# ELECTRICITYCONSUMPTION MANAGEMENT SYSTEM

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#### 1.INTRODUCTION

Our project entitled "Electricity Consumption Management System(ECMS)" aims is to generate electricity bill with all the charges. Manual system that is employed is extremely laborious and quite inadequate. It only makes the process more difficult and hard.

The aim of our project is to develop a system that is meant to partially computerize the work performed in the Electricity Board like generating monthly electricity bill, record of consuming unit of energy, store record of the customer and previous unpaid record.

### 1.1Scope:

Our project aims to computerize various processes of Electricity Billing System. In the sector of electricity board we have computerizes their department.

Scope of any software depends upon the following things:

- 1. It satisfy the user requirement
- 2. Be easy to understand by the user.
- 3. Be easy to operate.
- 4. Have a good user interface.
- 5. Be expandable.
- 6. Delivered on schedule within the budget.

## 1.2Objective Of Project

- 1. Separate login areas for user and admin.
- 2. Users can register and input their consumption details.
- 3. To keep the consuming unit of current and previous month.

#### 2.SYSTEM ANALYSIS

#### 2.1 Existing System

At present there are a lot of flood reconstruction websites are available.

## The main drawbacks of the existing system are:

- > Difficult to maintaining and retrieving the information.
- > Manual
- Lack of Security.
- Not user friendly.
- > Difficult to find errors while entering the records.
- > Difficult to update records.
- > It requires a large database and memory.

## 2.2 Proposed System

#### Advantages of Proposed System are:

- > Present system is fully automated.
- Secure Data.
- Cloud Based Storage.
- **Easy** to maintaining and update information.
- > Time saving.
- > .User Friendly.

**ECMS** 

2.3. Module Description

The System is divided into two modules namely Admin, User. Each user specifies the

functional requirements of the system.

2.3.1Admin Module

The Admin has overall control of the system. The Admin in this system would be the

owner of the site. If your user name and password is matching with admin's user name

and password, then you will enter into the site as admin. You will access the functions of

admin from his home page. The functionality of Admin module is described below:

2.3.1.1: Approve Users

Description: New registered users are approved by the admin.

2.3.1.2: Generate Bill

Description: It generate bill for corresponding users.

2.3.2 User Module

The User is the one who uses the site, they are registered users. If your user name and

password is matching with dealer's username and password, then you will enter in to the

site as a registered dealer. You will access the functions of dealer from his/her home

page.

The functionalities of dealer module are given below;

2.3.2.1: Registration

Description: If a dealer wants to use this site, they will to become a registered user.

The registration process is a simple one where essential detail that are required for the

functionalities that are entered into the database. Basic details like email id, address and

phone number are entered. The user also sets a password according to their choice.

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## 2.3.2.2: Login

Description: The user can login to their own account by using their email id and password. When they login, they can add their loss details and upload the proof for their loss.

## 2.3.2.3: Power Consumption details

Description: It allows users for inputing their power consumption details such as electronic appliances, amount of electrical energy used.

#### 2.3.2.4:View Bill

Description: The bill generated by the admin can be viewed by the user.

# SYSTEM DESIGN

# 4. Data Flow Diagram

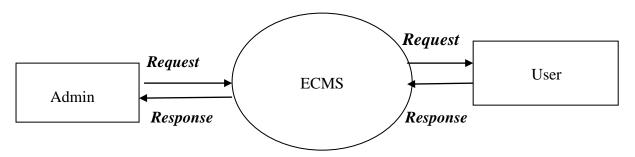


Fig 4.1 Level 0(Context Diagram)

