

# **WATER BILLING SOFTWARE**

**BY:**

**NMAE: PRIYANKA RAJENDRA PRASAD GOUD**

# SCOPE:

- This Mini java project will manages the water bills of their clients.
  - This system stores the system users' credentials, client info, and clients' water bills.
  - The system will automatically calculate the bill amount of the client upon saving the previous reading, present reading, and the price of water per cubic meter.
  - Unit comprised the billing, collection, storing the records in a database and report generation.
1. The system will generates billing statement that indicates the water consumed and its corresponding cost.
  2. Collection covers the recording of consumers' payments and necessary for the report generation as required by treasurers' department of the said unit.
  3. Transactions records are stored in the system's database.
  4. Report generation as needed by the unit for decision making purposes and in monitoring the periodic transactions as required and or needed by the decision-making body of the local government.
  5. This software can handled by two actor means In this software Admin can login and customer can also login .



# SOFTWARE REQUIREMENTS

1. **Operating System:** -Windows 10
2. **Server :-** Wamp Server(optional)
3. **IDE:-** NetBean
4. **Front End:** -Java core / swings
5. **Back End:** -MySQL

# ALGORITHM FOR OPERATION:

1. Start system
2. Enter login name and password
3. On clicking the login button
4. Connect to database
5. Query database to know whether user name and password are correct
6. If not, deny access and return login page with an error message
7. If correct, check if credentials for administrator
8. If yes, allow login
9. Set admin session, re-direct administrator to admin login page
10. If no, allow login set user session
11. Re-direct user to user home page

# MODULES:

1. Splash screen
2. Login
3. Signup
4. Dashboard
5. New Customer
6. view Customer
7. Payment(online mode)
8. Calculate Bills
9. Generate Bills
10. Print bill



# DATABASE TABLE:

MySQL 5.5 Command Line Client

```
mysql> desc login1;
```

Field	Type	Null	Key	Default	Extra
meter_no	varchar(20)	YES		NULL	
username	varchar(20)	YES		NULL	
name	varchar(20)	YES		NULL	
password	varchar(20)	YES		NULL	
user	varchar(20)	YES		NULL	

5 rows in set (0.05 sec)

```
mysql> desc customer;
```

Field	Type	Null	Key	Default	Extra
name	varchar(20)	YES		NULL	
meter	varchar(20)	YES		NULL	
address	varchar(20)	YES		NULL	
city	varchar(20)	YES		NULL	
state	varchar(20)	YES		NULL	
email	varchar(20)	YES		NULL	
phone	varchar(20)	YES		NULL	

7 rows in set (0.13 sec)

```
mysql> desc meter_info;
```

Field	Type	Null	Key	Default	Extra
meter_number	varchar(20)	YES		NULL	
meter_location	varchar(20)	YES		NULL	
meter_type	varchar(20)	YES		NULL	
phase_code	varchar(20)	YES		NULL	
bill_type	varchar(20)	YES		NULL	
days	varchar(20)	YES		NULL	

6 rows in set (0.05 sec)

MySQL 5.5 Command Line Client

```
mysql> desc bill;
```

Field	Type	Null	Key	Default	Extra
meter	varchar(20)	YES		NULL	
month	varchar(20)	YES		NULL	
units	varchar(20)	YES		NULL	
total_bill	varchar(20)	YES		NULL	
status	varchar(20)	YES		NULL	

5 rows in set (0.07 sec)

```
mysql> desc tax;
```

Field	Type	Null	Key	Default	Extra
cost_per_unit	varchar(10)	YES		NULL	
meter_rent	varchar(20)	YES		NULL	
service_charge	varchar(20)	YES		NULL	
service_tax	varchar(20)	YES		NULL	
swacch_bharat_cess	varchar(20)	YES		NULL	
fixed_tax	varchar(20)	YES		NULL	

6 rows in set (0.07 sec)

```
mysql> █
```

**RESULTS:**



**Splash Screen**



# 1. Dashboard: For Admin Panel:





# Login Interface:



The screenshot shows a web browser window titled "Login Page". On the left side, there is a large black silhouette of a person's head and shoulders. To the right of the silhouette, there are three input fields: "Username", "Password", and "Logging in as". The "Logging in as" field has a dropdown menu with "Admin" selected. Below these fields are three buttons: "login" (with a key icon), "Cancel" (with a red X icon), and "Signup" (with a plus icon). At the bottom left, there is a small logo that says "Wento Stock".

