

Electricity Bill Management System

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Abstract: *The Electricity Bill Management System (EBMS) is a Java-based application to facilitate efficient management and processing of electricity bills for residential and commercial consumers. This system aims to streamline the billing process, enhance accuracy, and provide users with convenient access to their billing information. The EBMS comprises various modules to handle different aspects of electricity bill management. These modules include user registration and login, bill generation, payment processing, and administrative functionalities. Upon registration, users can securely log in to the system and access their account information. They can view their current and past electricity bills, along with detailed consumption data.*

Additionally, users can update their personal information and preferences through the user profile module. The bill generation module automates the process of generating electricity bills based on consumption data collected from smart meters or manual readings. Bills are generated periodically and made available to users through their accounts.

The payment processing module enables users to conveniently pay their electricity bills online through various payment methods, including credit/debit cards, net banking, and digital wallets. Users receive instant payment confirmation and can track their payment history within the system. Administrators have access to advanced functionalities for managing user accounts, generating reports, and monitoring system activity. They can generate usage reports, analyse consumption patterns, and handle any discrepancies in billing.

Keywords: Electricity Bill Management System, Java, Billing Process, User Experience, Accuracy, Billing Computation, User Registration, Login, Bill Generation, Payment Processing, Administrative Functionalities, Smart Meters, Online Payment, User Profile, Consumption Data, Payment Methods, Credit/Debit Cards, Net Banking, Digital Wallets, Usage Reports, Customer Satisfaction