

CSCI-6690 Master's Project Proposal

University of New Haven



Electric Utilities Customer Account Management

Date: 08/25/2017

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1-Introduction:

Every sector is based on the electric energy. We can't imagine the world without power. Developing countries are continuing to expand their electric facilities depending upon the demand of the customers, number of projects on power are increasing rapidly day by day. But they find a different way to generate power that is use of renewable resources like natural gas, solar energy, wind energy etc, which is less in cost and these renewable too.

Our project mainly concentrates to serve the customers of the electric utility efficiently. There are many companies out there which has only website that provides the customers to pay their bills and view their consumption and graphs and analysis. But, now a day's customers do not have the time to open the websites and do these things. So, like others we design a flexible application in the android platform that supports customers to view their bills, to pay them, to register any complaint instead of contacting customer service. This will reduce a time for customers. Customer need not call the customer care even for a small verification such as their last bill amount or current total bill amount etc., We have a news feed in our application which shows all the latest information about the company. It can display latest offers, information about power outages, we can even display storm alerts, hurricane alerts.

Our current application mainly concentrates on how easily we can provide service to customer better compared to other companies and ease the use of online account. The basic design includes the details of the customer of an electric company that mainly deals with distribution of power.

2- Project Objectives:

The main objective is to develop an android application to provide the customers utility services efficiently. It supports the Customers to view their bills, to pay their bills and they can raise a complaint instead of calling customer service. Customers need not call customer care for their history instead they can view in the application. There is also a news page where you can know the offers, information about power outages, storm and hurricane alerts. Application design includes the details of the customer of an electric company that mainly deals with distribution of power. This application is to provide an easy and efficient database that stores the information of employees and customers and how they are related to each other etc. The employee has his details stored such as his department, salary, position and his role etc. The customer has his details stored, equipment details and based on his consumption, billing is generated.

3-Modules:

1.Authentication and Security Module:

Security and authentication module is main module which can provide security for entire processing of the system by using username, password, login, change password etc.

1. Billing Module:

View bill:

The customers can view the bill for the power consumption. This can be viewed by customer and the admin.

Update bill:

The bill payment can be updated by the admin(employee of the company) can access after the payment of bill.

Pay bill:

The customer can pay his bill through credit/debit card.

2. Profile Module:

The customer can view his profile, address, meter details etc,

3. Complaint Module:

The customer can raise the complaint what they have and the admin finds the problem and resolves the complaints and they will update the complaints which are given by the customer. The customers can give feedback to the electric utility company.

4. Newsfeed Module:

Where you can know the offers, information about power outages, storm and hurricane alerts

4-Software Requirements:

Operating System	: Windows 10
Languages	: JAVA
Web Server	: TOMCAT 9
Web Technologies	: HTML, JavaScript.
Back End	: PL/SQL Server
Database	: Oracle 11G
IDE/Workbench	: My Eclipse

5-Hardware Requirements:

Processor	: Intel i5
Hard Disk	: 500 GB
RAM	: 8GB

6-Deliverables:

Electric Utilities Customer Account Management can be easily accessed by the customer to pay bill, view history and to file a complaint.
It is user-friendly application.