

# SERVERLESS IOT DATA PROCESSING

## PHASE -4: DEVELOPMENT-2

### GIVEN STATEMENT:

In this part you will continue building your project.

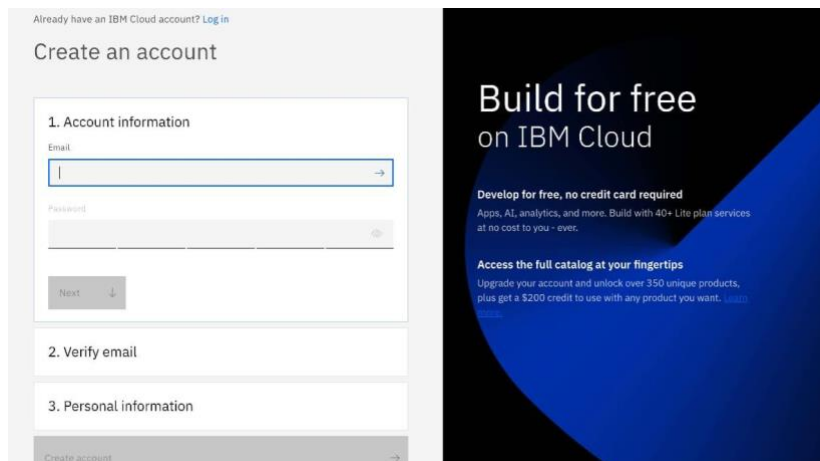
- Continue building the solution by implementing real-time data processing, automation, and storage.
- Use IBM Cloud Functions to process data and trigger automated routines.
- Store processed data in IBM Cloud Object Storage for analysis.

Following these steps to continue building your project with IBM Cloud Functions and IBM Cloud Object Storage:

- ✓ Set Up IBM Cloud Account:

If you haven't already, create an IBM Cloud account or log in to your existing account.

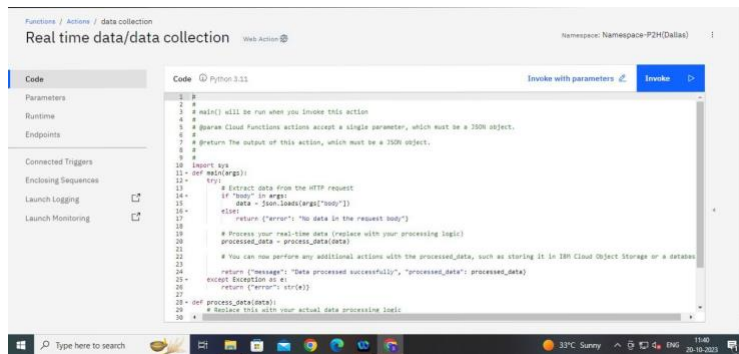
- ✓ Create IBM Cloud Functions:
- ✓

The image shows a screenshot of the IBM Cloud account creation interface. On the left, there is a form titled 'Create an account' with a link 'Already have an IBM Cloud account? Log in'. The form has three sections: '1. Account information' with fields for 'Email' and 'Password', a 'Next' button, and a 'Create account' button at the bottom; '2. Verify email'; and '3. Personal information'. On the right, there is a promotional banner with a blue and black background. The banner text includes 'Build for free on IBM Cloud', 'Develop for free, no credit card required', 'Apps, AI, analytics, and more. Build with 40+ Lite plan services at no cost to you - ever.', and 'Access the full catalog at your fingertips'. It also mentions 'Upgrade your account and unlock over 350 unique products, plus get a \$200 credit to use with any product you want.' with a 'Learn more' link.

- ✓ Navigate to the IBM Cloud Functions service in your IBM Cloud dashboard.

