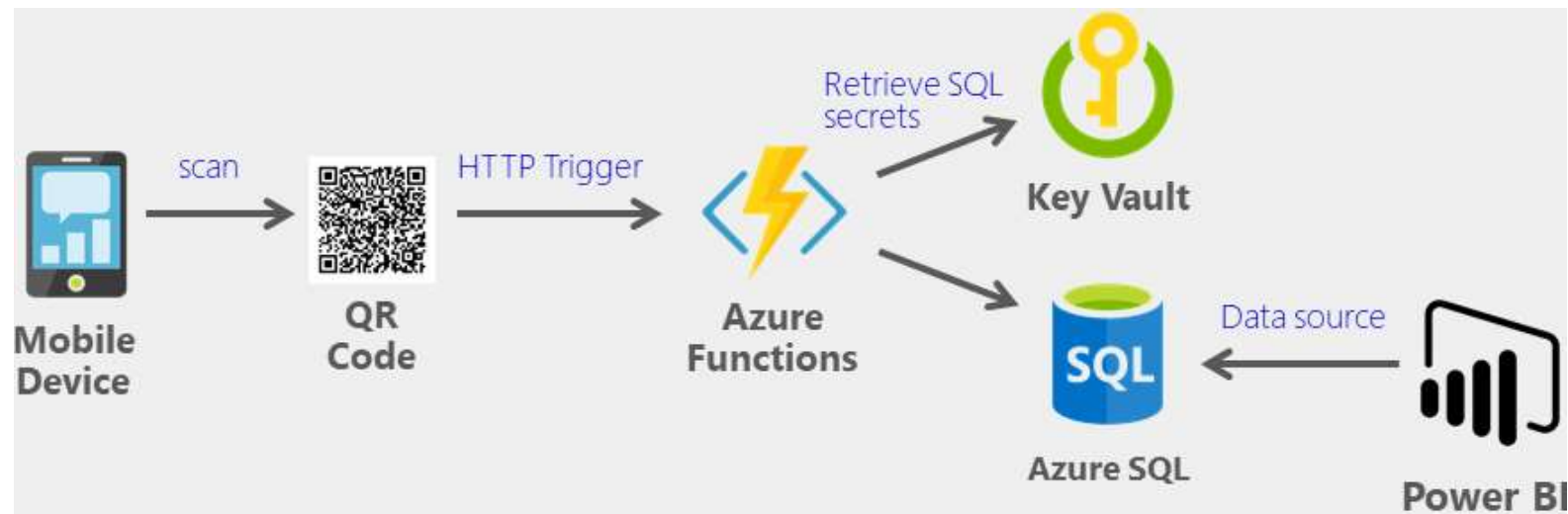




Azure Function App

What are Function Apps and its usage

- Can author and execute snippets of code in the cloud
- No hassle of managing the servers
- It lets you run small pieces of code
- Doesn't have to worry about the infrastructure of the platform



