ABSTRACT

Water is very precious and water is life line. Sanitation and quality drinking water leads to good life.In today's world, water is contaminated .water borne diseases leads to loss of productivity which impacts the economy of the nation.Thus providing safe drinking water is a must .water consumed by affluent class must be made available to common man too. So water treatment units are being established and in a phased manner across the Karnataka state. But the maintenance of these station have become challenging as the data is maintained manually.

ACKNOWLEDGEMENT

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CONTENTS

1. INTRODUCTION

Water is very precious and water is life line. Sanitation and quality drinking water leads to good life. In today's world, water is contaminated.

Water borne diseases leads to loss of productivity which impacts the economy of the nation.

Thus providing safe drinking water is a must. Water consumed by affluent class must be made available to common man too. So Water treatment units are being established and in a phased manner across the Karnataka state. But the maintenance of these stations have become challenging as the data is maintained manually.

Our Mission is providing people with clean and safe drinking water. Our mission is to set up more than 200 modules throughout Karnataka till 2012.

We are also moving in the rural areas so that the technology is spread throughout the country. Our aim is also to help the government in every way so that we can make our country reach newer heights. We have been creating awareness in people about various water facts and water borne diseases. Our primary concern is facilitating people with clean and safe drinking water especially in rural areas and sub-urban areas where economically weaker people can’t afford to pay for clean and safe drinkingwater.

Our efforts had facilitated people with clean and safe drinking water at only a mere cost of Rs. 0.1 per litre. This facilitates the economically weaker people to use REVERSE OSMOSIS FILTERED WATER instead of depending on natural and unhygenic sources like wells, ponds, tank water and lakes.

Water, the miracle of nature, is the greatest gift to mankind. Life exists on our planet only because of water. It was in it that the first form of life took birth.

Water sustains our lives by playing a vital role in our day-to-day life. But, unfortunately, with accelerated industrialization and other human rapid degradation of water resources, leading to scarcity of pure water in many parts of our country.

Yet today, nearly one billion people – about one in eight – lack access to clean water. More than twice that many, 2.5 billion people, don’t have access to a toilet.

2. LITERATURE SURVEY

2.1 Current system

There are hundreds of Water treatment units are already installed but maintenance of the data is still manual .This may lead for many problems.

As follows

1. Employee management.

2. Stock management.

3. Miss use of treated water.

4. No beneficiaries data.

5. No Information about water consumed by the raw water**.**

6. Escalation of the plant problem and solution is difficult as it is handled manually.

2.2 Proposed system

Water purification is the process of removing undesirable chemicals, biological contaminants, suspended solids, and gases from water. The Goal is to produce water fit for specific purposes. These standards usually include minimum and maximum concentrations depending on the intended use of the water. We ask you to join us in holding this vision. And remember, you need not know the "how" or the "who" is involved in attaining the manifestation of this vision. You only need to hold it, unwavering, regardless of all the current media hype, your own parade of doubts, or any evidence to the contrary. For the Highest Good of the Universe, Mother Earth, the Waters, and everyone everywhere. As you line up with this Vision, it becomes your Vision too!

Advantages of Proposed System

- Improved water quality
- Removal of contaminants
- Cost-saving in the long run
- Environmentally friendly
- No shortage of water
- Avoid losing water during a crisis
- Improve taste and water clarity

2.3 Software requirement

Name of the component specification

*Front end tool : HTML,CSS,Javascript,JQuery,Bootstrap

*Database : MySQL

*Client : Microsoft Internet Explorer

*Tool : PHP

*User Interface : PHP

*Web Server : Wamp Server

2.4 Hardware requirement

Name of component specification

*Processor : Intel Pentium 4 or More

*RAM : 1 GB

*Hard Disk : 80 GB

*Operating System : Windows XP/Windows 7

*System Type : 64-bit operating system

3.1SOFTWARE REQUIREMENTS SPECIFICATION

3.1 Introduction

The SRS is meant to specify in detail the software to be developed , SRS helps the developers, testers and also conveys the desire of client.

The software product should satisfy various type of users, besides accuracy in all its functionality. Human machine system understands user requirements and communicates with hardware components. the same time user experiences should be good. these are some of the basic outcomes expected out of the project "result analysis".

3.2 Purpose

The purpose of this report is to describe about the logical and systematicfunctions of student marks analyzing system This system will have three breed of users that is staff, admin and student.

The system will acquire the details of students from faculties and analyzes the obtained data then declare the results based on the grade criteria's of the institution where student will play vital role of client that is they just acquire the processed information from th e system database.

3.3 Scope

Since all of the requirements identified in collect requirements may not be include in the project this process describes the project , service or result boundaries by defining which of the requirement will be included and excluded from the project scope.

3.1Specific requirements

3.1.1 Functional Requirements

Functionalities of the admin

Admin plays a main role in this project. once he can enters the valid id and password he or she will provided with the following services

- Admin can insert, delete or update searching, and various report.
- He can view various report generated by user.
- He can add meter reading details and also amount collected and details.
- Update the amount collected.
- View the various report.

3.1.2 Non Functional Requirements

Performance

The system must not lag, because the user using it do not have time to wait for it to complete the action. all the functions available in the system must be available to the user every time the system is turned on.

