**Azure Cosmos DB**

**Operations in Cosmos DB**

**Create:**

await container.CreateItemAsync<Product>(saddle);

ItemResponse<Product> response = await container.CreateItemAsync<Product>(saddle); HttpStatusCode status = response.StatusCode; double requestUnits = response.RequestCharge; Product item = response.Resource;

With exception handling:

try { await container.CreateItemAsync<Product>(saddle); } catch(CosmosException ex) when (ex.StatusCode == HttpStatusCode.Conflict) { // Add logic to handle conflicting ids } catch(CosmosException ex) { // Add general exception handling logic }

**Read document :**

string id = "027D0B9A-F9D9-4C96-8213-C8546C4AAE71";

string categoryId = "26C74104-40BC-4541-8EF5-9892F7F03D72"; PartitionKey partitionKey = new (categoryId);

Product saddle = await container.ReadItemAsync<Product>(id, partitionKey);

**Update Documents:**

saddle.price = 35.00d;

await container.UpsertItemAsync<Product>(saddle);

**Configure time to live**

[JsonProperty(PropertyName = "ttl", NullValueHandling = NullValueHandling.Ignore)] public int? ttl { get; set; }

saddle.ttl = 1000;

await container.UpsertItemAsync<Product>(saddle);

**Delete Documents :**

string id = "027D0B9A-F9D9-4C96-8213-C8546C4AAE71";

string categoryId = "26C74104-40BC-4541-8EF5-9892F7F03D72";

PartitionKey partitionKey = new (categoryId);

await container.DeleteItemAsync<Product>(id, partitionKey);

**Configuration:**

**cosmos db connectiion code**

using System;

using System.Linq;

using Microsoft.Azure.Cosmos;

string endpoint = "https://sdko-demo-cosmos.documents.azure.com:443/";

string key = "bjv2uiAzxA8aTR9rzTw0dMDOkAAVfnwCE9MYBPoRMXpOSqZej0Jsjk3VQX9ldEPoXTGl2ddxbN22ACDbr5TDgg==";

CosmosClient client = new (endpoint, key);

AccountProperties account = await client.ReadAccountAsync();

Console.WriteLine($"Account Name:\t{account.Id}");

Console.WriteLine($"Primary Region:\t{account.WritableRegions.FirstOrDefault()?.Name}");

**---------------------------------------------------------**

**connect with cosmos db Emulator and create db and container**

using System;

using Microsoft.Azure.Cosmos;

string connectionString = "AccountEndpoint=https://localhost:8081/;AccountKey=C2y6yDjf5/R+ob0N8A7Cgv30VRDJIWEHLM+4QDU5DE2nQ9nDuVTqobD4b8mGGyPMbIZnqyMsEcaGQy67XIw/Jw==";

CosmosClient client = new (connectionString);

Database database = await client.CreateDatabaseIfNotExistsAsync("cosmicworks");

Console.WriteLine($"New Database:\tId: {database.Id}");

Container container = await database.CreateContainerIfNotExistsAsync("products", "/categoryId", 400);

Console.WriteLine($"New Container:\tId: {container.Id}");

**-------------------------------------------------------------------------------------------------------------------**

**Configuration**

{

// Use IntelliSense to learn about possible attributes.

// Hover to view descriptions of existing attributes.

// For more information, visit: https://go.microsoft.com/fwlink/?linkid=830387

"version": "0.2.0",

"configurations": [

{ "name": ".NET Core Launch (console)",

"type": "coreclr",

"request": "launch",

"preLaunchTask": "build",

"program": "${workspaceFolder}/04-sdk-connect/bin/Debug/net6.0/app.dll",

"args": [],

"cwd": "${workspaceFolder}/04-sdk-connect",

"console": "internalConsole",

"stopAtEntry": false

},

{

"name": ".NET Core Attach",

"type": "coreclr",

"request": "attach"

}

]

}

**Add sample data to Cosmos DB**

**Via Portal :**

Click on tha Quick Launch.

**Via Command Line:**

dotnet tool install –global cosmicworks

Cosmicworks --endpoint myendpoint --key myprimarykey --datasets product

https://www.youtube.com/watch?v=fkwpaoUE4J0&list=PLOlK8ytA0MghBrzu0i6WlTBdoO1WdwV\_e