Supported Languages

C#

F#

JavaScript

Java 8

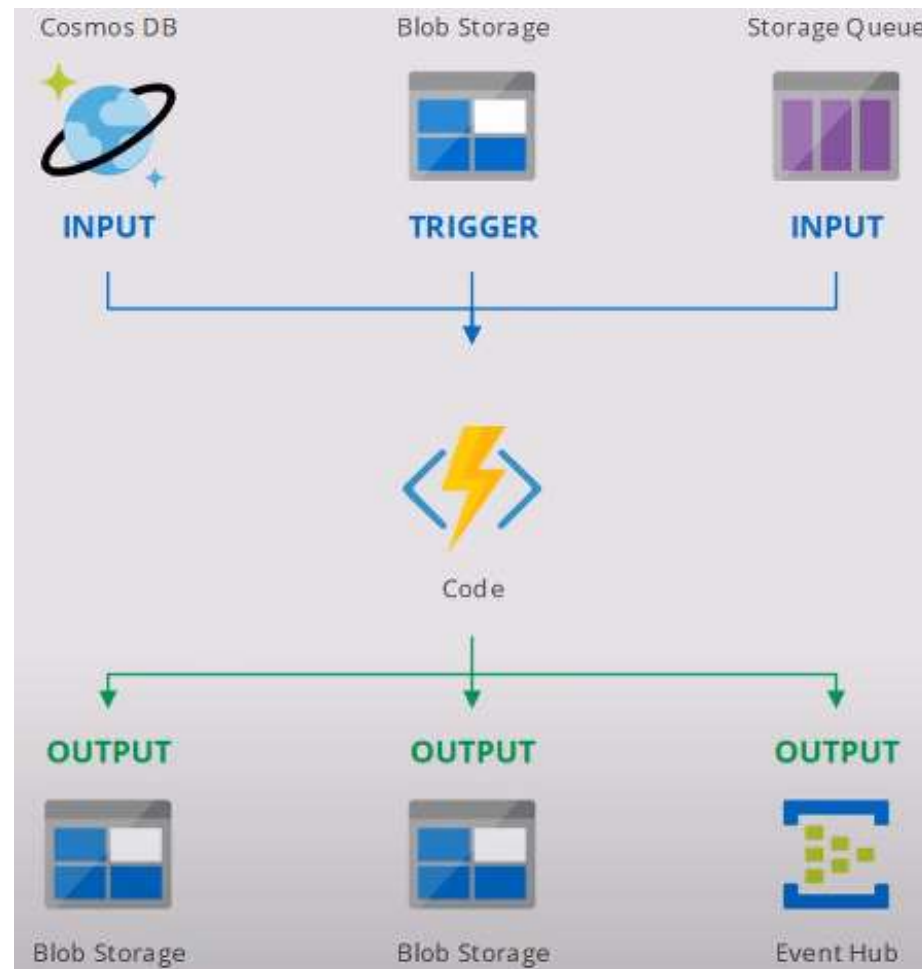
PowerShell Core 6

Python 3.7.x

Typescript



How Azure Functions Works



Azure Function: Hands-on

- Create a Function in Azure Function App

Example of function

```
run.csx  Save  Run  </> Get function URL

1 #r "Newtonsoft.Json"
2
3 using System.Net;
4 using Microsoft.AspNetCore.Mvc;
5 using Microsoft.Extensions.Primitives;
6 using Newtonsoft.Json;
7
8 public static async Task<IActionResult> Run(HttpRequest req, string inputBlob, ILogger log)
9 {
10     log.LogInformation("C# HTTP trigger function processed a request.");
11
12     string name = req.Query["name"];
13
14     string requestBody = await new StreamReader(req.Body).ReadToEndAsync();
15     dynamic data = JsonConvert.DeserializeObject(requestBody);
16     name = name ?? data?.name;
17
18     string greetingMessage = inputBlob;
19     if(greetingMessage == null)
20         greetingMessage = "Hello ";
21
22     return name != null
23         ? (ActionResult)new OkObjectResult(greetingMessage + name)
24         : new BadRequestObjectResult("Please pass a name on the query string or in the request body");
25 }
26
```