- This provides an interface through which both existing and new consumers can login and register respectively
  - connecting successfully to the host server the “Home page” is loaded first on the browser
  - The registered consumers can login with their login detail and get access to the system .
  - unregistered consumers can register by click “Signup” by filling registration form and submit the registration details.

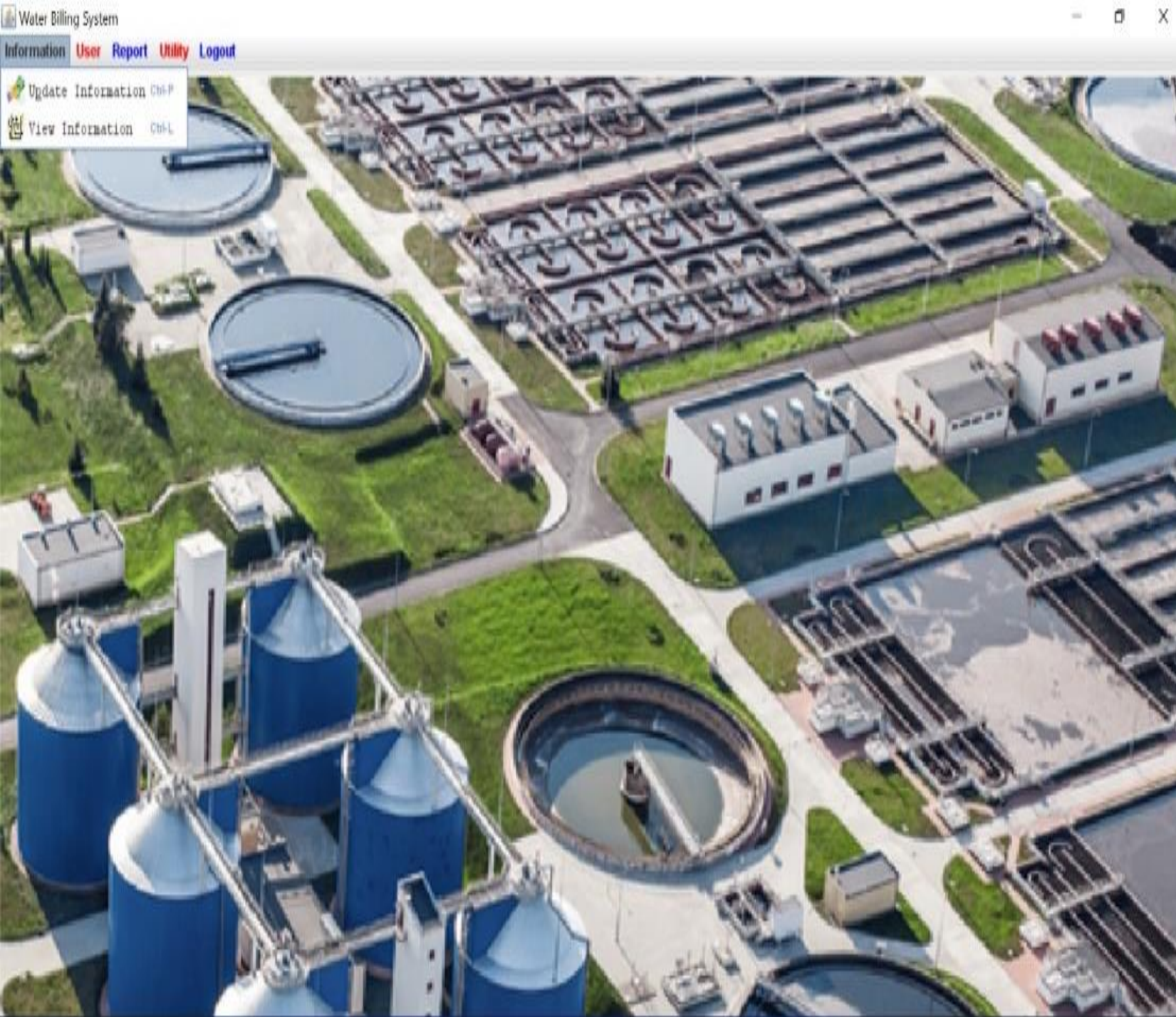
# Signup

The image shows a web browser window with a 'Create Account' form. The form has the following elements:

- Username:** A text input field.
- Name:** A text input field.
- Password:** A text input field.
- Create Account For:** A dropdown menu with 'Admin' selected.
- Buttons:** 'Create' and 'Back' buttons at the bottom left.
- Graphic:** A large, 3D-style oval button with a red border and the text 'SIGN UP!' in the center.

- After filling this form the user will click on the submit button to register
- the system will redirect to login page or click on to cancel the registration and go back to the login page.





## Dashboard:

### For Customer Panel:


- A. **Information** :In this user will get choice to perform following task;
1. **update information** : user can open and update their information like name, address, city ,phone ,etc
  2. **view information**: users can view their information



# View Customer Information

Water Billing System


Information User Report Utility Logout



VIEW CUSTOMER INFORMATION

Name	cjgf	State	tffb
Meter Number	182068	Email	tffg
Address	vcj	Phone	gfthj
City	cfjh		

