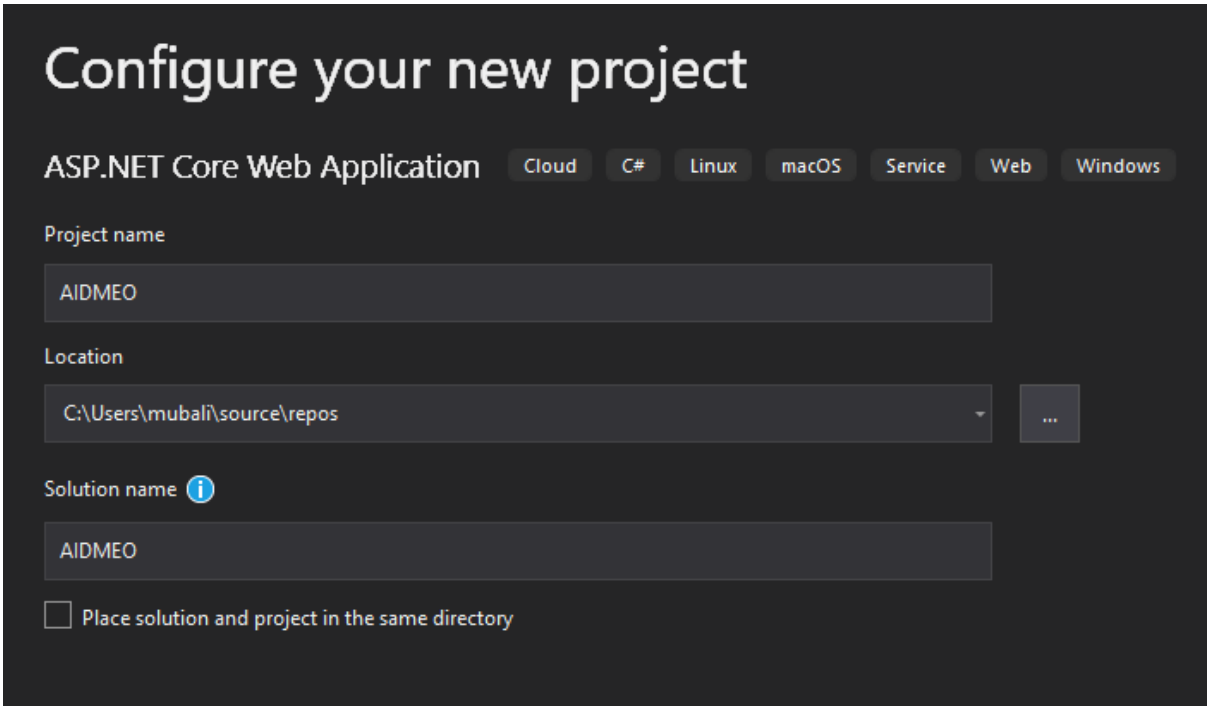
1. Open visual studio and create new project



