EBA : Electricity Board Application

College of Engineering, Cherthala

March 2, 2017

GROUP 7

AJESH M (04)
MUHAMMED NADIRSHA N K (24)
RIBIN ROY (28)
SREENIVAS S NAIK(34)

Guide: Mrs. Anitha M A

Table of Contents

INTRODUCTION

- Electricity Board Application is designed to meet all the needs a regular consumer faces with the Power Supply.
- Almost all facilites which at present requires direct interaction with an officer will be available online.
- Better UI and simple steps for each facilities are provided for improved interaction with consumers.
- It is an online android application.

PRODUCT SCOPE

- Implementation of EBA helps consumers to save their time by interacting online through the application rather than the traditional way to meet officers.
- Crowd in Power Supply Offices can be decreased.

EXISTING SYSTEM

- Presently online application which helps only to pay bill online is available.
- All other facilities require direct interaction between consumer and officers.
- Existing application is poorly designed.
- There is wastage of time.
- We have no options to know previous bill and meter reading details.

PROPOSED SYSTEM

- Much more efficient and interactive than the existing application.
- Application includes features to help people to know about:
  - Verified consumer accounts.
  - Online Bill payment.
  - Alert about the last date for the bill to be paid.
  - Previous Bill payment details.
  - Notification about power cuts.
  - Apply for new connection.
  - Consumer complaints.

ADVANTAGES OF PROPOSED SYSTEM

- Consumers valuable time can be saved.
- Better User Interface.
- Simple and efficient application.

HARDWARE REQUIREMENTS

The minimum hardware requirements are
Android phone with:

- RAM: 256MB
- Internal memory: 500MB
- Operating System: Android kitkat or above.
- Internet connection: 2G or above.

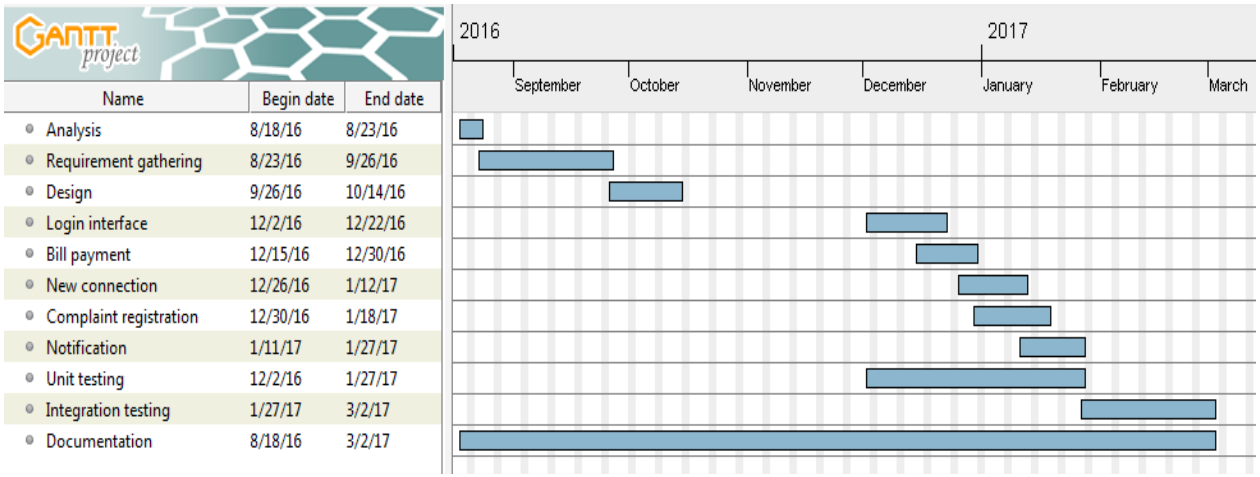
SOFTWARE REQUIREMENTS

- Operating System: Windows
- Front End: JAVA, ANDROID, PHP
- Back End: MySQL

SYSTEM DESIGN

- Based upon the level of the product, the project has been divided into 5 modules:
  - Login Interface Module
  - Bill Payment Module
  - New Connection Module
  - Complaint Module
  - Notification Module

GANTT CHART



Name	Begin date	End date
Analysis	8/18/16	8/23/16
Requirement gathering	8/23/16	9/26/16
Design	9/26/16	10/14/16
Login interface	12/2/16	12/22/16
Bill payment	12/15/16	12/30/16
New connection	12/26/16	1/12/17
Complaint registration	12/30/16	1/18/17
Notification	1/11/17	1/27/17
Unit testing	12/2/16	1/27/17
Integration testing	1/27/17	3/2/17
Documentation	8/18/16	3/2/17