Reliability

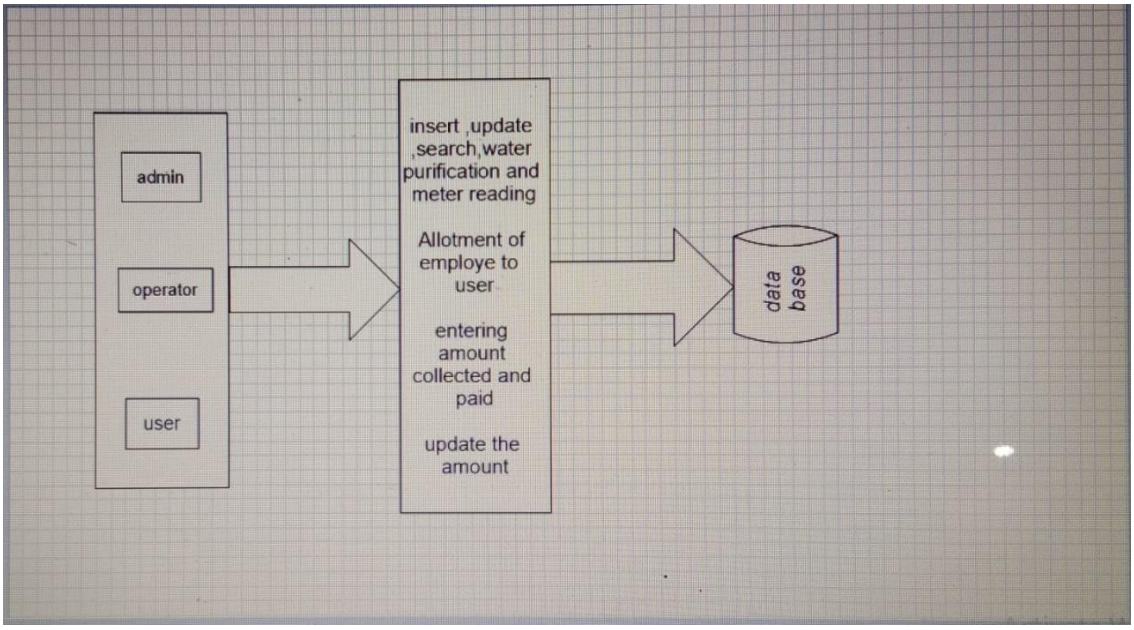
The accurate data must be stored in local data storage. the modification or transaction in any module must be reported.

Security

Only authorized person can access the delegated module that tracking up of all the users is needed.