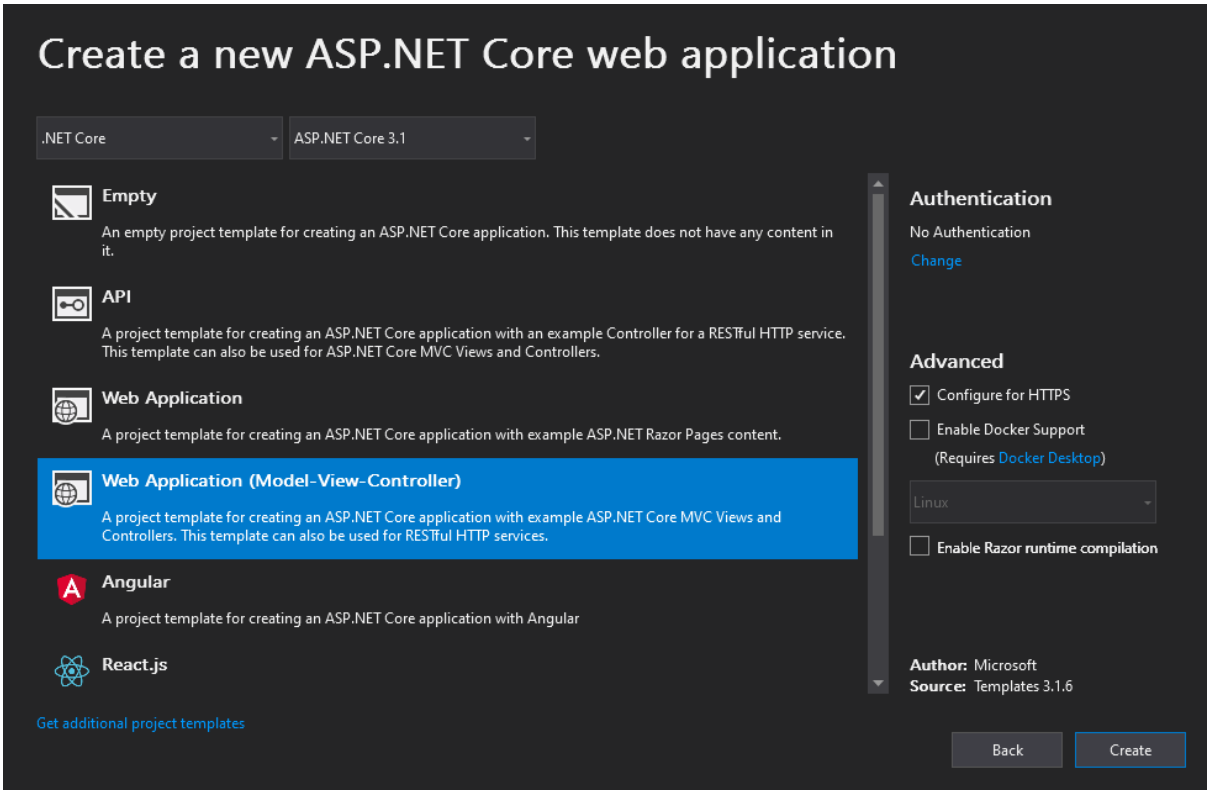

2. Select ASP.NET Core Web Application tempalte



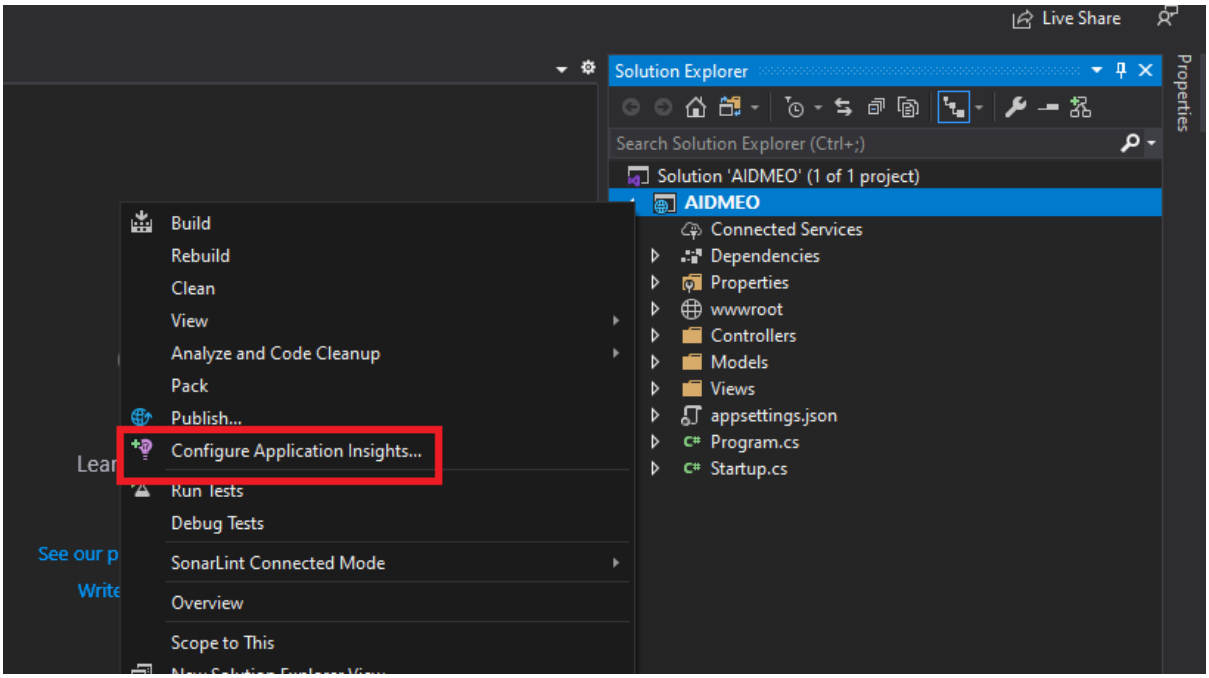

3. Configure new project, provide name and location



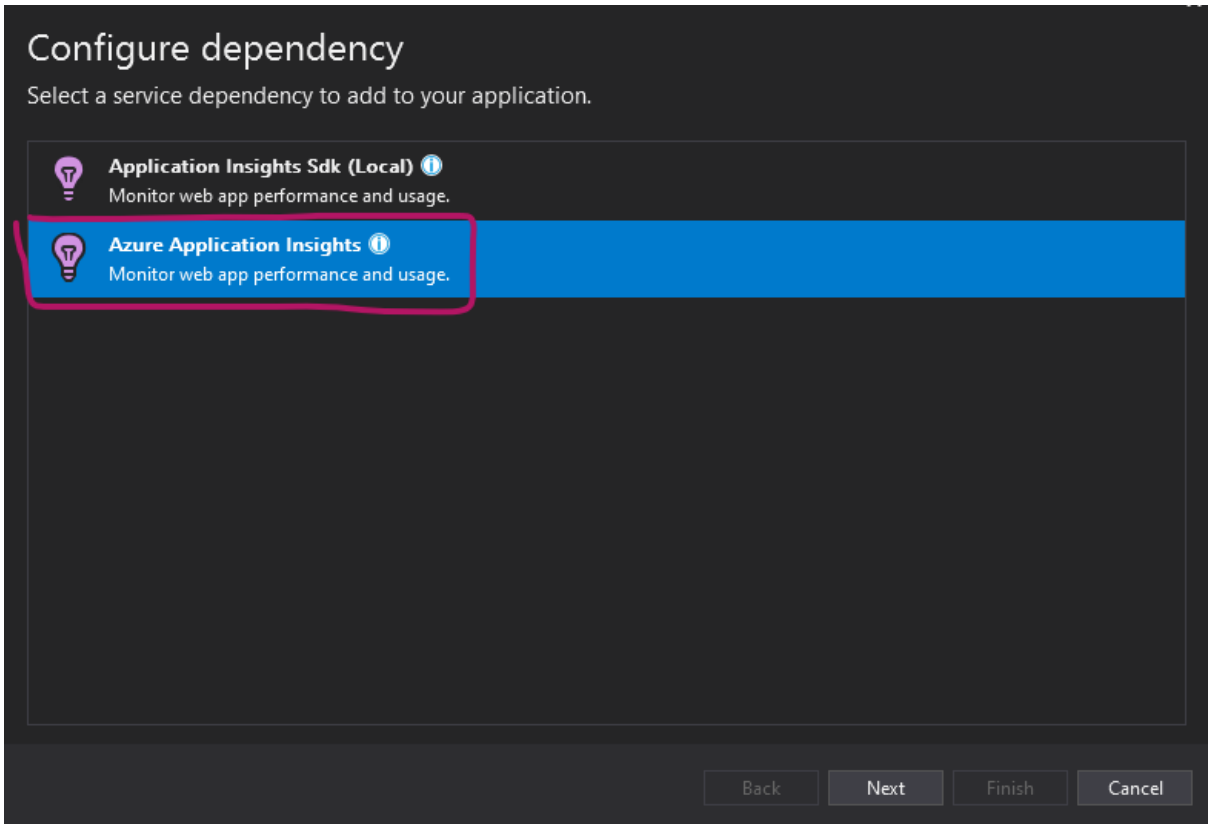