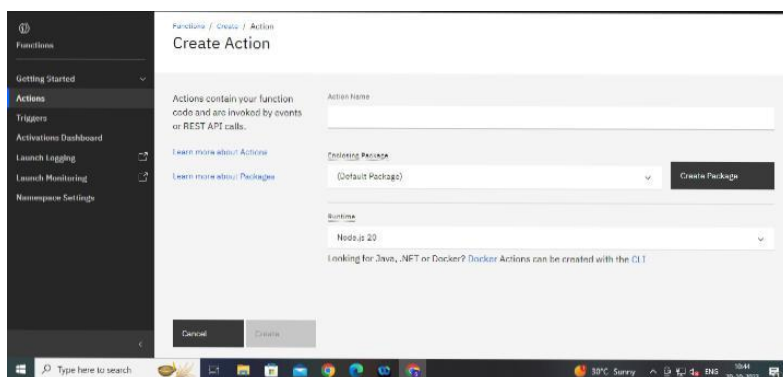
Create a new Action or Function that will process your real-time data. You can write your code in a supported runtime, such as Node.js, Python, or Swift.

✓ Implement Real-Time Data Processing:



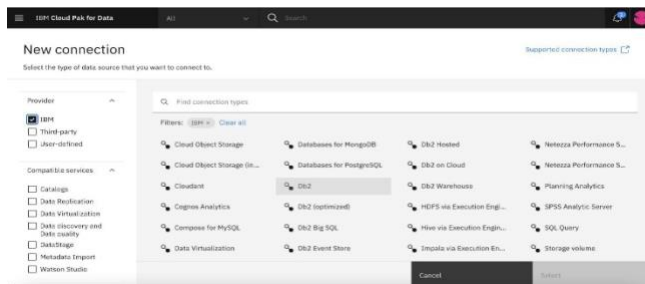
Write the code for your IBM Cloud Function to process the incoming real-time data. You can use triggers (like HTTP requests or message queues) to initiate this function.

✓ Automate Routines:



Configure your IBM Cloud Function to trigger automated routines whenever specific conditions are met. This can include sending alerts, notifications, or performing other actions in response to processed data.

## ✓ Store Data in IBM Cloud Object Storage



Set up an instance of IBM Cloud Object Storage in your IBM Cloud account.

Modify your IBM Cloud Function to save the processed data into IBM Cloud Object Storage. You can use SDKs or APIs to interact with Object Storage.

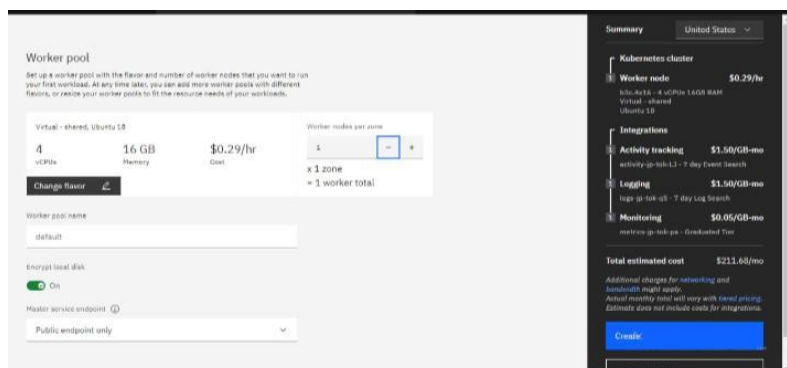
## ✓ Secure Your Data:

Ensure that you have proper access control and security measures in place to protect your data. IBM Cloud offers fine-grained access control and encryption options for data storage.

## ✓ Analysis and Reporting:

Once data is stored in IBM Cloud Object Storage, you can set up analytics tools or services to analyze and generate reports on the stored data.

## ✓ Testing and Monitoring:



Test the end-to-end solution to ensure it functions as expected.

Implement monitoring and logging to keep track of the system's performance and any potential issues.

✓ **Scaling and Optimization:**

Depending on your project's needs, you can scale your IBM Cloud Functions and Object Storage to handle increased data loads.