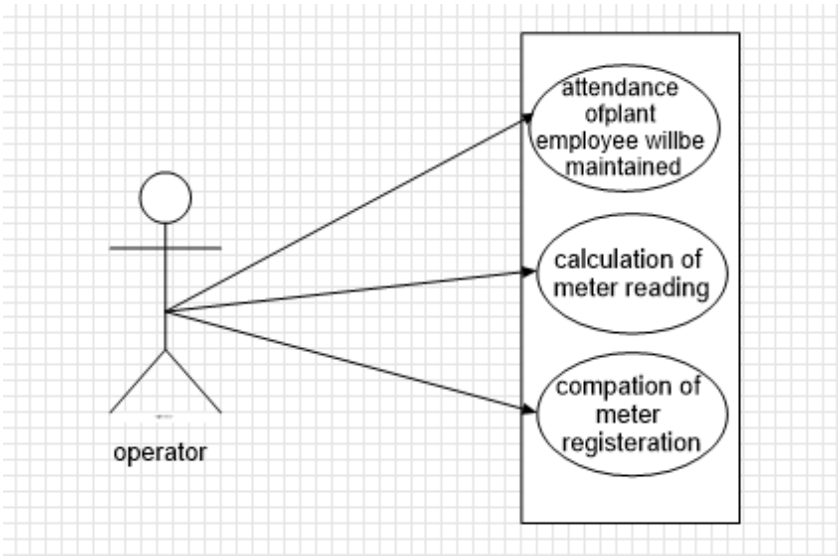
4. SYSTEM DESIGN

4.1 Architecture diagram

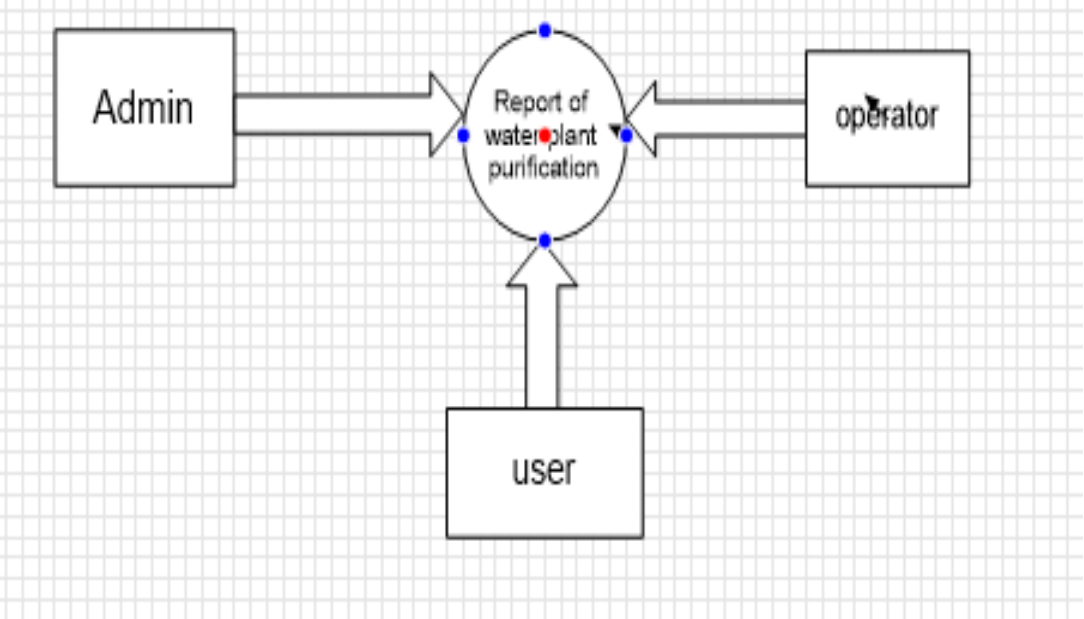


5. DETAILED DESIGN

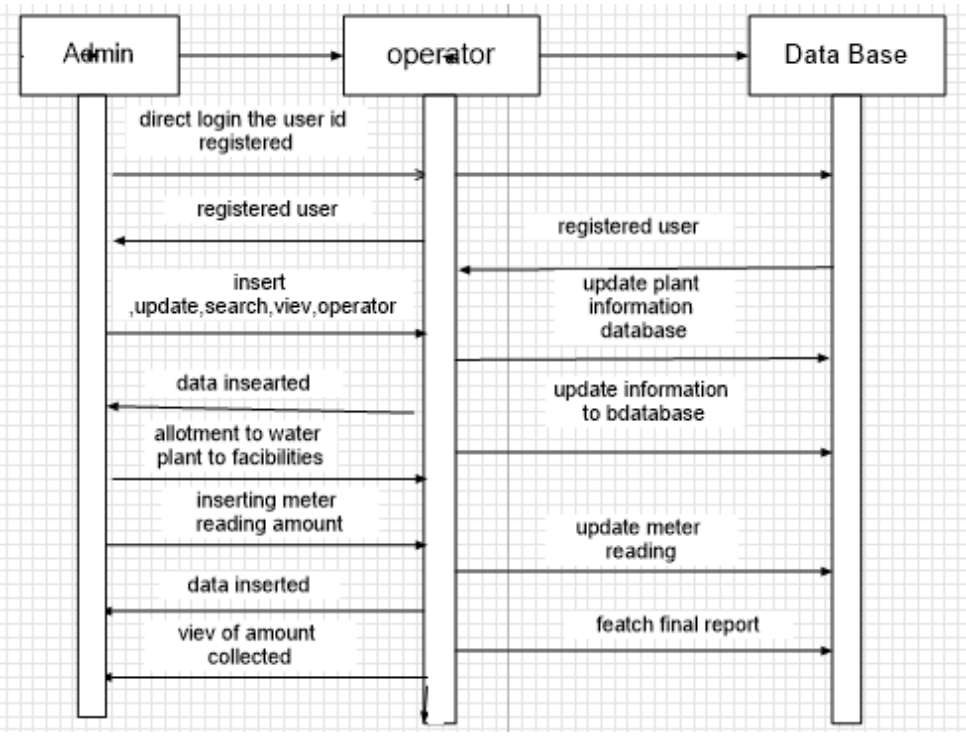
5.1.1 Use case Diagram



5.2 Data Flow Diagram



5.3 Sequence diagram



5.3 Database design

Server: localhost ▸ Database: demo

admin

Field	Type	Null	Default	Comments
Id	int(3)	No		
username	varchar(50)	No		
password	varchar(50)	No		

comp_det

Field	Type	Null	Default	Comments
Comp_no	int(3)	No		
Comp_Disc	varchar(30)	No		

comp_solved

Field	Type	Null	Default	Comments
Comp_Solve_No	int(3)	No		
Complaint_Entry_Id	int(3)	No		
Eng_Name	varchar(35)	No		
Solve_Date	Date	No		
Status	varchar(15)	No		
Desc	varchar(150)	No		

complaint

Field	Type	Null	Default	Comments
Complaint_Entry_Id	int(11)	No		
Plant_no	varchar(10)	No		
Emp_no	varchar(11)	No		
Comp_no	varchar(35)	No		
Comp_Date	Date	No		
Comp_time	Time	No		
Status	int(3)	No		

employee

Field	Type	Null	Default	Comments
Reg_Emp	int(11)	No		
Emp_No	varchar(15)	No		
Emp_Name	varchar(25)	No		
Emp_Phone	varchar(11)	No		
Emp_Plant	varchar(11)	No		

employee_information

Field	Type	Null	Default	Comments
Emp_id	int(5)	No		
Emp_first_name	varchar(100)	No		
Emp_Fa_Name	varchar(100)	No		

Emp_La_Name	varchar(100)	No		
Emp_DOB	varchar(20)	No		
Emp_Addr	varchar(300)	No		
Emp_Jdate	varchar(20)	No		
Emp_Mb_No	varchar(11)	No		
Emp_Location	varchar(50)	No		

engineer

Field	Type	Null	Default	Comments
Eng_No	int(3)	No		
Eng_Name	varchar(35)	No		
Status	varchar(15)	No		

plant_information

Field	Type	Null	Default	Comments
Plantnoo	int(5)	No		
PlantLocation	varchar(100)	No		
PlantTaluk	varchar(100)	No		
PlantDistrict	varchar(100)	No		
PlantPanchayat	varchar(100)	No		
PlantAddr	varchar(500)	No		
PlantPhNo	int(20)	No		
PlantRRNo	int(10)	No		
PlantArea	varchar(100)	No		
PlantInstDate	Text	No		
PlantwtrCapacity	int(10)	No		
PlantSnap	longblob	No		
Plantagreement	Blob	No		
PlantTdsData	varchar(500)	No		
PlantWaterProbs	varchar(500)	No		

shudha_reg

Field	Type	Null	Default	Comments
Reg_no	int(5)	No		
Emp_no	varchar(10)	No		
Pass	varchar(15)	No		
Desig	varchar(10)	No		
Plantoo	int(10)	No		
Status	int(3)	No		

tbl_attend_leave

Field	Type	Null	Default	Comments
Attend_Id	int(11)	No		
Emp_Num	varchar(20)	No		
Emp_Name	varchar(30)	No		
Attend_OR_Leave	varchar(30)	No		
Emp_Date	Date	No		
Emp_Time	varchar(10)	No		
Desci	varchar(150)	No		
Status	int(3)	No		

tbl_image_upload

Field	Type	Null	Default	Comments
Image_Id	int(11)	No		
Image_Name	int(60)	No		
Image_Path	varchar(70)	No		