4. Select Web Application (Model-View-Controller)



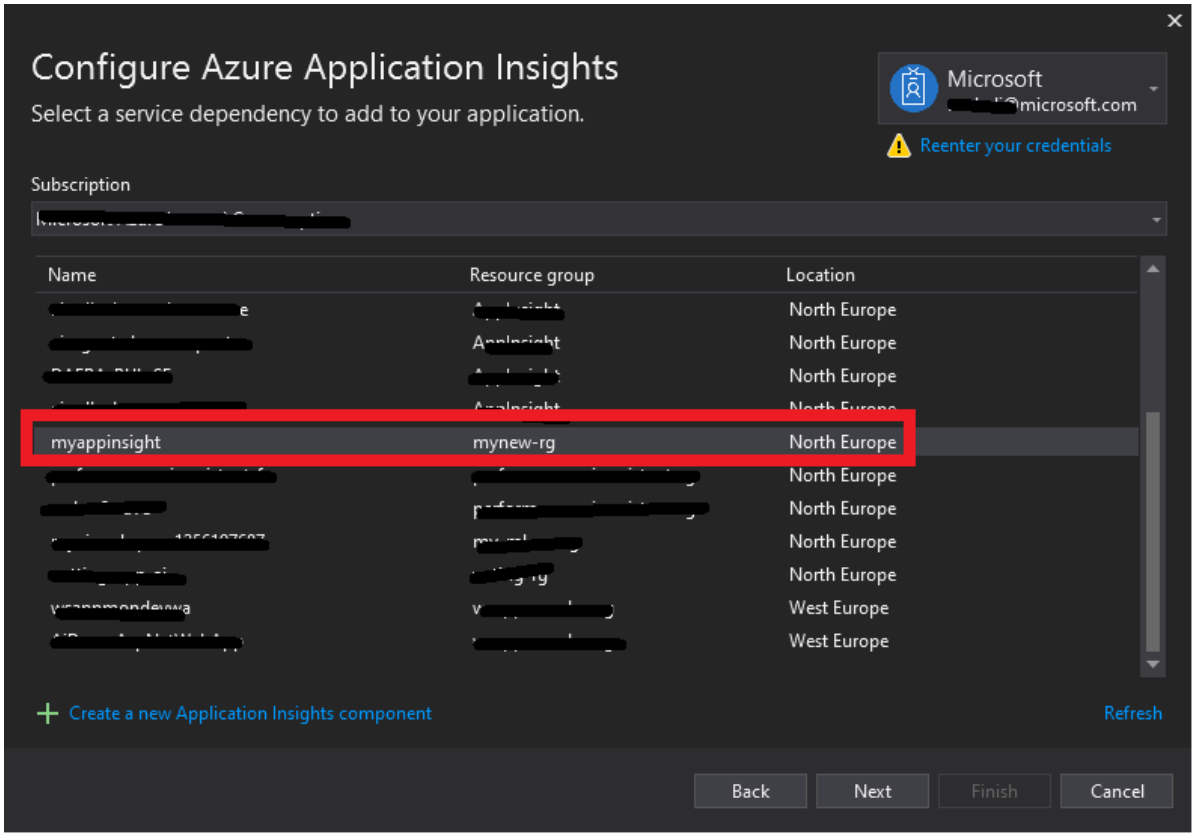

5. After few seconds your project will be created, right click on your project file and click Configure Application Insights….