Figure: gantt chart

DATA FLOW DIAGRAM

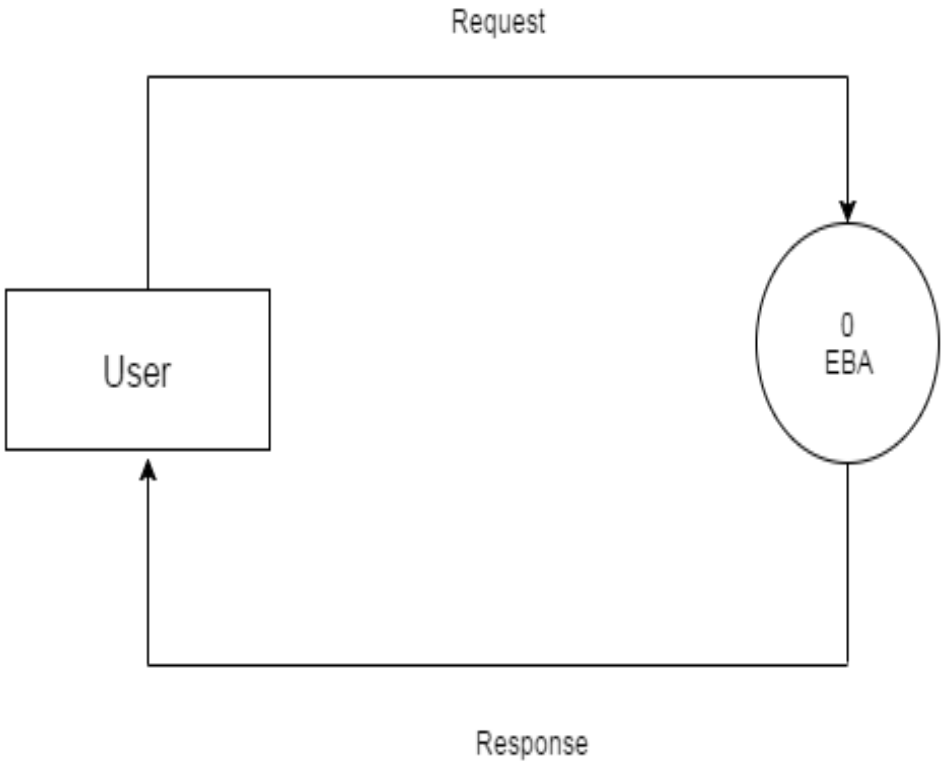


Figure: LEVEL 0 DFD