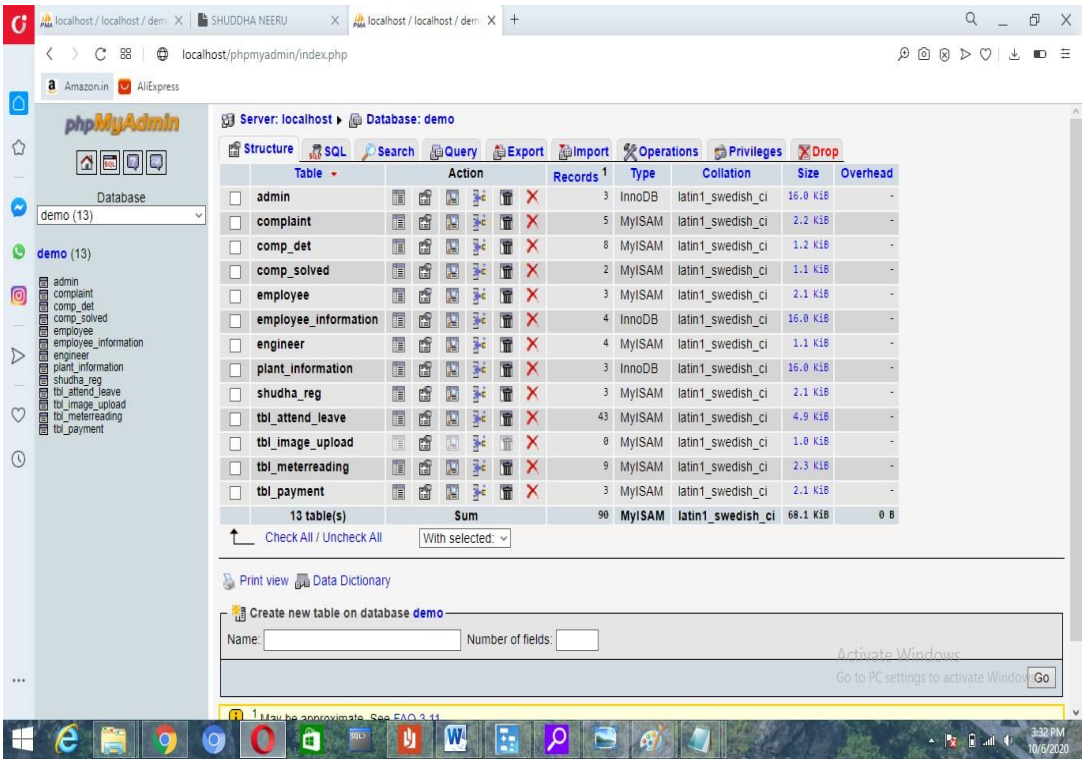
tbl_meterreading

Field	Type	Null	Default	Comments
Meter_Entry_Id	int(11)	No		
Plant_No	varchar(20)	No		
Emp_No	varchar(20)	No		
RR_No	varchar(15)	No		

Water_M_No	varchar(15)	No		
Meter_Date	Date	No		
Meter_Time	varchar(12)	No		

tbl_payment

Field	Type	Null	Default	Comments
p_id	int(11)	No		
Plant_Num	varchar(20)	No		
Emp_Num	varchar(20)	No		
Amount_Paid	int(8)	No		
P_Date	Date	No		
P_Time	Time	No		



6. IMPLEMENTATION

6.1 Introduction PHP

PHP started out as a small open source project that evolved as more and more people found out how useful it was. Rasmus Lerdorf unleashed the first version of PHP way back in 1994.

- PHP is a recursive acronym for "PHP: Hypertext Preprocessor".
- PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites.
- It is integrated with a number of popular databases, including MySQL, Postgre SQL, Oracle, Sybase, Informix, and Microsoft SQL Server.
- PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time.
- PHP supports a large number of major protocols such as POP3, IMAP, and LDAP. PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time.
- PHP is forgiving: PHP language tries to be as forgiving as possible.
- PHP Syntax is C-Like.

6.2 Common uses of PHP

PHP performs system functions, i.e. from files on a system it can create, open, read, write, and close them. The other uses of PHP are:

PHP can handle forms, i.e. gather data from files, save data to a file, through email you can send data, return data to the user.

- You add, delete, modify elements within your database through PHP.
- Access cookies variables and set cookies.
- Using PHP, you can restrict users to access some pages of your website. It can encrypt data.

6.3 Characteristics of PHP

Five important characteristics make PHP's practical nature possible:

- Simplicity
- Efficiency
- Security
- Flexibility
- Familiarity

"Hello World" Script in PHP

To get a feel for PHP, first start with simple PHP scripts. Since "Hello, World!" is an essential example, first we will create a friendly little "Hello, World!" script.

As mentioned earlier, PHP is embedded in HTML. That means that in amongst your normal HTML (or XHTML if you're cutting-edge) you'll have PHP statements like this:

```
<html>
<head>
<title>Hello World</title>
<body>
<?php echo "Hello, World!";?>
</body>
</html>
```

It will produce following result:

Hello, World!

If you examine the HTML output of the above example, you'll notice that the PHP code is not present in the file sent from the server to your Web browser. All of the PHP present in the Web page is processed and stripped from the page; the only thing returned to the client from the Web server is pure HTML output.

All PHP code must be included inside one of the three special markup tags ate are recognized by the PHP Parser.

<?php PHP code goes here ?>

<? PHP code goes here ?>

<script language="php"> PHP code goes here </script>

Most common tag is the <?php...?>

6.4 Introduction to Wamp Server

WAMP Sever 2.0 Introduction and installation

Hopefully, you have now downloaded and installed Wampserver. This will give you a server on your own PC (Windows users), somewhere you can test your scripts. If you haven't yet dowloaded the Wampserver software, you can download it here:

6.5 Advantage of wamp server

in order create dynamic web applications with PHP, Apache and Php myadmin(MySQL database) **WampServer** allow users to set up a server locally on their Windows machine in the sameconditions of development on the server.and you can upgrade components, develop, perform any web development task and carefully test everything offline first, which reduces the risks of creating problems on the live server.

INTRODUCTION TO MySQL

MySQL is a leading open source database management system. It is a multi- user, multithreaded database management system. MySQL is especially popular on the web. It is one of the parts of the very popular LAMP platform. Linux, Apache, MySQL and PHP. Currently MySQL is owned by Oracle. MySQL database is available on most important OS platforms. It runs on BSD Unix, Linux, Windows or Mac. Wikipedia, YouTube, Facebook use MySQL. These sites manage millions of queries each day. MySQL comes in two versions. MySQL server system and MySQL embedded system.

The development of MySQL begun in 1994 by a Swedish company MySQLAB. Sun Microsystems acquired MySQL AB in 2008. Sun was bought by Oracle in 2010. So today, Oracle corporation is the owner of the MySQL database.

6.6 Features of MySQL:

The following list shows the most important properties of MySQL. This section is directed to the reader who already has some knowledge of relational databases. We will use some terminology from the relational database world without defining our terms exactly. On the other hand, the explanations should make it possible for database novices to understand to some extent what we are talking about.

Relational Database System: Like almost all other database systems on the market, MySQL is a relational database system.

Client/Server Architecture: MySQL is a client/server system. There is a database server (MySQL) and arbitrarily many clients (application programs), which communicate with the server; that is, they query data, save changes, etc. The clients can run on the same computer as the server or on another computer (communication via a local network or the Internet).

Almost all of the familiar large database systems (Oracle, Microsoft SQLServer, etc.) are client/server systems. These are in contrast to the file-server systems, which include Microsoft Access, dBase and FoxPro. The decisive drawback to file-

server systems is that when run over a network, they become extremely inefficient as the number of users grows.

MySQL supports as its database language -- as its name suggests – SQL (Structured Query Language). SQL is a standardized language for querying and updating data and for the administration of a database. There are several SQL dialects (about as many as there are database systems). MySQL adheres to the current SQL standard (at the moment SQL:2003), although with significant restrictions and a large number of extensions.

Stored procedures: Here we are dealing with SQL code that is stored in the database system.