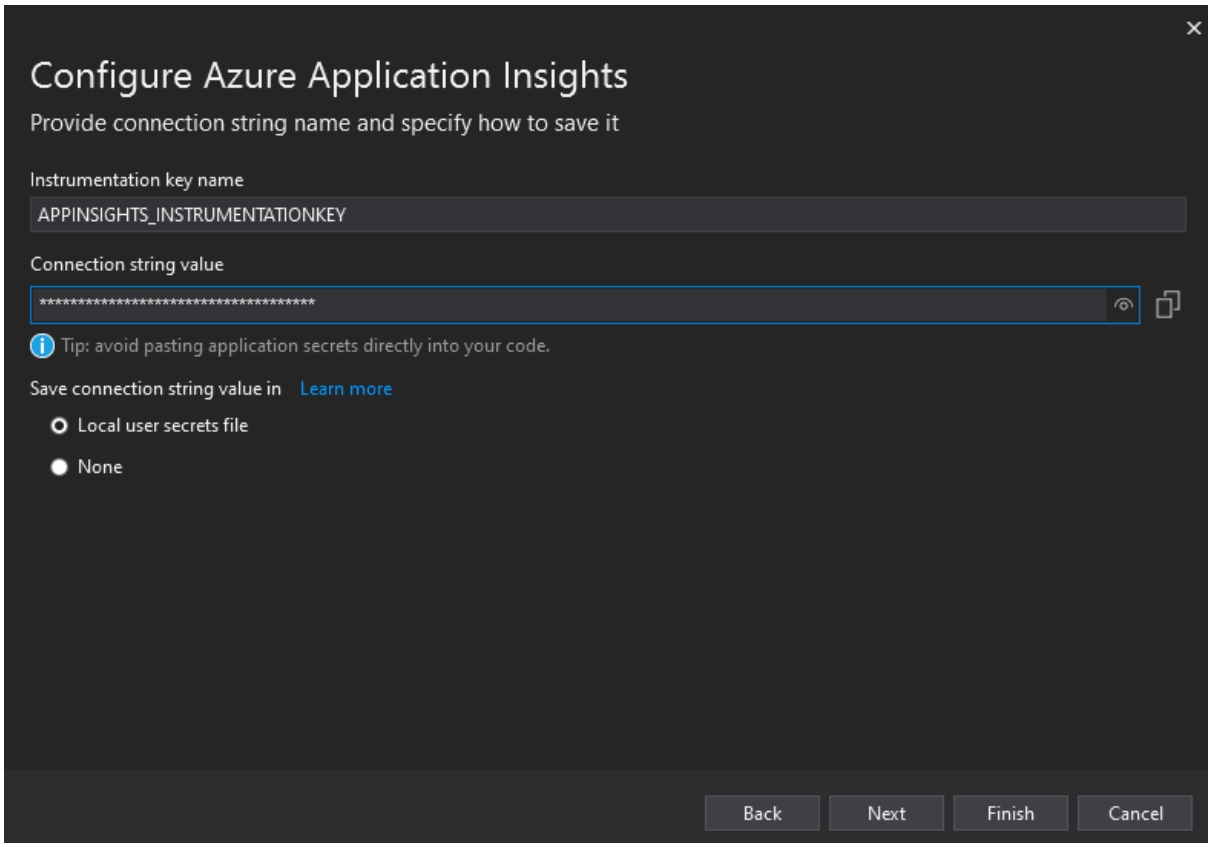
6. Select Azure Application Insights. SDK option just add code and NuGet packages and let's you debug locally, where as second option will transmit data to Azure App Insights.