DATA FLOW DIAGRAM

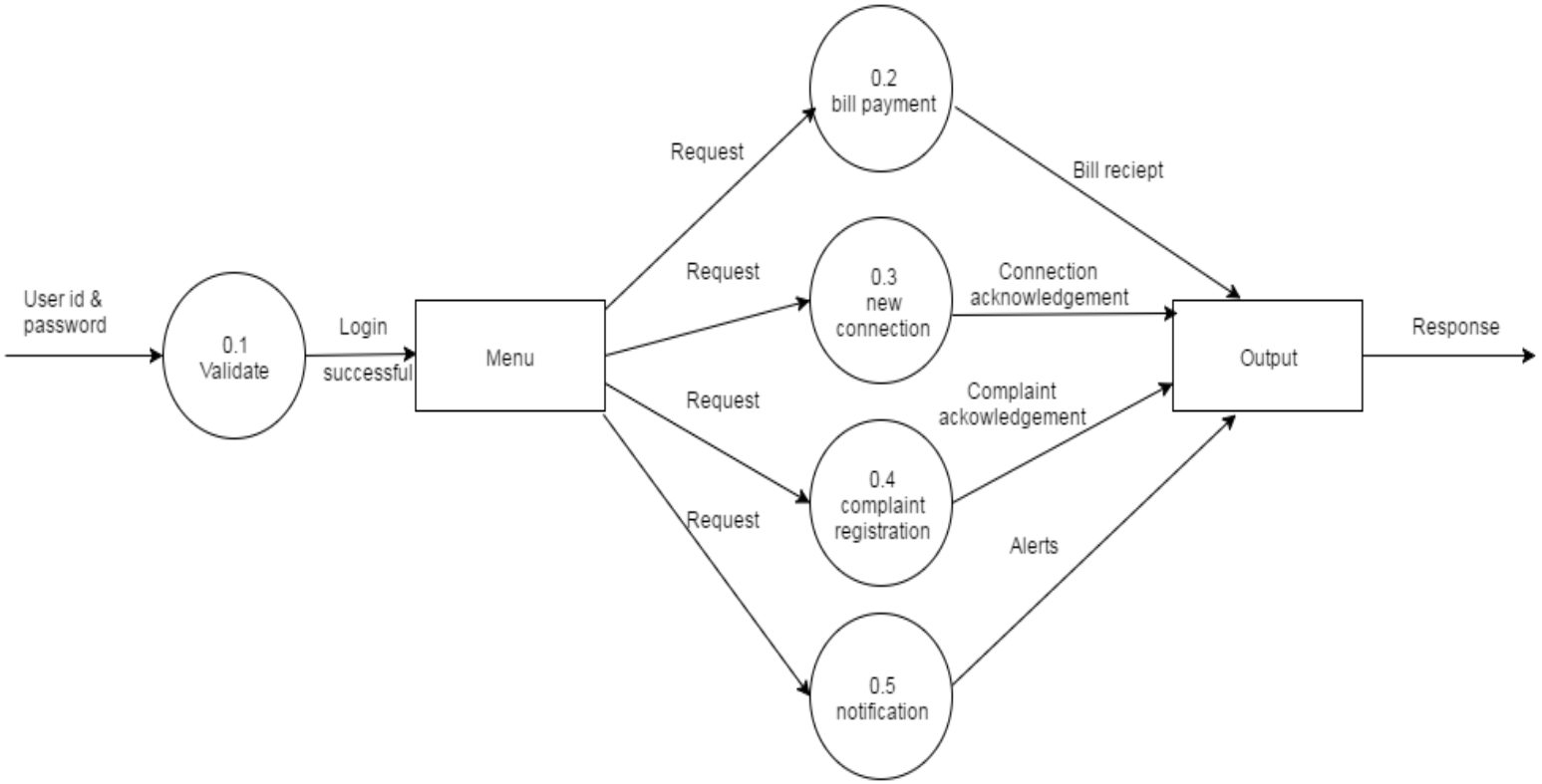


Figure: LEVEL 1 DFD

DATA FLOW DIAGRAM