Stored procedures (SPs for short) are generally used to simplify certain steps, such as inserting or deleting a data record. For client programmers this has the advantage that they do not have to process the tables directly, but can rely on SPs. Like views, SPs help in the administration of large database projects. SPs can also increase efficiency. MySQL has supported SPs since version 5.0.

Triggers: Triggers are SQL commands that are automatically executed by the server in certain database operations (INSERT, UPDATE, and DELETE). MySQL has supported triggers in a limited form from version 5.0, and additional functionality is promised for version 5.1.

Unicode: MySQL has supported all conceivable character sets since version 4.1, including Latin-1, Latin-2, and Unicode (either in the variant UTF8 or UCS2).

User interface: There are a number of convenient user interfaces for administering a MySQL server.

Full-text search: Full-text search simplifies and accelerates the search for words that are located within a text field. If you employ MySQL for storing text (such as in an Internet discussion group), you can use full-text search to implement simply an efficient search function.

Replication: Replication allows the contents of a database to be copied (replicated) onto a number of computers. In practice, this is done for two reasons: to increase

protection against system failure (so that if one computer goes down, another can be put into service) and to improve the speed of database queries.

Programming languages: There are quite a number of APIs (application programming interfaces) and libraries for the development of MySQL applications. For client programming you can use, among others, the languages C, C++, Java, Perl, PHP, Python, and Tcl

ODBC: MySQL supports the ODBC interface Connector/ODBC. This allows MySQL to be addressed by all the usual programming languages that run under Microsoft Windows (Delphi, Visual Basic, etc.). The ODBC interface can also be implemented under Unix, though that is seldom necessary.

6.7 Top Ten Reasons To Use Mysql:

1. Scalability and Flexibility:

The MySQL database server provides the ultimate in scalability, sporting the capacity to handle deeply embedded applications with a footprint of only 1MB to running massive data warehouses holding terabytes of information. Platform flexibility is a stalwart feature of MySQL with all flavors of Linux, UNIX, and Windows being supported.

And, of course, the open source nature of MySQL allows complete customization for those wanting to add unique requirements to the database server.

2. High Performance:

A unique storage-engine architecture allows database professionals to configure the MySQL database server specifically for particular applications, with the end result being amazing performance results. Whether the intended application is a high-speed transactional processing system or a high-volume web site that services a billion queries a day, MySQL can meet the most demanding performance expectations of any system. With high-speed load utilities, distinctive memory caches, full text indexes, andother performance-enhancing mechanisms, MySQL offers all the right ammunition for today's critical business systems.

3. High Availability:

Rock-solid reliability and constant availability are hallmarks of MySQL, with customers relying on MySQL to guarantee around-the-clock uptime. MySQL offers a variety of high-availability options from high-speed master/slave replication configurations, to specialized Cluster servers offering instant failover, to third party vendors offering unique high-availability solutions for the MySQL database server.

4. Robust Transactional Support:

MySQL offers one of the most powerful transactional database engines on the market. Features include complete ACID (atomic, consistent, isolated, durable) transaction support, unlimited row-level locking, distributed transaction capability, and multi-version transaction support where readers never block writers and vice-versa. Full data integrity is also assured through server-enforced referential integrity, specialized transaction isolation levels, and instant deadlock detection.

5. Web and Data Warehouse Strengths:

MySQL is the de-facto standard for high-traffic web sites because of its high-performance query engine, tremendously fast data insert capability, and strong support for specialized web functions like fast full text searches. These same strengths also apply to data warehousing environments where MySQL scales up into the terabyte range for either single servers or scale-out architectures. Other features like mainmemory tables, B-tree and hash indexes, and compressed archive tables that reduce storage requirements by up to eighty-percent make MySQL a strong standout for both web and business intelligence applications.

DATABASE CONNECTIVITY

A database is a separate application that stores a collection of data. Each database has one or more distinct APIs for creating, accessing, managing, searching and replicating the data it holds.

Other kinds of data stores can be used, such as files on the file system or large hash tables in memory, but data fetching and writing would not be so fast and easy with those types of systems.

6.8 A Relational Database Management System (RDBMS) is software that:

- Enables you to implement a database with tables, columns and indexes.
- Guarantees the Referential Integrity between rows of various tables.
- Updates the indexes automatically.
- Interprets an SQL query and combines information from various tables.

6.8.1 RDBMS Terminology:

Before we proceed to explain MySQL database system, let's revise few definitions related to database.

- **Database:** A database is a collection of tables, with related data.
- **Table:** A table is a matrix with data. A table in a database looks like a simple spreadsheet.
- **Column:** One column (data element) contains data of one and the same kind, for example the column postcode.
- **Row:** A row (= tuple, entry or record) is a group of related data, for example the data of one subscription.

- **Redundancy:** Storing data twice, redundantly to make the system faster.
- **Primary Key:** A primary key is unique. A key value can not occur twice in one table. With a key, you can find at most one row.
- **Foreign Key:** A foreign key is the linking pin between two tables.
- **Compound Key:** A compound key (composite key) is a key that consists of multiple columns, because one column is not sufficiently unique.
- **Index:** An index in a database resembles an index at the back of a book.
- **Referential Integrity:** Referential Integrity makes sure that a foreign key value always points to an existing row.

6.9 MYSQL Database:

MySQL is a fast, easy-to-use RDBMS being used for many small and big businesses. MySQL is developed, marketed, and supported by MySQL AB, which is a Swedish company. MySQL is becoming so popular because of many good reasons:

- MySQL is released under an open-source license. So you have nothing to pay to use it.
- MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.
- MySQL uses a standard form of the well-known SQL data language.
- MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, JAVA, etc.
- MySQL works very quickly and works well even with large data sets.
- MySQL is very friendly to PHP, the most appreciated language for web development.

6.9.1 PHP Syntax

MySQL works very well in combination of various programming languages like PERL, C, C++, JAVA and PHP. Out of these languages, PHP is the most popular one because of its web application development capabilities.

```
mysql_function(value,value,...);
```

The second part of the function name is specific to the function, usually a word that describes what the function does. The following are two of the functions:

```
mysqli_connect($connect);
mysqli_query($connect,"SQL statement");
```

Following example shows a generic syntax of PHP to call any MySQL function.

```
<html>
<head>
<title>PHP with MySQL</title>
</head>
<body>
<?php
   $retval = mysql_function(value, [value,...]);
   if( !$retval )
   {
       die ( "Error: a related error message" );
   }
   // Otherwise MySQL  or PHP Statements
?>
</body>
</html>
```

6.10 Database Connection

MySQL Connection using mysql binary You can establish MySQL database using **mysql** binary at command prompt.