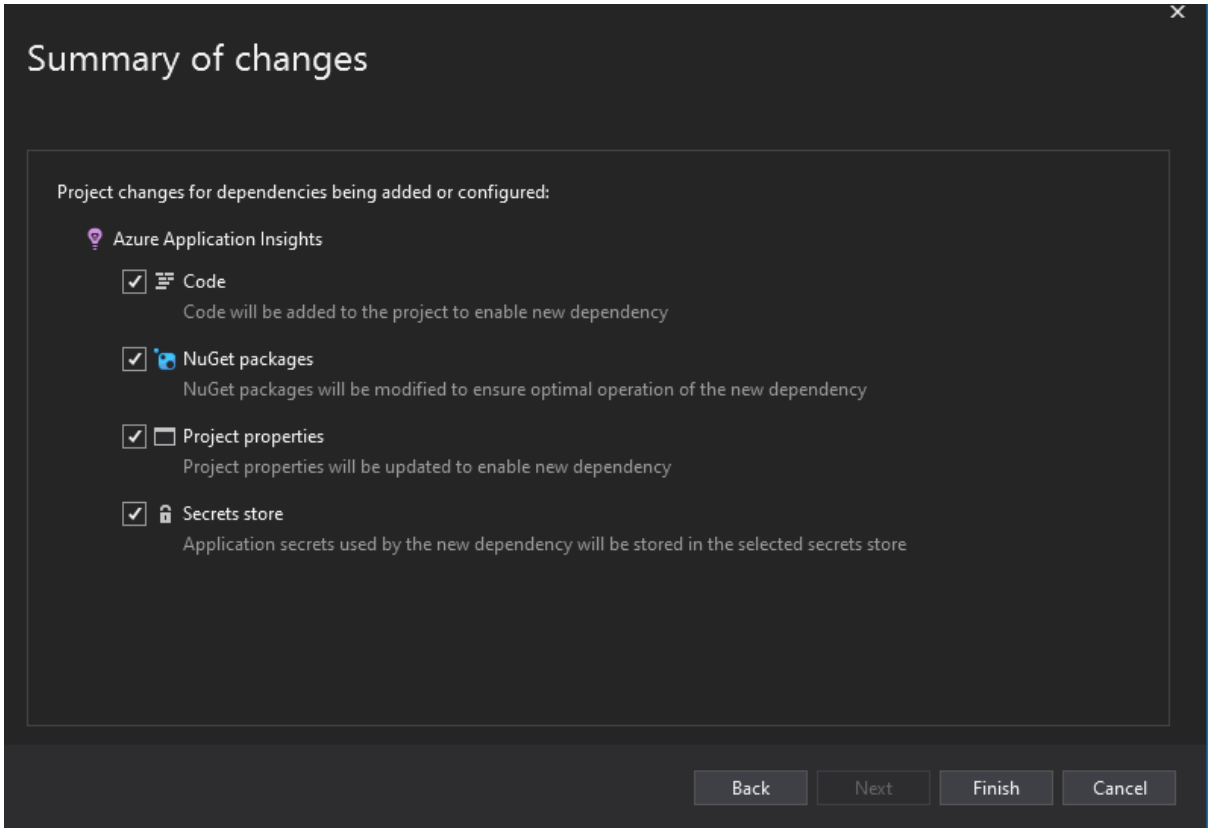

7. Select the App Insight that you have created for Lab, if you have not created one, create a new App Insights…



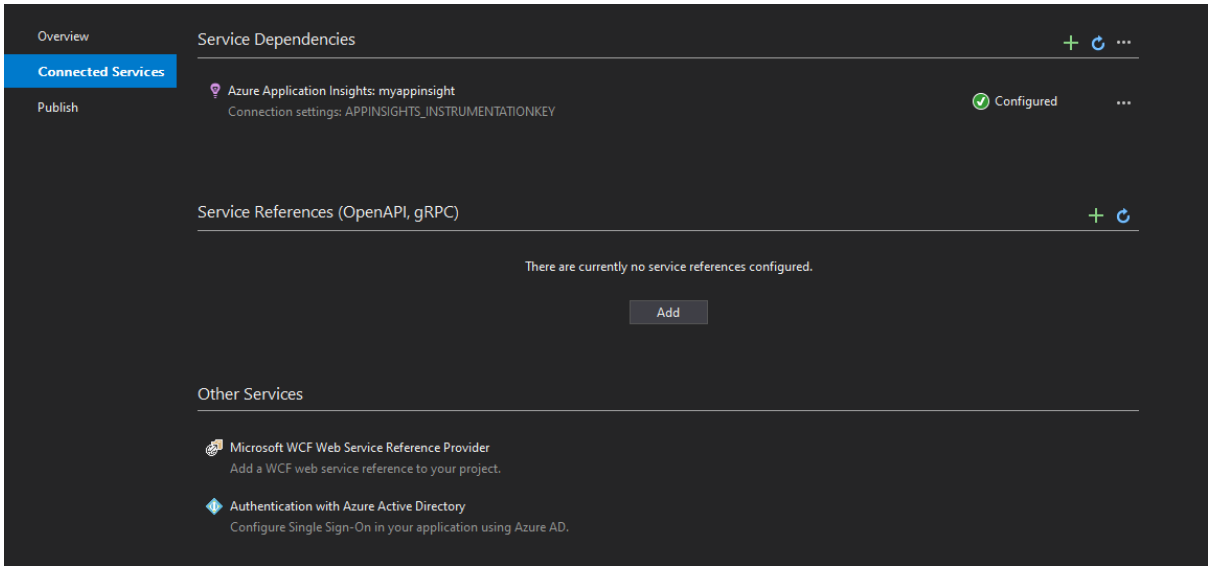

8. Once you link App Insights, click Next



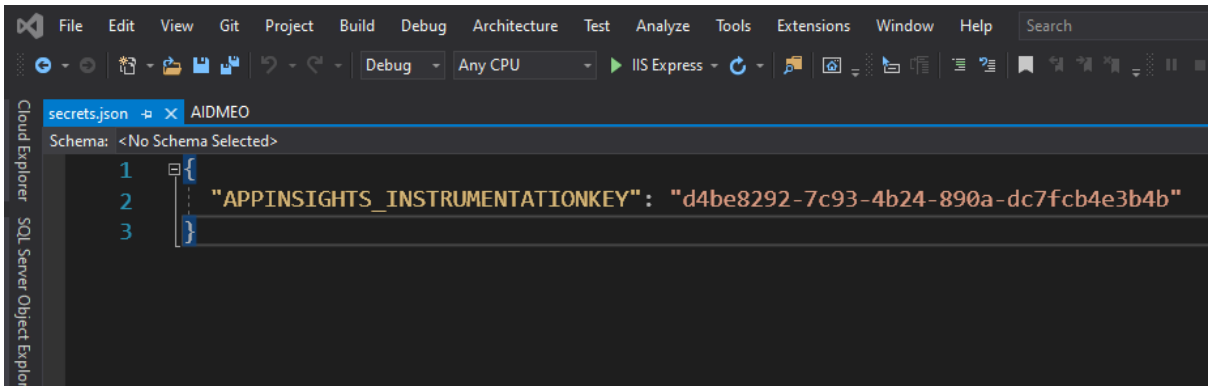
