

# ANNA UNIVERSITY REGIONAL CAMPUS COIMBATORE-641046

## IBM NAAN MUDHALVAN PHASE 1

## **CLOUD COMPUTING**

## SERVERLESS IOT DATA PROCESSING

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## **AGENDA**

- **1.**Project Overview
- 2.Problem Statement
- **3.**Proposed Solution
- **4.**Implementation Plan
- **5.**Benefits and Impact

#### PROJECT OVERVIEW

#### **Project Review:**

- The goal of this project is to develop a highly efficient and scalable system for processing IoT data in the cloud using serverless computing.
- This project aims to provide real-time insights and analytics from large-scale IoT deployments.

## PROBLEM STATEMENT

#### **Challenges:**

- The increasing volume, velocity, and variety of IoT data pose challenges in terms of efficient processing, real-time analytics, and cost-effectiveness.
- •Existing solutions often struggle to scale effectively to handle IoT data spikes and maintain low-latency processing.

## PROPOSED SOLUTION

#### **Serverless IoT Data Processing:**

- •Our proposed solution leverages serverless computing to address the challenges associated with IoT data processing.
- •Serverless computing allows automatic scaling, reducing operational overhead and ensuring real-time processing.
- •Key components of the solution include data ingestion, processing, storage, and analytics.

## IMPLEMENTATION PLAN

- Planning and Architecture Design
  - Define system requirements and architecture.
  - Identify key technologies and tools.
- Implementation
  - Develop serverless functions for data processing.
  - Set up data pipelines and storage.
- Testing and Optimization
  - Perform rigorous testing, including load and stress testing.
  - Optimize functions and workflows for efficiency.
- Deployment and Monitoring
  - Deploy the system in a production environment.
  - Implement real-time monitoring and alerting.

## BENEFITS AND IMPACT

#### •Potential Benefits:

- Scalability to handle varying IoT data volumes.
- Cost savings through serverless computing.
- Real-time insights for better decision-making.

#### •Impact :

Alignment with business goals and long-term strategies.

## CONCLUSION

In summary, the proposed project, "Serverless IoT Data Processing," aims to leverage serverless computing for efficient and scalable IoT data processing. By choosing this approach, we anticipate cost savings, real-time insights, and improved decision-making capabilities.



EXPRESSING OUR GRATITUDE....