Example**:**

Here is a simple example to connect to MySQL server from command prompt:

```
[root@host]# mysql -u root -p
Enter password:******
```

This will give you mysql> command prompt where you will be able to execute any SQL command. Following is the result of above command:

```
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 2854760 to server version: 5.0.9

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.
```

In above example, we have used **root** as a user but you can use any other user. Anyuser will be able to perform all the SQL operations, which are allowed to that user.

You can disconnect from MySQL database any time using **exit** command at mysql> prompt.

```
mysql> exit
Bye
```

MySQL Connection using PHP Script:

PHP provides **mysql_connect()** function to open a database connection. This function takes five parameters and returns a MySQL link identifier on success or FALSE on failure.

Syntax:

```
connection mysql_connect(server,user,passwd,new_link,client_flag);
```

You can disconnect from MySQL database anytime using another PHP function **mysql_close()**. This function takes a single parameter, which is a connection returned by **mysql connect()** function.

7. SYSTEM LOGIN

7.1 Admin Login

Admin has the power to add new user and can edit and delete a user. The admin can add edit and delete marks for the student. All the users can see the marks**.**

7.1 Operator Login

FIGURE 1

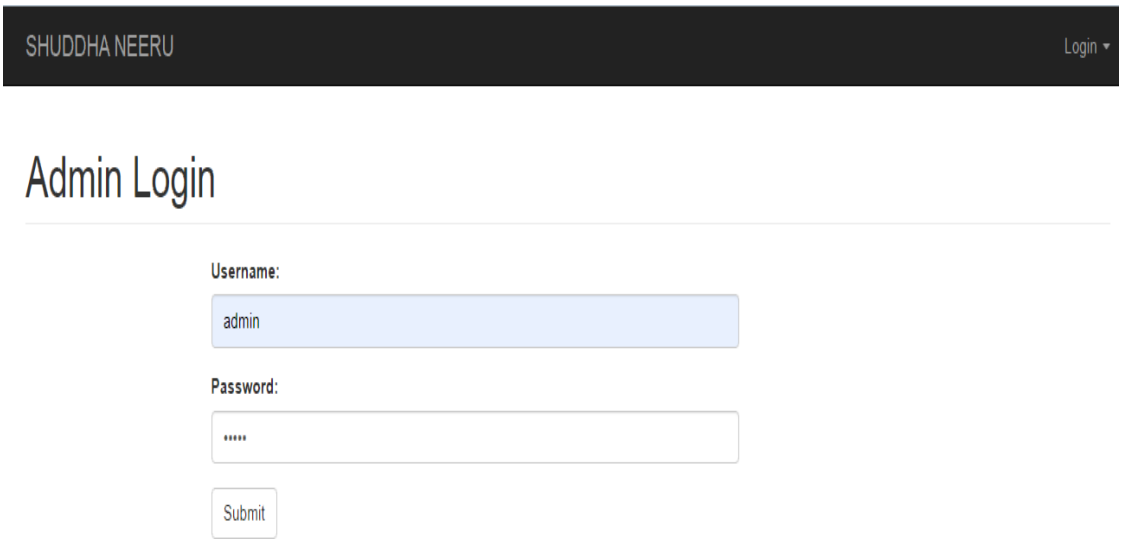
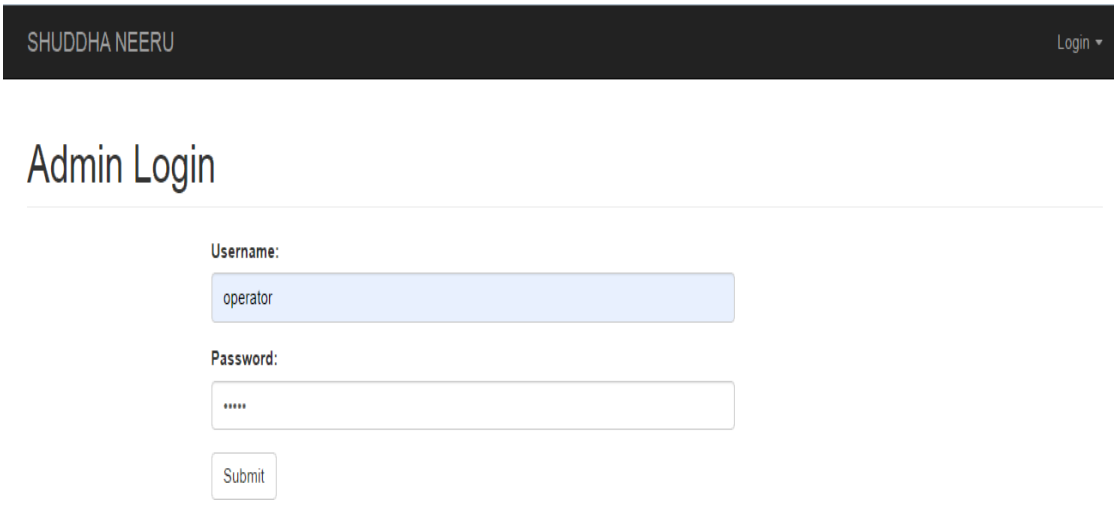
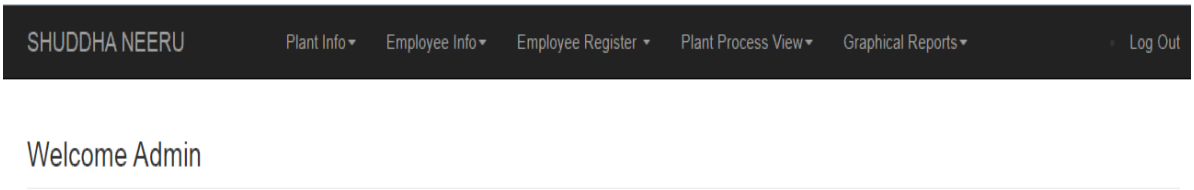
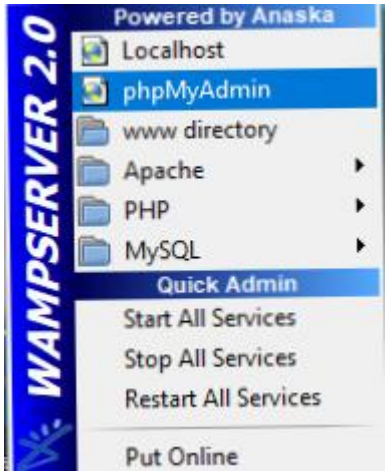