9. Click Finish and App Insights will be added to your project.



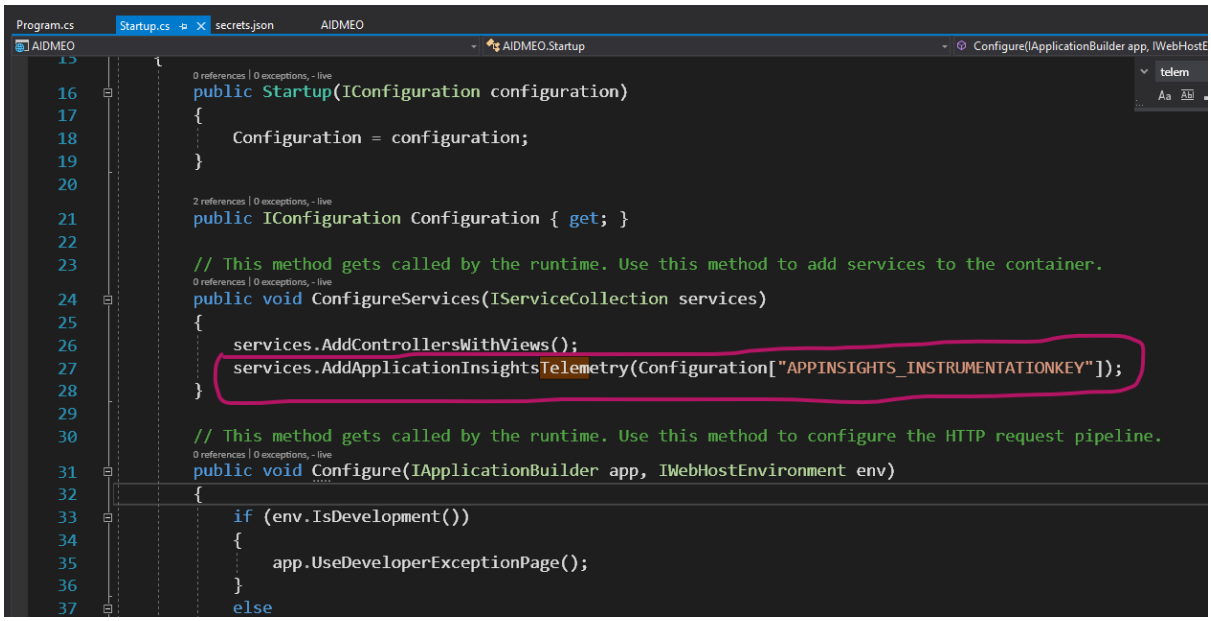

10. Confirm that application insights is added to the project and configured properly.



- Right click on your project and click “Manage User Secrets”, you should be able to see App Insights Key.




