**2.2 Implement Functions**

**GetAllData Azure Function**

Retrieves all documents from Cosmos DB.

1. **Create Function**:
   * Click **+ Add Function** > **HTTP Trigger**.
   * Name it GetAllData.
2. **Configure Input Binding**:
   * In the function, go to **Integration**.
   * Click **+ Add Input**.
   * Choose **Azure Cosmos DB** and configure:
     + **Database Name**: mydatabase
     + **Container Name**: mycontainer
     + **Connection String**: Select the Cosmos DB account.
3. **Modify \_\_init\_\_.py**:
   * Navigate to **Code + Test**.
   * Replace the default code with:

python

CopyEdit

import logging

import azure.functions as func

import json

def main(req: func.HttpRequest, documents: func.DocumentList) -> func.HttpResponse:

logging.info("Fetching all documents.")

if not documents:

return func.HttpResponse("No data found", status\_code=404)

return func.HttpResponse(json.dumps([doc.to\_dict() for doc in documents]), mimetype="application/json")

**GetData Azure Function**

Retrieves a single document by ID.

1. **Create Function**: GetData
2. **Configure Input Binding** (same as GetAllData).
3. **Modify \_\_init\_\_.py**:

python

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import logging

import azure.functions as func

import json

def main(req: func.HttpRequest, documents: func.DocumentList) -> func.HttpResponse:

logging.info("Fetching document by ID.")

if not documents:

return func.HttpResponse("Document not found", status\_code=404)

return func.HttpResponse(json.dumps(documents[0].to\_dict()), mimetype="application/json")

**SaveData Azure Function**

Inserts or updates a document.

1. **Create Function**: SaveData
2. **Configure Output Binding**:
   * Click **+ Add Output** > **Azure Cosmos DB**.
   * Select the same database and container.
3. **Modify \_\_init\_\_.py**:

python

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import logging

import azure.functions as func

import json

def main(req: func.HttpRequest, outDocument: func.Out[func.Document]) -> func.HttpResponse:

logging.info("Saving document.")

try:

data = req.get\_json()

outDocument.set(func.Document.from\_dict(data))

return func.HttpResponse("Document saved successfully", status\_code=200)

except Exception as e:

return func.HttpResponse(f"Error: {str(e)}", status\_code=400)

**DeleteData Azure Function**

Deletes a document by ID.

1. **Create Function**: DeleteData
2. **Modify \_\_init\_\_.py**:

python

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import logging

import azure.functions as func

def main(req: func.HttpRequest, documents: func.DocumentList) -> func.HttpResponse:

logging.info("Deleting document.")

if not documents:

return func.HttpResponse("Document not found", status\_code=404)

doc = documents[0]

doc.delete()

return func.HttpResponse("Document deleted successfully", status\_code=200)

**Step 3: Test the Functions**