1) Triggers

2) Input

4) Your actual codes

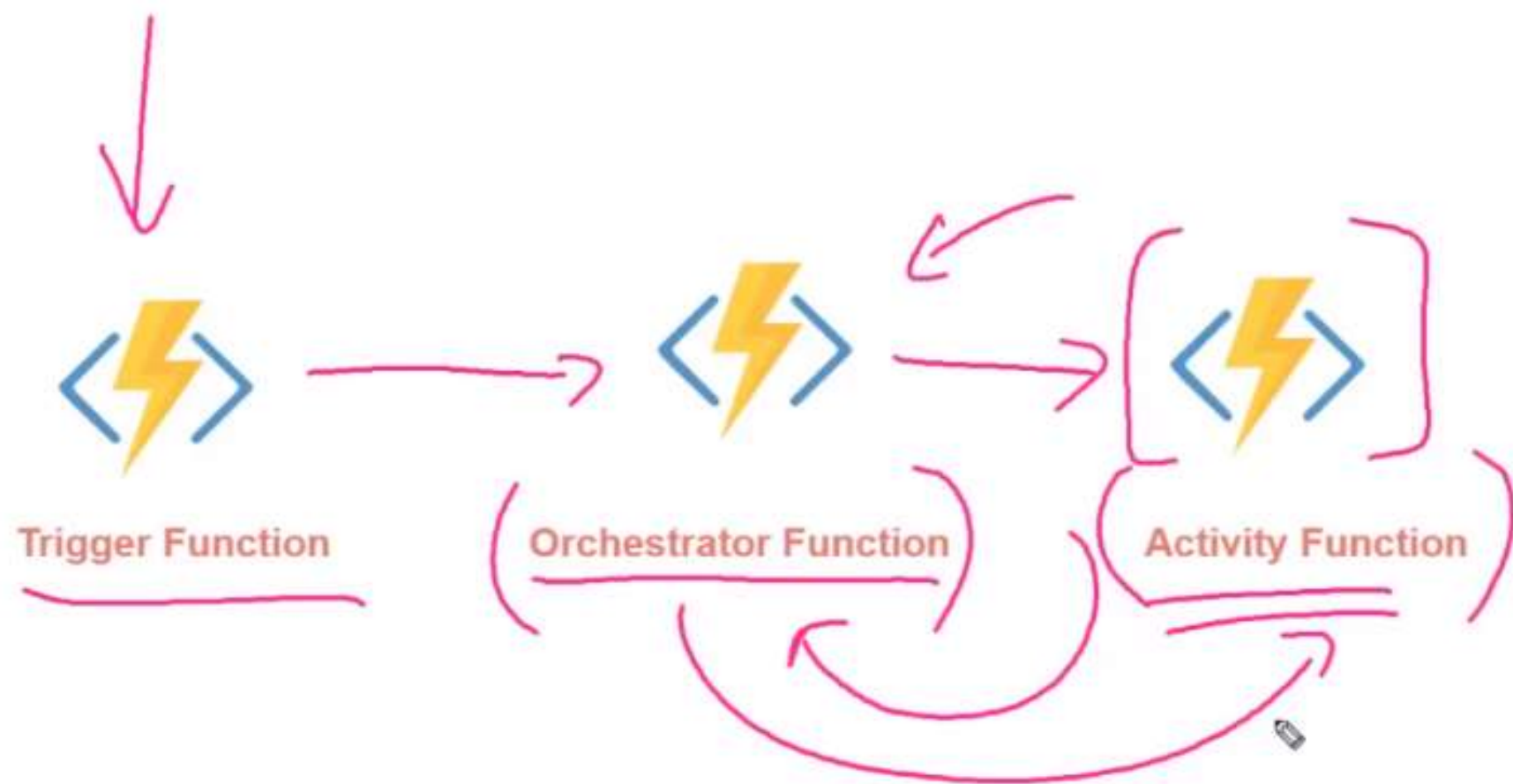
3) Output

Triggers: Hands-on

Azure Durable Functions

- An extension of Azure Function that is used to write Stateful Functions
- It consists of Orchestrator function and entity functions that can be defined as a workflow
- As a state-based services, it enables checkpoint and restarts from it.
- Azure Durable Function supports languages like
 - C#
 - JavaScript
 - F#
 - Python
 - PowerShell

Azure Durable Functions



Azure Durable Functions - Example

- In this example, the values F1, F2, F3, and F4 are the names of other functions in the same function app.
 - `import azure.functions as func`
 - `import azure.durable_functions as df`
 - `def orchestrator_function(context: df.DurableOrchestrationContext):`
 - `x = yield context.call_activity("F1", None)`
 - `y = yield context.call_activity("F2", x)`
 - `z = yield context.call_activity("F3", y)`
 - `result = yield context.call_activity("F4", z)`
 - `return result`
 - `main = df.Orchestrator.create(orchestrator_function)`

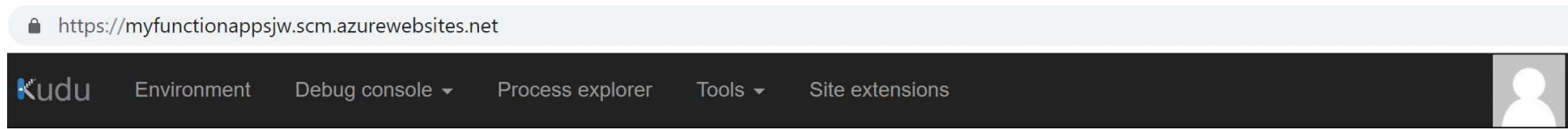
Durable Function: Hands-on

- Create a Durable Function

What are Kudu in Function App

- The advanced tools for App Service (also known as Kudu)
- Provide access to advanced administrative features of your function app.
- From Kudu, you manage
 - System information,
 - App settings,
 - Environment variables,
 - Site extensions,
 - HTTP headers, and
 - server variables.
- Accessing your KUDU console is easily done via the following URL:
<https://dotest.scm.azurewebsites.net>
- Replace dotest with the name of your app name

What are Kudu in Function App



Environment

Build	79.11121.3655.0 (935294dece)
Azure App Service	79.0.8598.64 (rd_websites_stable.181217-1712)
Site up time	00.00:03:05
Site folder	D:\home
Temp folder	D:\local\Temp\

REST API (works best when using a JSON viewer extension)

- [App Settings](#)
- [Deployments](#)
- [Source control info](#)
- [Files](#)
- [Log streaming](#) (use curl, not browser!)
- [Processes and mini-dumps](#)
- [Runtime versions](#)
- Site Extensions: [installed](#) | [feed](#)
- [Web hooks](#)
- WebJobs: [all](#) | [triggered](#) | [continuous](#)
- Functions: [list](#) | [host config](#)

Thanks