11. Application Insight has been added to your project

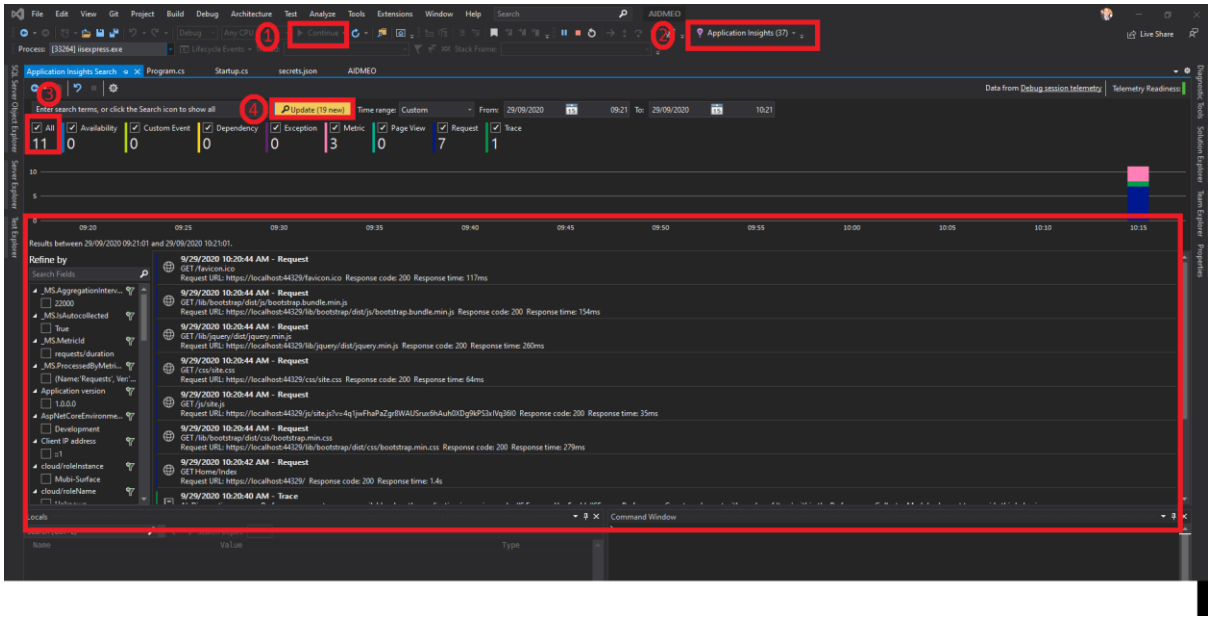


# 4 Exercise 3 – Getting Telemetry

## 4.1 Telemetry in Visual Studio

Viewing Telemetry locally in Visual Studio

- Click Run web app
- Click on App Insights (right top corner as shown in image)
- Tick [All]
- Click Update
- Browse web page, you will see telemetry events being loaded…

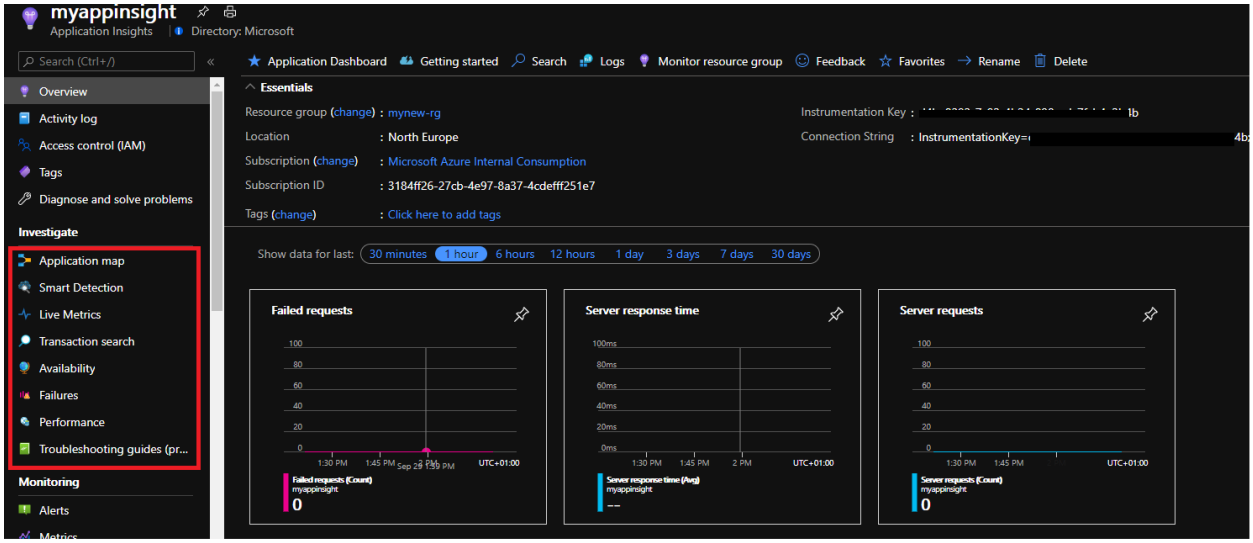


## 4.2 Telemetry in Azure Portal

Go to Azure portal, open App Insights you created, to view Telemetry.

See telemetry data on following tabs.

- Application Map
- Smart Detection
- Live Metrics
- Transaction Search
- Availability
- Failure
- Performance


myappinsight
Application Insights
Directory: Microsoft
Search (Ctrl+/)
Application Dashboard
Getting started
Search
Logs
Monitor resource group
Feedback
Favorites
Rename
Delete
Overview
Activity log
Access control (IAM)
Tags
Diagnose and solve problems
Investigate
Application map
Smart Detection
Live Metrics
Transaction search
Availability
Failures
Performance
Troubleshooting guides (pr...
Monitoring
Alerts
Essentials
Resource group (change) : mynew-rg
Location : North Europe
Subscription (change) : Microsoft Azure Internal Consumption
Subscription ID : 3184ff26-27cb-4e97-8a37-4cdefff251e7
Tags (change) : Click here to add tags
Instrumentation Key :
Connection String : InstrumentationKey=
Show data for last:
30 minutes
1 hour
6 hours
12 hours
1 day
3 days
7 days
30 days
Failed requests
Server response time
Server requests
UTC+01:00
0

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# 5 Exercise 4 – Adding Custom Events

