The Smart Utility Management System (SUMS): A Comprehensive Digital Platform for On-Demand Services

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Abstract: *The Smart Utility Management System (SUMS) is an advanced digital platform designed to connect users with professional service providers across a wide range of utility-based tasks. These tasks include home maintenance, appliance repair, plumbing, electrical services, cleaning, and more. SUMS aims to bridge the gap between service providers and consumers by offering a seamless, efficient, and technology-driven solution. Inspired by leading service aggregation platforms like UrbanClap, SUMS integrates artificial intelligence, location-based services, and automated booking systems to enhance the overall user experience. This paper explores the key aspects of SUMS, including service request management, user experience optimization, real-time tracking, and secure payment integration.*

SUMS revolutionizes the service industry by providing real-time service tracking, instant communication channels between users and providers, and a robust rating and feedback system. SUMS incorporates secure digital payment options, enabling hassle-free transactions with multiple payment methods, including credit/debit cards, mobile wallets, and UPI.One of the key advantages of SUMS is its adaptive learning mechanism, which continuously improves service recommendations and pricing models through data-driven insights. By leveraging big data analytics, SUMS can predict peak service demand, optimize service provider allocation, and improve operational efficiency. Additionally, the platform's geo-location tracking allows for efficient route planning and service dispatching, minimizing delays and maximizing customer satisfaction. This paper explores the key aspects of SUMS, including service request management, user experience optimization, real-time tracking, secure payment integration, and the future potential of AI-driven service automation in utility management.

Keywords: On-Demand Services, Service, Aggregation Home Maintenance, Smart Booking System, Utility Management