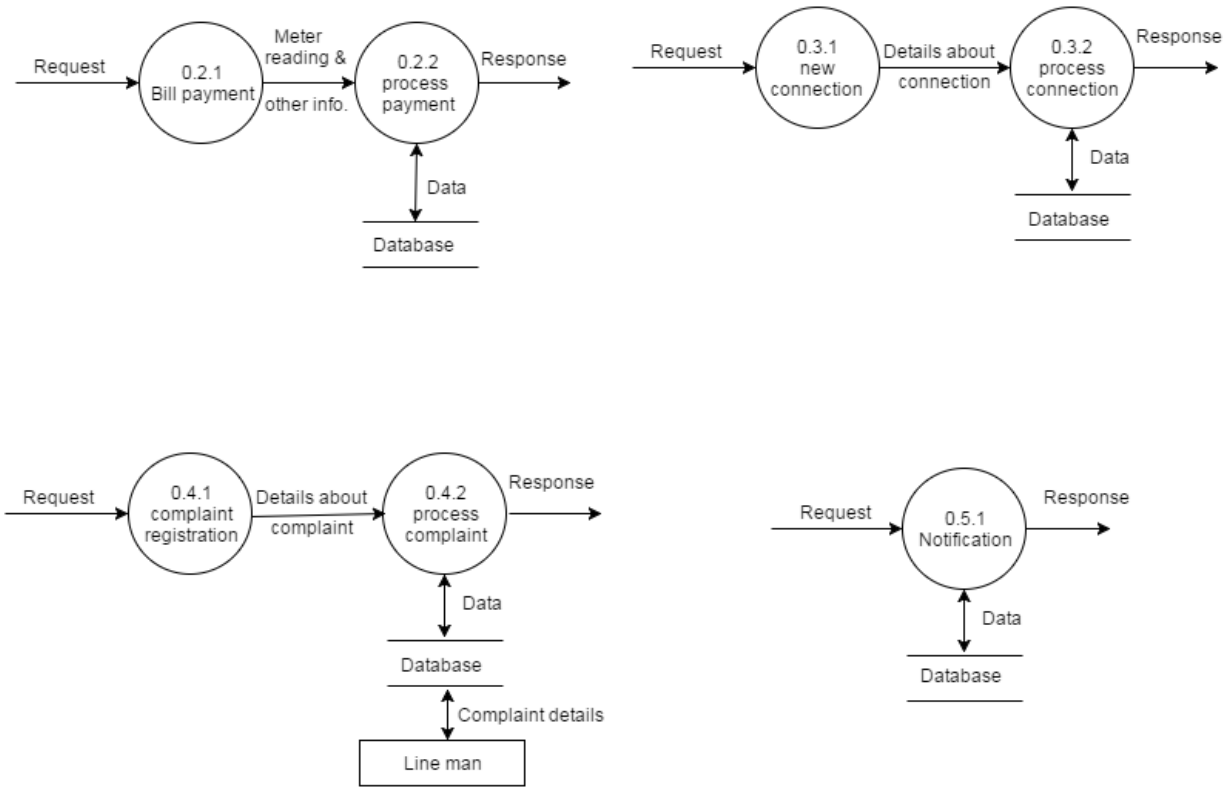
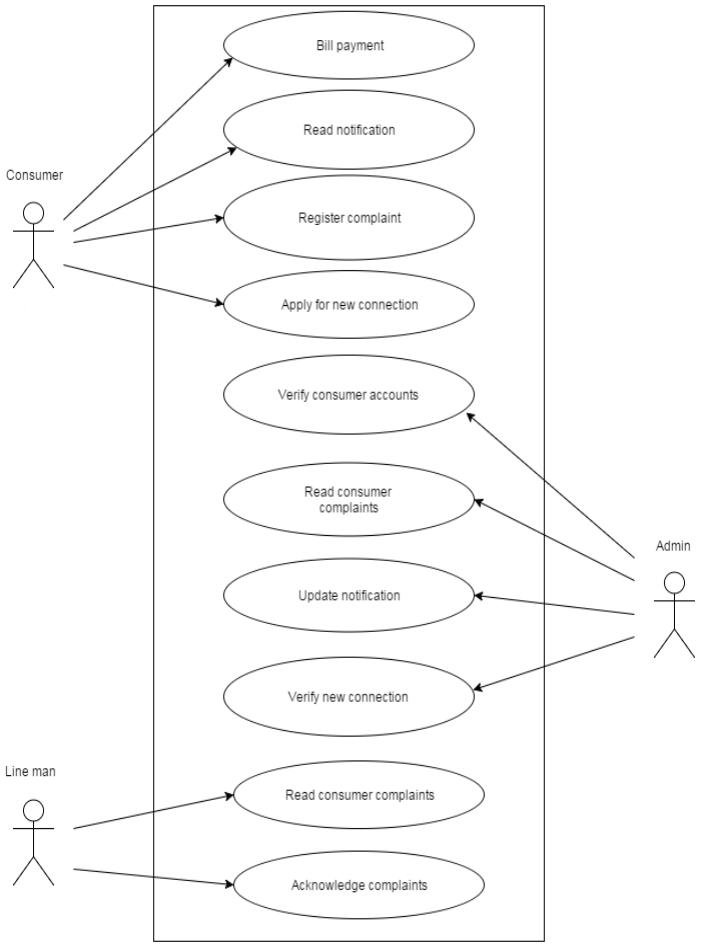
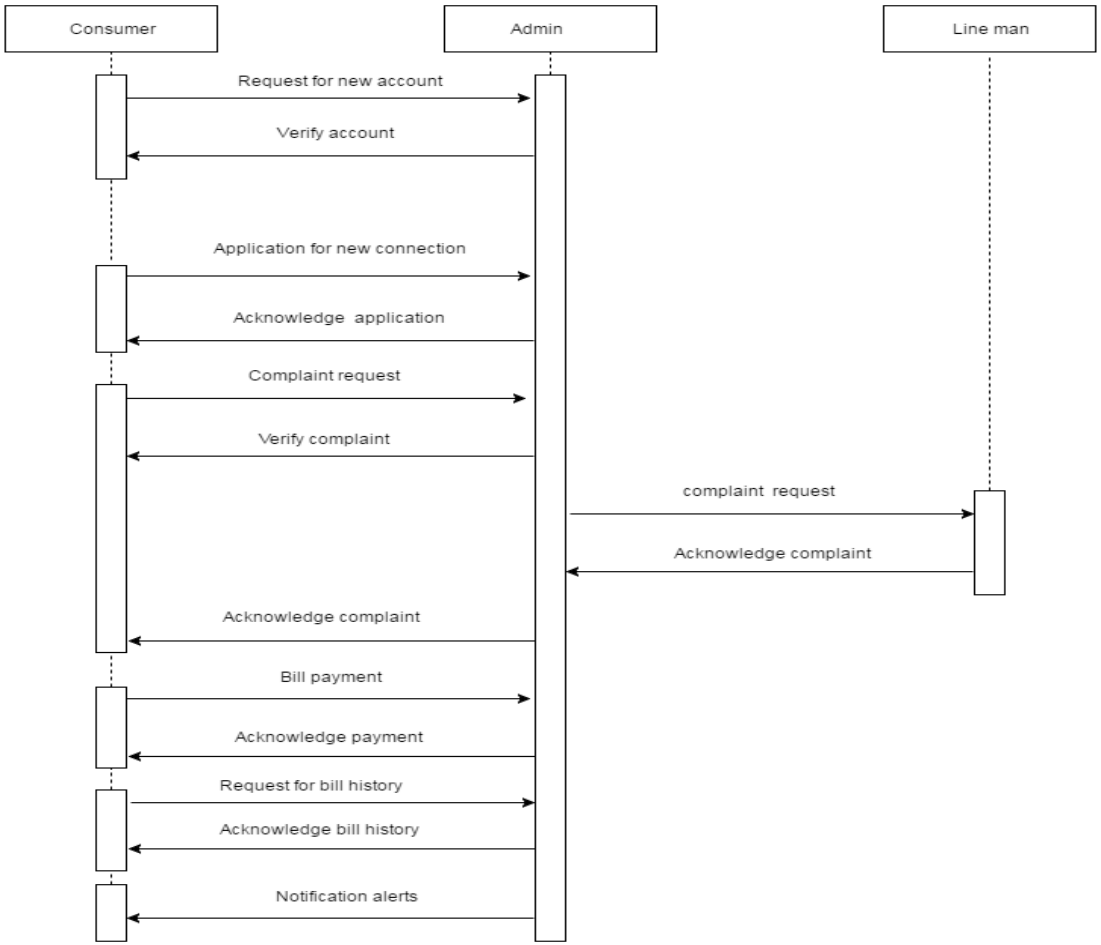


