Amrita School of Computing
Department of Computer Science and Engineering

Minor Project: 19CSE495
(2020-2024 B.Tech CSE)

Problem Definition Document

I. Project Title: Cloud-Based IoT Data Analytics Platform for Real-Time Insights and Recommendations

II. Team members:

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III. Abstract

Title: Cloud-Based IoT Data Analytics Platform for Real-Time Insights and Recommendations

The goal of this project is to develop a cloud-based Internet of Things (IoT) data analytics platform that enables the collection, processing, and analysis of sensor data from multiple IoT devices. The platform will provide real-time insights, data visualization, and actionable recommendations to users, facilitating informed decision-making and optimizing IoT device performance.

By developing the cloud based IoT data analytics platform, you can demonstrate proficiency in IoT data processing, real-time analytics, machine learning, and data visualization. This project addresses the increasing demand for extracting actionable insights from the vast amounts of data generated by IoT devices, enabling organizations to make informed decisions, optimize processes, and improve overall operational efficiency.

IV. Motivation

The motivation behind the project idea of a cloud based IoT data analytics platform for real-time insights and recommendations is driven by the increasing adoption of IoT devices and the need to leverage the data they generate to make informed decisions and optimize processes. A cloud based IoT data analytics platform is a system that collects, processes, and analyzes data generated by Internet of Things (IoT) devices. It leverages cloud computing infrastructure to store and process large volumes of data, providing real-time insights and recommendations to users. This platform enables organizations to harness the power of IoT data for improved decision-making, operational efficiency, and business outcomes.

Consider a scenario where an energy company wants to optimize its energy generation and consumption based on real-time data from IoT devices. The company aims to reduce energy waste, enhance operational efficiency, and ensure sustainable energy practices. A cloud based IoT data analytics platform can play a crucial role in achieving these goals.

Students' Name and Signature

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Guide's Signature