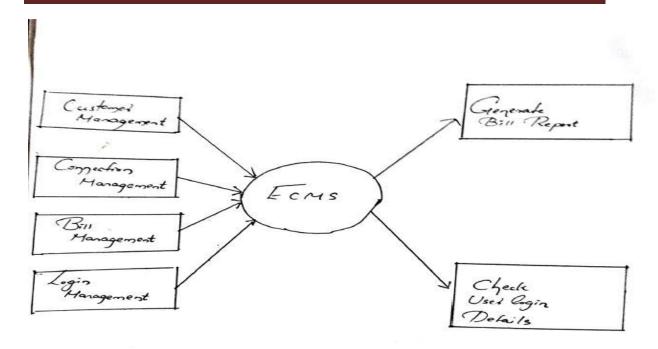


Fig 4.2:Level 1

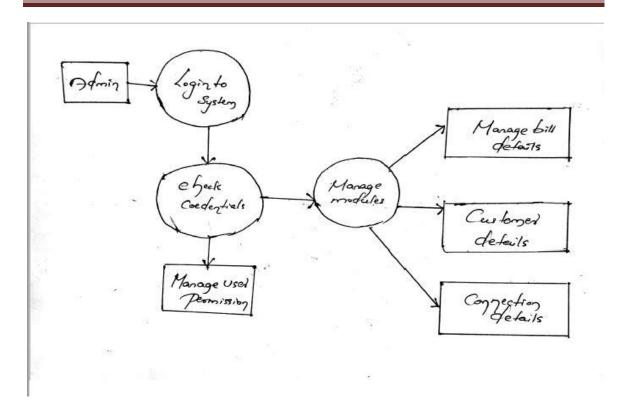


Fig 4.3 Level 2

# **USECASE DIAGRAM**

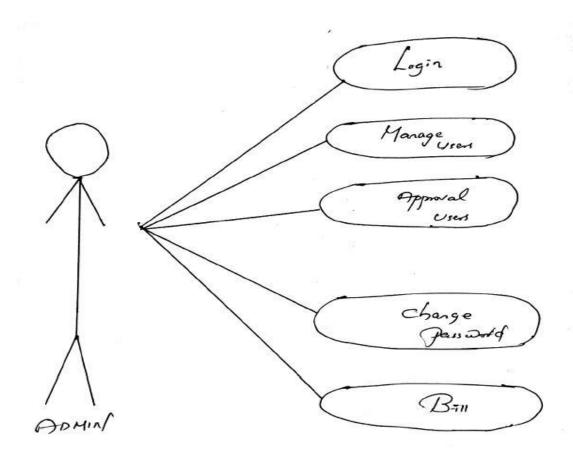


Fig:Admin

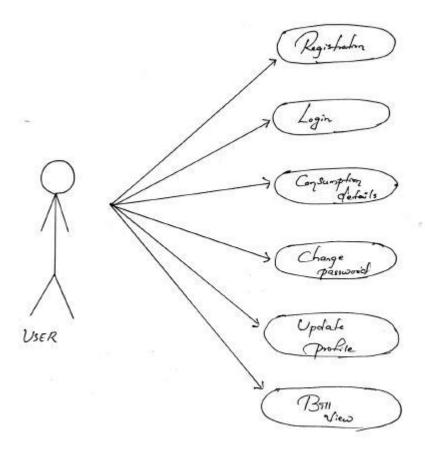
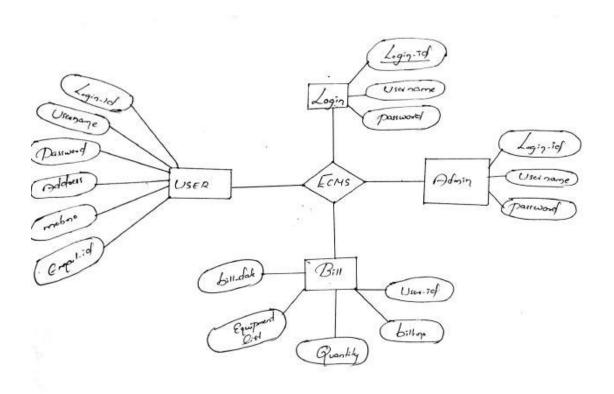


Fig:User

# ER DIAGRAM



# **DATABASE DESIGN**

Table Name:tbl\_user-login

Table Description: Table to store login information of users

Fieldname	Type	Size	Constraints	Description	
login_id	int	8	Primary key	Login id of a user	
username	varchar	30	Not null	Username for login	
password	varchar	10	Not null	Password for login	

Table 4.1 tbl\_user-login

Table Name:tbl\_admin-login

Table Description: Table to store login information of admin

Fieldname	Type	Size	Constraints	Description	
log_id	int	8	Primary key	Login id of a user	
uname	varchar	30	Not null	Username for login	
pswd	varchar	10	Not null	Password for login	

Table 4.2 tbl\_admin-login

Table Name: tbl\_user\_reg
Table Description: Table to store User details

Fieldname	Type	Size	Constraints	Description
user_id	int	8	Primary Key	Id of a user
Username	varchar	30	Not Null	Name of user
Address	varchar	50	Not Null	Address of user
mobile_no	varchar	12	Not Null	Mobile no of user
Email	varchar	50	Foreign Key	Email of User
Password	varchar	8	Not Null	Password of user

Table 4.3 tbl\_user\_reg

Table Name: tbl\_bill

Table Des : To store bill details

Field Name	Type	Size	Constraints	Description
user-id	int	10	Primary Key	User Id
bill-no	Int	10	Not Null	BillNo
bill-date	date	30	Not Null	Bill date
equipment	Varchar	40	Not Null	Equipment
quantity	int	20	Not Null	Quantity

Table 4.4 tbl\_bill