Figure: LEVEL 2 DFD

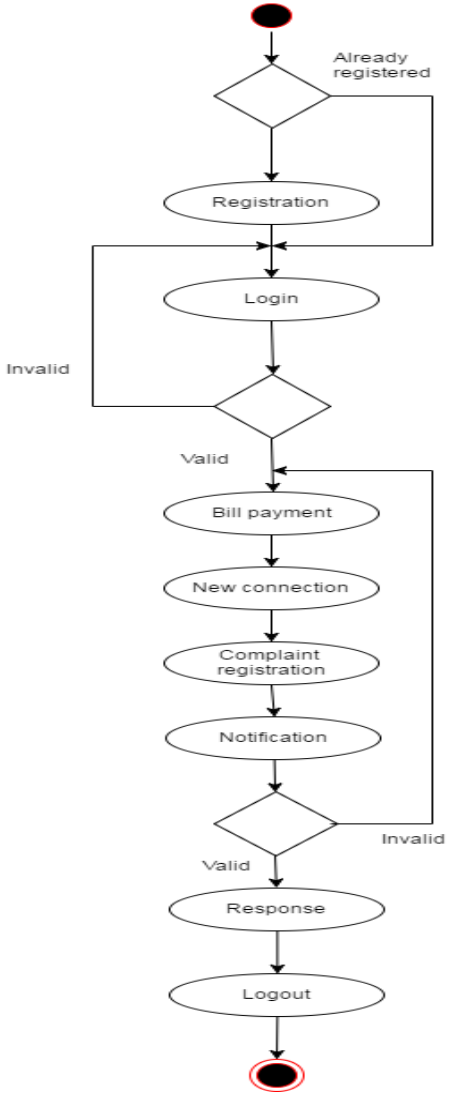
USECASE DIAGRAM



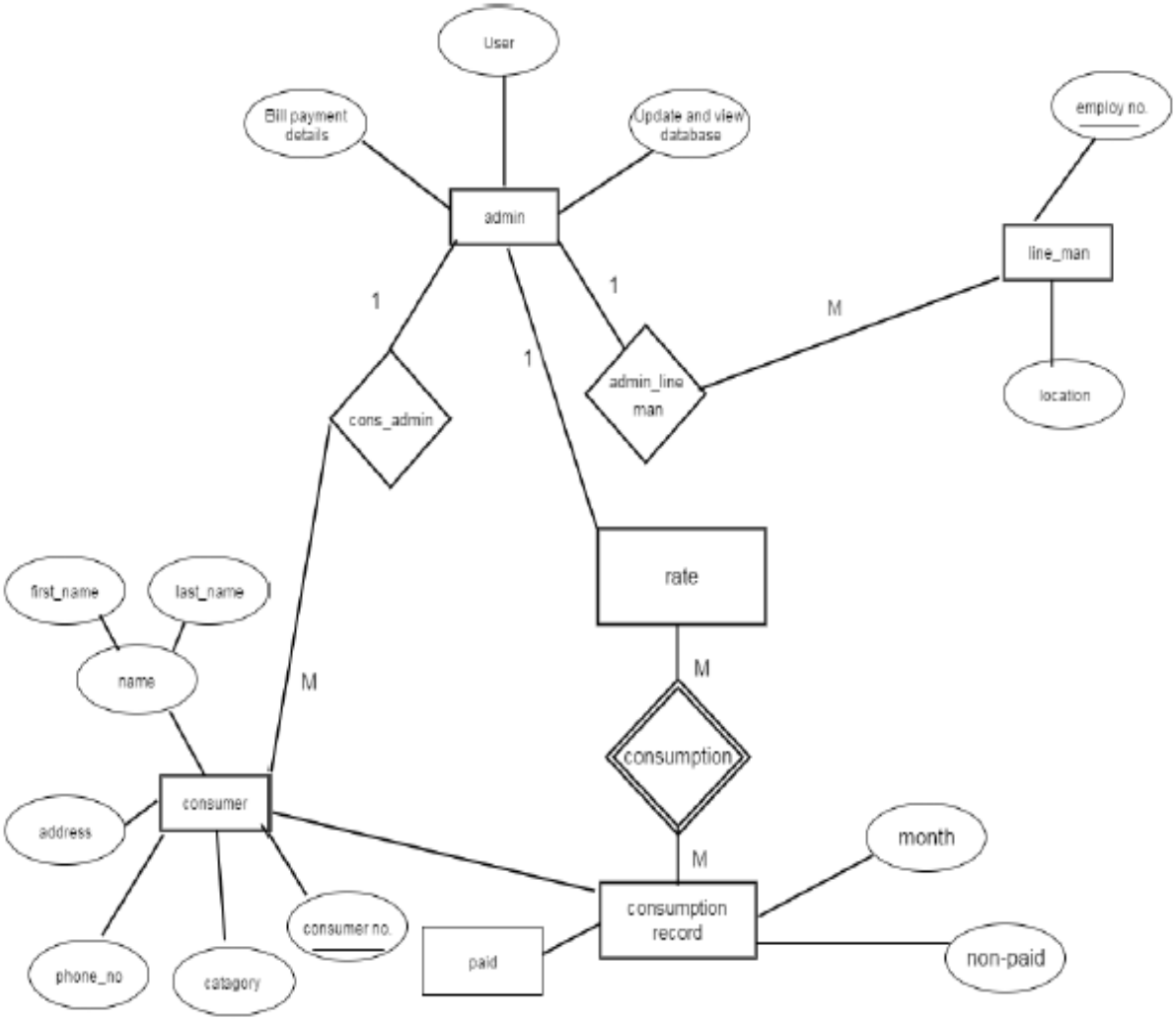
SEQUENCE DIAGRAM



ACTIVITY DIAGRAM



ER DIAGRAM


User
Bill payment details
Update and view database
admin
employ no.
line_man
location
1
1
1
M
cons_admin
admin_line man
rate
first_name
last_name
name
M
M
consumption
consumer
address
month
M
consumption record
consumer no.
paid
non-paid
phone_no
catagory

IMPLEMENTATION

- The languages used are:
  - PHP: PHP is a server-side scripting language designed primarily for web development but is also used as a general-purpose programming language.
  - JAVA: Java is a general-purpose computer programming language that is concurrent, class based, object-oriented, and specically designed to have as few implementation dependencies as possible.
  - Android: Android is a mobile operating system developed by Google, based on the Linux kernel and designed primarily for touch screen mobile devices such as smart phones and tablets

CONCLUSION

- Proposed system is more user friendly.
- User will get informations about his/her current connection.
- User can pay bill easily.
- User can easily report their issues related to current connection.
- Moreover, all the services associated with the electricity board is collaborated into a single device.


thank
you