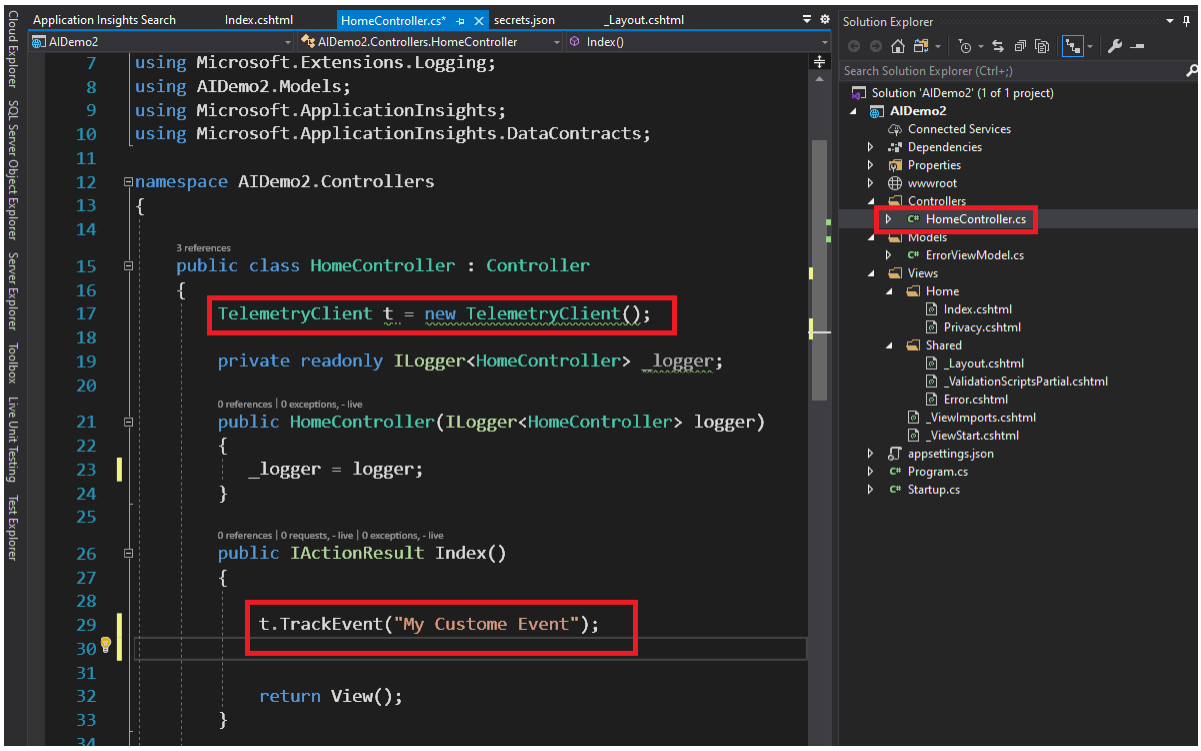
Adding custom events

1. Go to Controllers/HomeController.cs

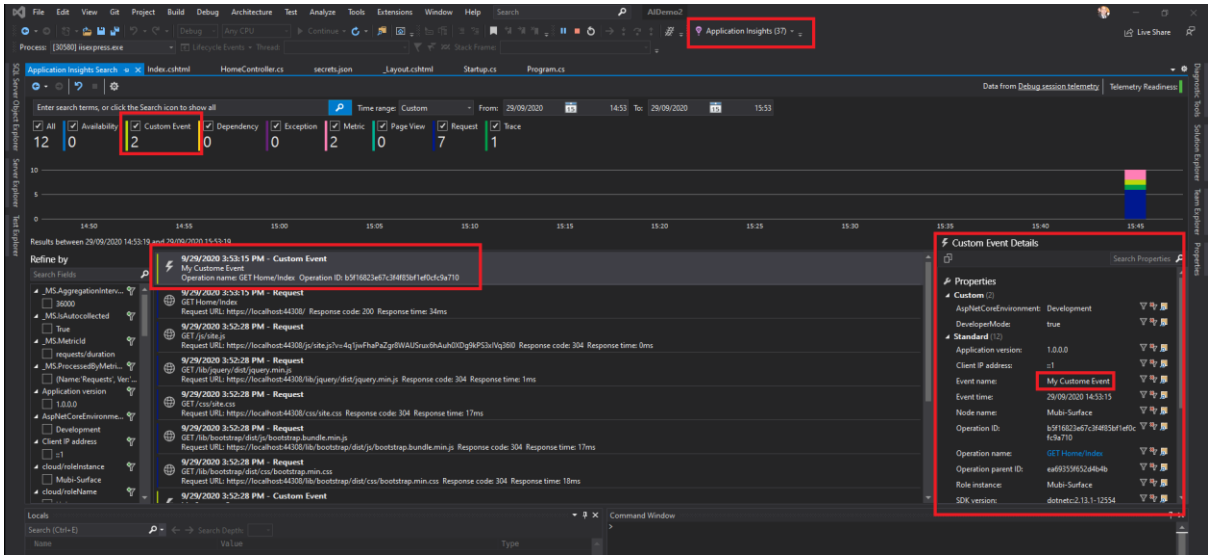
2. In the main class declare
   TelemetryClient t = new TelemetryClient();

3. In Index method add

   t.TrackEvent("My Custome Event");




4. Navigate to App Insights screen and view your custom event



5. Try some other custom events…
   - Exception
   - Page View
   - Metric
   - TrackTrace