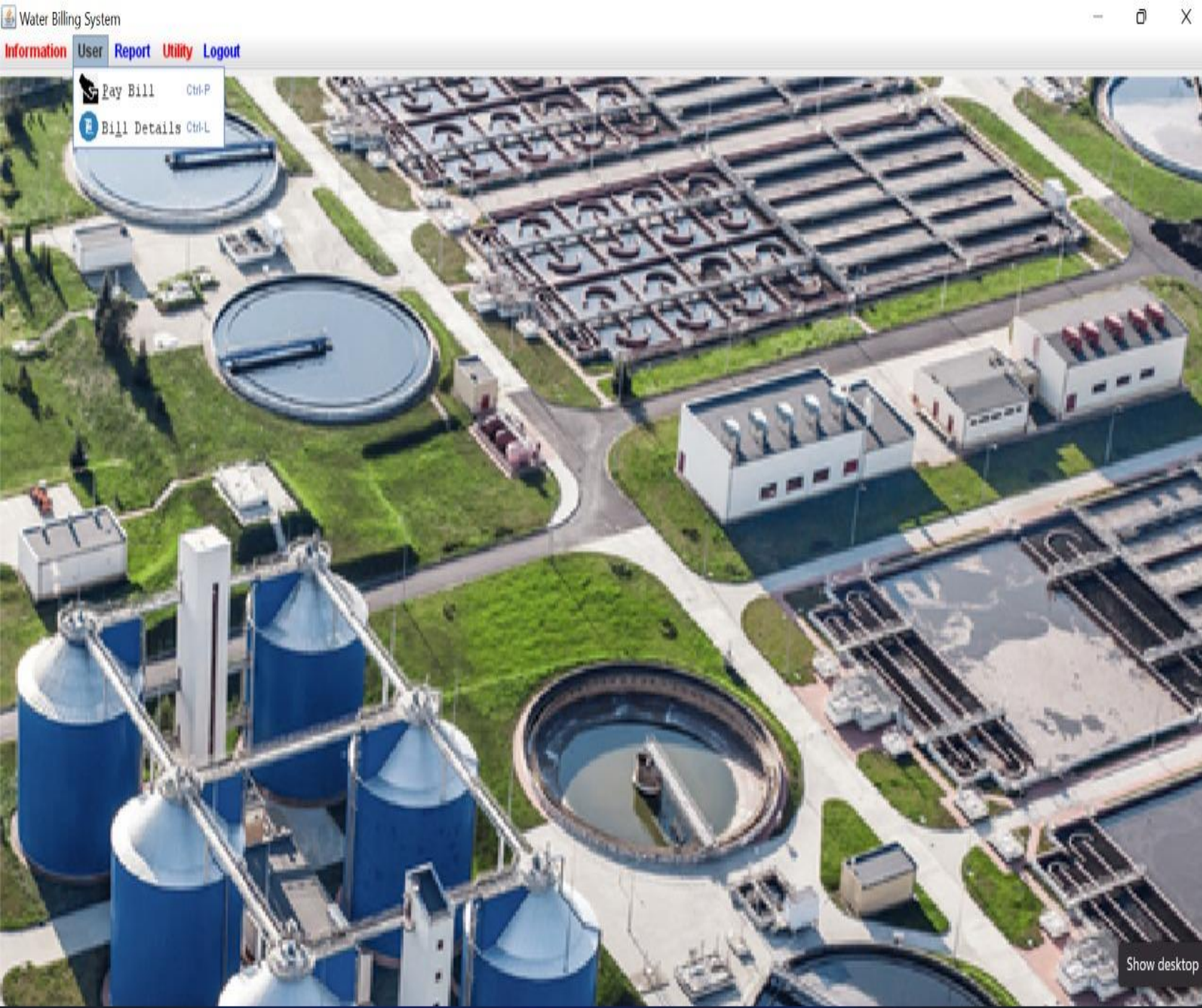
Back



Show desktop

Here admin can view customer details of their clients / Customers

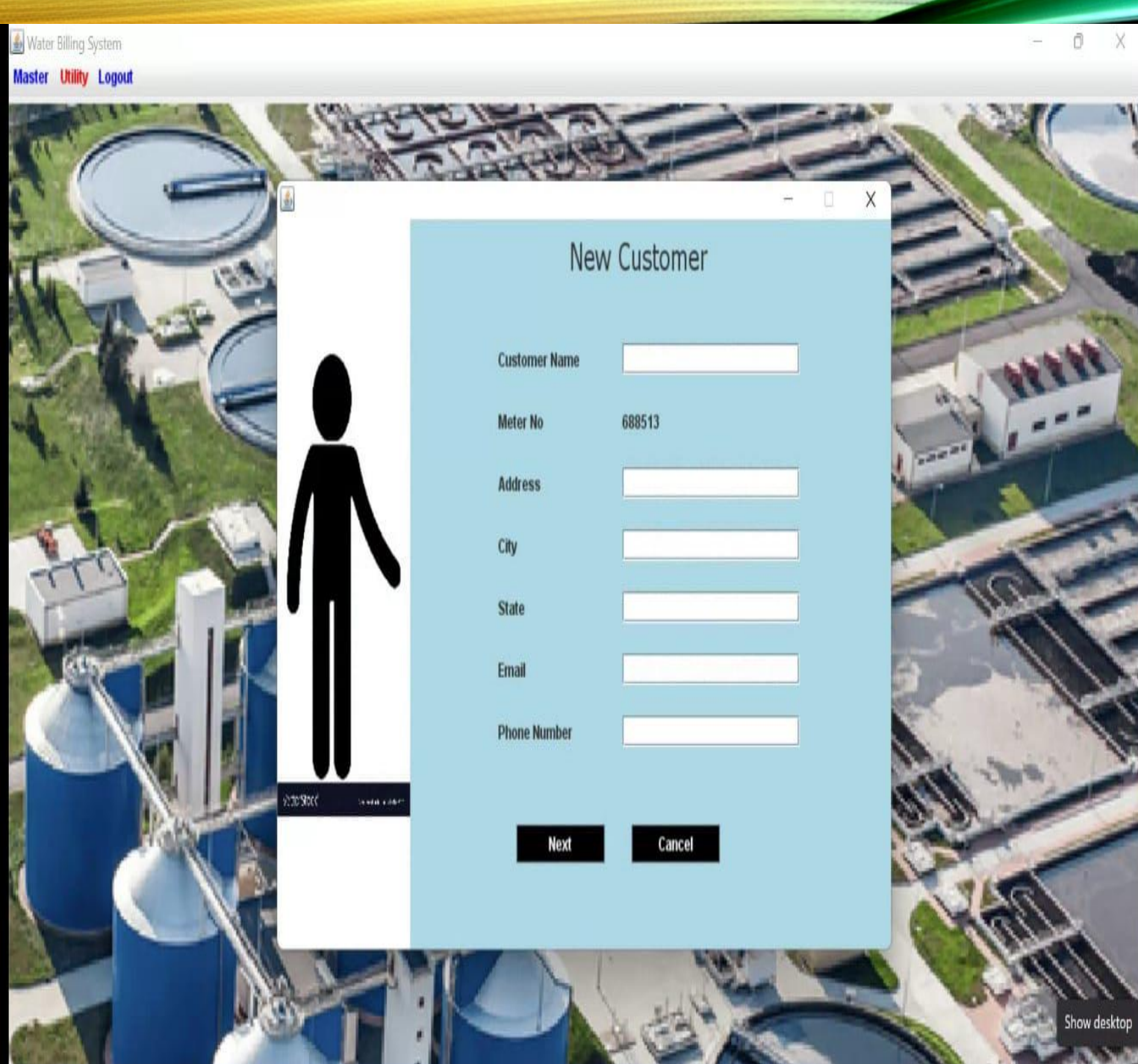




A. **Users:** In this user will get choice to perform following task;

1. **Pay bill:** This will allow the customer
2. **View bill details .**





## New Customer

This will allow the admin to enter the customer details and automatically generates unique meter number, by adding customer name, address, city, state, email and phone . Submit the details of customer that has been entered by clicking onto next button .

# Generated bill

Water Billing System

Information User Report Utility Logout

Generate Bill 182068 January

State: tffb  
City: cfjh  
Email: tffg  
Phone Number gfhj

