PROJECT PHASE DESIGN - I

SOLUTION ARCHITECTURE

Date	14 oct 2022
Team Id	PNT2022TMID18315
Project Name	Gas leakage monitoring and alerting system for industries
Maximum mark	4mark

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

• Find the best tech solution to solve existing business problems.

• Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.

• Define features, development phases, and solution requirements.

• Provide specifications according to which the solution is defined, managed, and delivered.

USERS/APPLICATIONS

PEER PLATFORM

PEER PLATFORM APPLICATION

END USER APPLICATION

END USER

ENTERPRISE USER

ENTERPRISE APPLICATIONS

OPERATOR

DEVICE UI

EDGE

PLATFORM

ENTERPRISE

IBM PLATFORM

IoT SOLUTION

IIoT PLATFORM

ACCESS NETWORK

API MANAGEMENT

APPLICATION RUNTIME

PROCESS MANAGEMENT

SERVICES NETWORK

SENSOR GATEWAY

SENSOR/ ACTUATOR

VISUALIZATION SUPPORT

ENTERPRISE TRANSFORMATION & CONNECTIVITY

PROXIMITY NETWORK

EDGE SERVICES

USER MANAGEMENT

ENTERPRISE DATA

Transform/Connect

Apps/Analytics

Gateway Device Management

Device Management Client

Configuration/Container Management

Device Data

Digital Device

Firmware

Apps/Analytics

Network Connection

Device Management Client

DEVICE

IoT GATEWAY

IoT CONNECTIVITY & BROKERING

DEVICE MANAGEMENT

IoT INFORMATION MODEL

AI/ ANALYTICS

IoT BLOCKCHAIN INTEGRATION

ENTERPRISE USER DIRECTORY

PHYSICAL ENTITY

SCADA

DATA MANAGEMENT SERVICES

IoT DATA LAKE

LEGEND

■ Security
■ User
■ Data oriented service
■ Infrastructure services
■ Application