SHUDDHA NEERU
Login
Admin Login
Username:
admin
Password:
Submit

FIGURE 2


SHUDDHA NEERU
Login
Admin Login
Username:
operator
Password:
Submit


SHUDDHA NEERU
Plant Info
Employee Info
Employee Register
Plant Process View
Graphical Reports
Log Out
Welcome Admin

Wampserver:


WAMPSERVER 2.0
Powered by Anaska
Localhost
phpMyAdmin
www directory
Apache
PHP
MySQL
Quick Admin
Start All Services
Stop All Services
Restart All Services
Put Online

CODING

```
<?php
   session_start();
         header( 'Content-Type: text/html; charset=utf-8' );
   include_once 'includes/class.user.php';
   $user = new User();

   $Email = $_SESSION['username'];

   if (!$user->get_session()){
     header("location:login.php");
   }

   if (isset($_GET['q'])){
      $user->user_logout();
      header("location:login.php");
   }
?>
   <link href="font-awesome/css/font-awesome.min.css" rel="stylesheet" type="text/css">

   <!-- HTML5 Shim and Respond.js IE8 support of HTML5 elements and media queries -->
   <!-- WARNING: Respond.js doesn't work if you view the page via file:// -->
```

```
<!--[if lt IE 9]>
    <script src="https://oss.maxcdn.com/libs/html5shiv/3.7.0/html5shiv.js"></script>
    <script
src="https://oss.maxcdn.com/libs/respond.js/1.4.2/respond.min.js"></script>
<![endif]-->
</head>
<body>
```

```
<div class="col-lg-12">
                <h3 class="page-header">
                  Add Employee Information
                </h3>
              </div>
                        <div class="col-lg-2">


                        </div>
                        <div class="col-lg-6">
                        <form data-toggle="validator" role="form" method="post" action="">
                                <div class="form-group">
                                        <label for="email">Att Date:</label>
                                        <input type="date" name="T1" class="form-control" required>
                                        <div class="help-block with-errors"></div>
                                </div>
                                <div class="form-group">
                                        <label for="email">Att_Attendance:</label>
                                        <input type="text" name="T2" class="form-control" required>
                                        <div class="help-block with-errors"></div>
                                </div>
                                <div class="form-group">
                                        <label for="email">Att_abs_reson :</label>
```

```
                    <input type="text" name="T3" class="form-control" required>
                    <div class="help-block with-errors"></div>
                </div>
                <div class="form-group">
                    <label for="email">Att_Abs_Type :</label>
                    <input type="text" name="T4" class="form-control" required>
                    <div class="help-block with-errors"></div>
                </div>
                <button type="submit" name="submit" class="btn btn-default">Submit</button>
            </form>

            </div>
    </div>


</div>
<!-- /.container -->

<!-- jQuery -->
<script src="js/jquery.js"></script>
    <script src="validator/validator.js"></script>
```

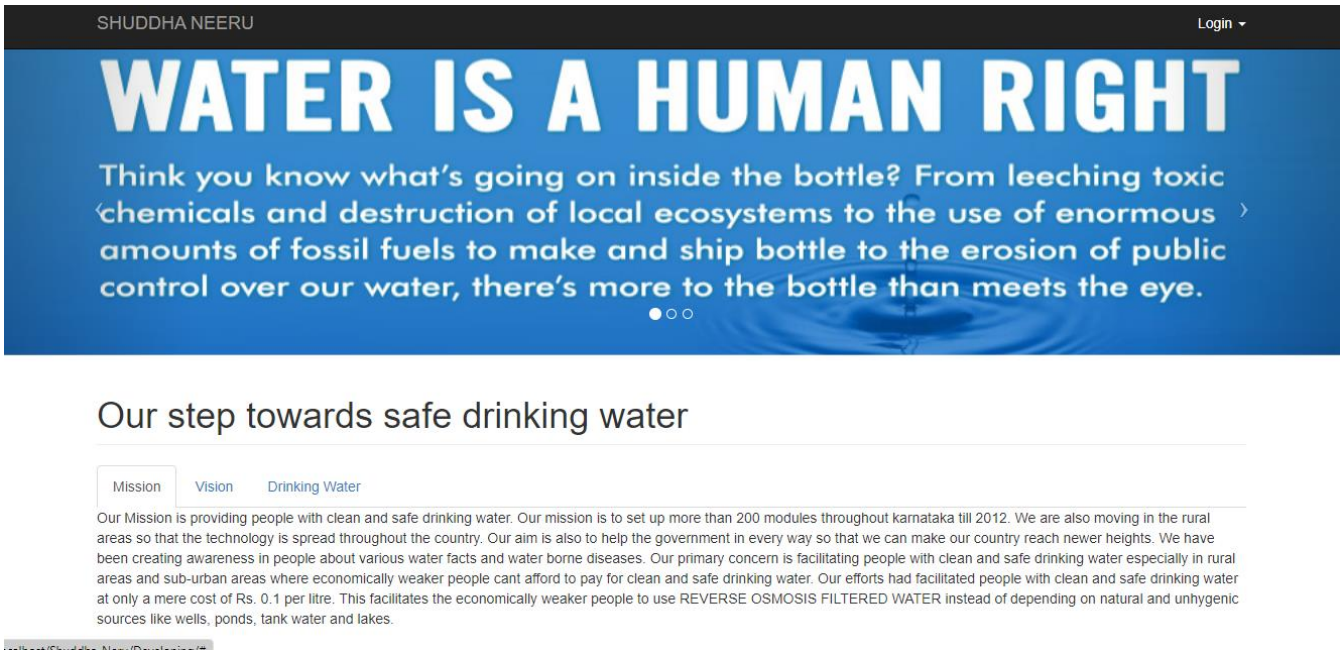
```
<!-- Bootstrap Core JavaScript -->
<script src="js/bootstrap.min.js"></script>

<!-- Script to Activate the Carousel -->
<script>
$('.carousel').carousel({
    interval: 5000 //changes the speed
})
</script>

</body></html>
```

Screenshots:

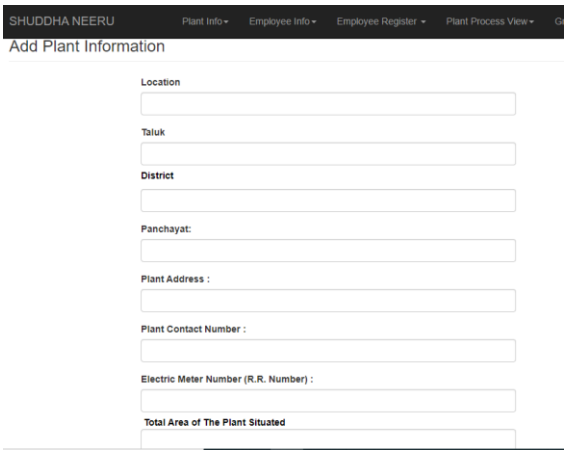
Homepage:

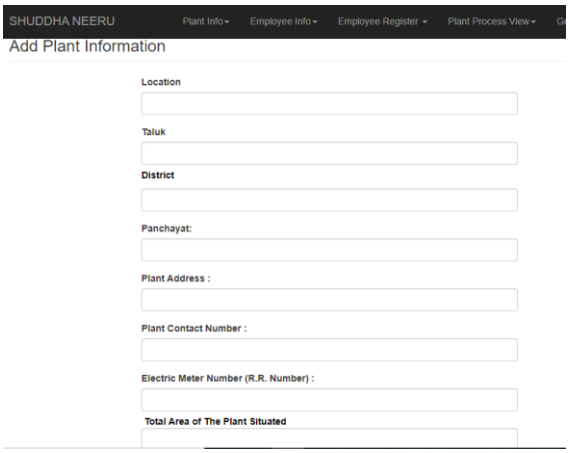


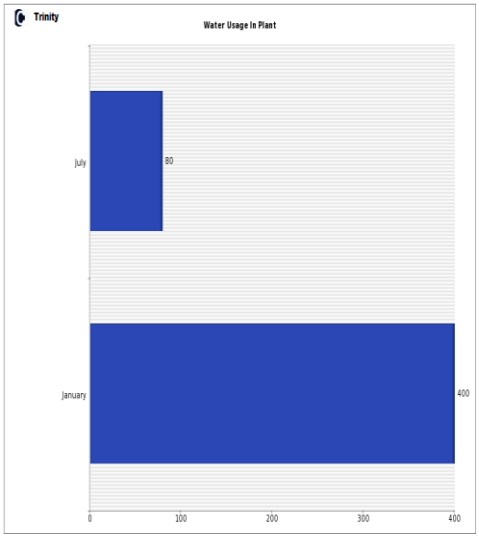
Our step towards safe drinking water

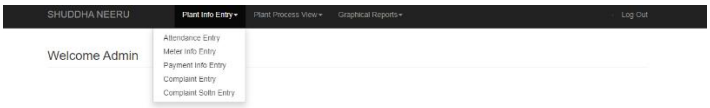
Mission | Vision | Drinking Water

Water, the miracle of nature, is the greatest gift to mankind. Life exists on our planet only because of water. It was in it that the first form of life took birth.
Water sustains our lives by playing a vital role in our day-to-day life. But, unfortunately, with accelerated industrialization and other human activities there is rapid degradation of water resources, leading to scarcity of pure water in many parts of our country.
Yet today, nearly one billion people – about one in eight – lack access to clean water. More than twice that many, 2.5 billion people, don't have access to a toilet.









8. SOFTWARE TESTING

TEST CASES AND RESULTS

Testing:

The development of software system involves a series of production activities where opportunities for human facilities are enormous. Error may begin to occur at very inception of the process where the objectives, may be erroneously or imperfectly specified, as well as in later design and development stages. Because of human inability to perform and communicate in perform software development is accompanied by quality assurance activity.

Software testing is critical element of software assurance and represents the ultimate review of specification, design and coding. Testing presents an interesting anomaly for software engineer. The engineer creates a series of test that are intended to "demolish" the software that has been built. In fact, testing is one step in software testing process that can be viewed as destructive rather than constructive.

8.1 Unit Testing

The applications of these modules are carried out and results are obtained as expected. In this module we have checked for all the blank case conditions and also if

any invalid inputs are given the appropriate alert messages are displayed. Any wrong inputs are not taken into the consideration. All the mandatory fields have to be filled else the alert message is displayed. This is how all the test cases are handled in this module.

8.2 System Testing

The system is tested after integrating all the modules and the results are obtained as expected. The modules are interrelated with one another if changes in one module will update into the other module. There are certain cases where the modules act independently and the change in one does not affect the other module. The blankand invalid cases are handled by giving the appropriate alert messages. The tests which are carried out are achieved successfully.

8.3: Test cases

User acceptance of the system is a key factor for the success of any system. The system under consideration is tested for user acceptance by constantly keeping in touch with prospective system and user at the time of developing and making changes whenever required.

Preparation of test case types is a vital role in the system testing .The test cases were developed using simple data specification .Testing was also done for each condition or combination of conditions.

Vendor Module:

SLNO	Sample Input	Procedure	Expected Output	Actual output	Remark
1	Login page	When user tries to login with valid credentials	Home Page should be displayed	Home Page will be displayed	Pass
		When user tries to login with Invalid credentials	Login Page should be displayed	Login Page will be displayed	Pass

2	Registration page	When user tries to register with correct details	Registration Successful message should be displayed	Registration Successful message will be displayed	Pass
3	Forgot Password	When user tries to update passwordwith valid details	New password updated message should be displayed	New password updated message will be displayed	Pass

CONCLUSION

The usage of this web site will help the higher authorities to get the information immediately to have track on weather the facilities provided by the government is reaching everyone or not

FEATURE ENHANCEMENT OF WATER PURIFICATION AND PLANT MAGAMENT

1. Idetifity source of raw water: This is the first step in which you will decide about the source of water which you will use in production of drinking water.
2. Store raw water: the next process is to store raw water in raw water storage tank with the help of pumping system.
3. Water treatment system: In water treatment process we use clorine dosing system.
4. Testing of water: In this process we test purified water in inhouse water testing laboratory.
5. Purified water storage: Producation machinery is required to blow blottes and store purifired water in it.

BIBLIOGRAPHY

1. Ian Somerville “Software Engineering”, 6th Edition, Pearson Publication, USA 2006.
2. Jacobson, “Object-Oriented Software Engineering: A Use Case Driven Approach”, Edition 3, Pearson publications, USA, 1992.
3. Tool used for drawing diagrams : go .glify