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Meter Location: Outside  
Meter Type: WaterMeter  
Phase Code: 011  
Bill Type: Normal  
Days: 30

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Cost per Unit: Rs 7  
Meter Rent: Rs 32  
Service Charge: Rs 56  
Service Tax: Rs 12  
Swacch Bharat Cess: Rs 4  
Fixed Tax: Rs 80

Generate Bill

Show desktop



# Pay Online Mode

Amount to be Payble : Rs. 2400



palkarraahul75@okaxis



paytm



Payment method can online when customer have to pay bill they can pay through online mode via Google\_pay, Phone\_pay, Paytm or Scan code.





**Logout:** If user wants to exit then click onto logout option.

# Conclusion

**In every organization there must be a method set up to perform transactions between the organization and their customers, such methods must encounter some limitations and restriction which may hindered the performance, and reliability of the method used to some certain standard.**

**The application designed was meant to aid the administrator and consumer to carry out their respective functions effectively and also to carter for the problems of the existing system, the application designed was successfully validated in terms of its performance and functionality and it was proved to be reliable, consistent, ease the means of sending of bills, payment of bills .**

The background features a solid black field. At the top, there is a decorative, wavy horizontal band with a color gradient. From left to right, the colors transition from a bright yellow, through orange and red, to a dark green and finally a light cyan/blue at the far right edge.

**THANK YOU**