# ELECTRICITY BILLING SYSTEM

**Subject:**Software Group Project (SGP)

Made by: Vedant Patel (19IT113)

Krutarth Punjabi (19IT122)

Institute: Chandubhai S Patel Institute of

Technology, CHARUSAT

#### **Content:**

- Abstract
- Keyword
- Introduction of project
- Objective
- Problem and solution
- Feature
- Implementatio n Strategy
- Conclusion
- Reference

### **Keywords**

➤ Electricity billing system, login, customer details, new customer, pay bill, last bill, generate bill, calculate bill

### **Introduction of Project**

> Electricity Billing System is an application which is developed in Java programming language. The main aim of the project is to serve the department of electricity. The goal is to computerize the existing billing system .The focus is on the calculation of Units consumed during the specific amount of time and calculate the money that is to be paid to electricity offices. This project will ease the current system and will make the overall billing system easy, and the employee will also be able to access the details comfortably.

# **Objective:**

The firm handles all of the work manually, which is very tedious and mismanaged. The objective of our project is as follows:

- a. To store the information of Customer.
- b. To store the information of unit consumption of energy of current month
- c. Can add new customer.
- d. We can generate bill
- e. Paying bill
- f. It promotes eco-friendly environment minimizing the use of paper

#### **Abstract:**

The main aim of the project is the development of a system that focuses to computerize the manual work performed in the Electricity bill, and store record of consuming units of energy, store record of the customer and previous bills.

#### ELECTRICITY BILLING SYSTEM

Electricity billing system is a application made for the electricity officials to make their task easy. They will need to login to this application through username and password already assigned to them by the electricity department. After logging in they can easily calculate bill, generate bill, add customer and perform such tasks



### **Problem and solution**

The current system is paper based. The disadvantages of paper based system are that papers can get easily damaged by stain marks; they can be lost due to fire or accidents or can get lost in general. Hence, time and money is wasted. As paper based, any changes that need to be made in the result will require reprinting, leading to wastage. For small changes, reprinting the entire result is impossible. Changes cannot be made dynamically. It is inefficient to access a particular record from the stack of papers. This system is time consuming.

Benchmark (How this solution is better?)

As paper based, any changes that need to be made in the result will require reprinting, leading to wastage. For small changes, reprinting the entire result is impossible. Changes cannot be made dynamically. It is inefficient to access a particular record from the stack of papers. This system is time consuming. As system has been provided with all maximum possibility to make their task easier, so number of features has been made available to continue the task without any intervention. It will only not prepare the bill but also able to store data of each consumers, so that it can be accessed any time and if required can make modification as per requirement

### **Features**

- The features implemented in the project are as follows:
- The system will be more service oriented.
- The application can calculate the units consumed by the customer and then also makes bills.
- Security restriction is also one of the features
- It requires small storage for installation and functioning.
- We can access details of consumer any time.
- We can also accept the payment.

# **System Requirements For Developing This Project:**

# **Implementation**

➤ We have used java language to make electricity billing system because java is a very elegant programming language,

- ➤ Java is widely used. It's considered to be one of the most popular languages in the world.
- ➤ with applications in machine learning, big data, and web development.
- Being a Java developer is actually a pretty great job.
- we have used java swing method because Java swing components are platform-independent and swing provides more powerful components such as tables, scroll panes, color chooser, tabbed pane etc.
- We have used MYSQL for database. It is a language designed for querying data from a data base.
- The implementation was done using NetBeans and MYSQL for this application. The system enraptures the information of the energy units, consumer details with the aim to generate bill.
- This application is made for the electricity employee.
- > The system consists of login page.
- ➤ After logging the application displays the main page
- In the menu the employee can view the status of bills, can generate bill, can add customer, can accept payment.

System Requirements for NetBeans 8.2:

Minimum Hardware Configuration:

 Microsoft Windows Vista SP1/Windows 7 Professional:

**Processor:** 800MHz Intel Pentium III or equivalent

Memory: 512 MB

**Disk space:** 750 MB of free disk space

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NetBeans IDE runs on the Java SE Development Kit (JDK) which consists of the Java Runtime Environment and developer tools for compiling, debugging, and running applications written in the Java language.

The tested JDK for this release is JDK 8u101 for Windows, Linux, and OS X. The 8.2 version of the IDE cannot be installed or run on the JDK older than JDK 8.

### **Conclusion:**

A new system is mandatory in the current scenario to modernize the electricity billing procedure. This electricity billing system project would serve as a replacement for the existing traditional billing system. The new system will provide security, ease and comfort in billing. It will meet the current demand of users, and new modifications can be easily made and integrated into the system in future as per user requirements.

# **Reference**

- **♦** GOOGLE
- ◆ YOUTUBE VIDEOS

# 19IT113\_19IT122\_IT253\_ELECT RICITY\_BILLING\_SYSTEM

by 19it113 PATEL VEDANT BHAVENBHAI

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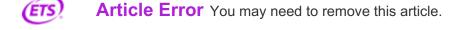
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