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Municipal Corporation Water Management System

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Abstract:- This Text describes the application "SMC Water Management System ". Water is one of the most important natural resource and water scarcity is the most challenging issue at a global level. In this system water supply is facing problems at a higher rate such as leakage, poor maintenance, poor customer service, and poor quality of water.

This system helps to convey water from the source to the consumers. Designing and operation a water distribution system is the most important consideration for a lifetime of expected loading conditions. Furthermore, a water distribution system must be able to assist the abnormal conditions such as pipe breakage, mechanical failure of pipes, valves, and control systems, power outages and inaccurate demand projections. The main objective of this application is digitally providing the digital notification to user as well as we send text message to all citizens.

SMC Water Management System provides digitally notification to user. Water supply is the one of the basic necessity for all human beings as well as it is essential for the survival of the human beings. Using this application, we can quickly sort out the problems related to water management system. Delay of water supply is done due to any reason. Citizens can get notification using this application. Display of text message is done to every citizen.

Keywords:- *SMC, Android application, Distribution.*

I. INTRODUCTION

The **"SMC Water Management System"**. This application is based on Android platform which is more user friendly. Water is one of the most important natural resource and water scarcity is the most challenging issue at a global level. In this system water supply is facing problems at a higher rate such as leakage, poor maintenance, poor customer service, and poor quality of water.

An Android Application for Water Management System in Corporation provides digitally notification to user.

Water supply is the one of the basic necessity for all human beings as well as it is essential for the survival of the human beings. Using this application quickly sort out the problems related to water management system.

In this application admin adds different category such as add department user, add citizen information, generate report from citizen, add Area, add water supply time table. For post notification PHE select one of the categories related to water management system and enter the title as well as notification and it also display full description with attachment. After post notification user get the notification on his mobile phone. The user first registers the application and the user's information is stored in database. If user does not have android phone, then he/she will receive simple text message related to water management system.

II. PROCEDURE FOR WATER MANAGEMENT SYSTEM

A. Review Stage

Water management system helps to solve the water related problems. This application provides easy platform to all the users. It also solves the problems related to water. User can post the complaint related to water. Through this application user can see the time related to water distribution. [5] This application will gives the information regarding the water management system. The application is very easy to handle to user. The application help to citizens and also the department user of water management system.

B. Final Stage

The final stage of this system is user can view notification related to water on his android application. He can view Timetable of water management system.

C. Architecture

Citizens are end user of our system. Citizens can view the notification related to water on his android application can see the bus details. Admin update the bus details and stored in the database in the system.

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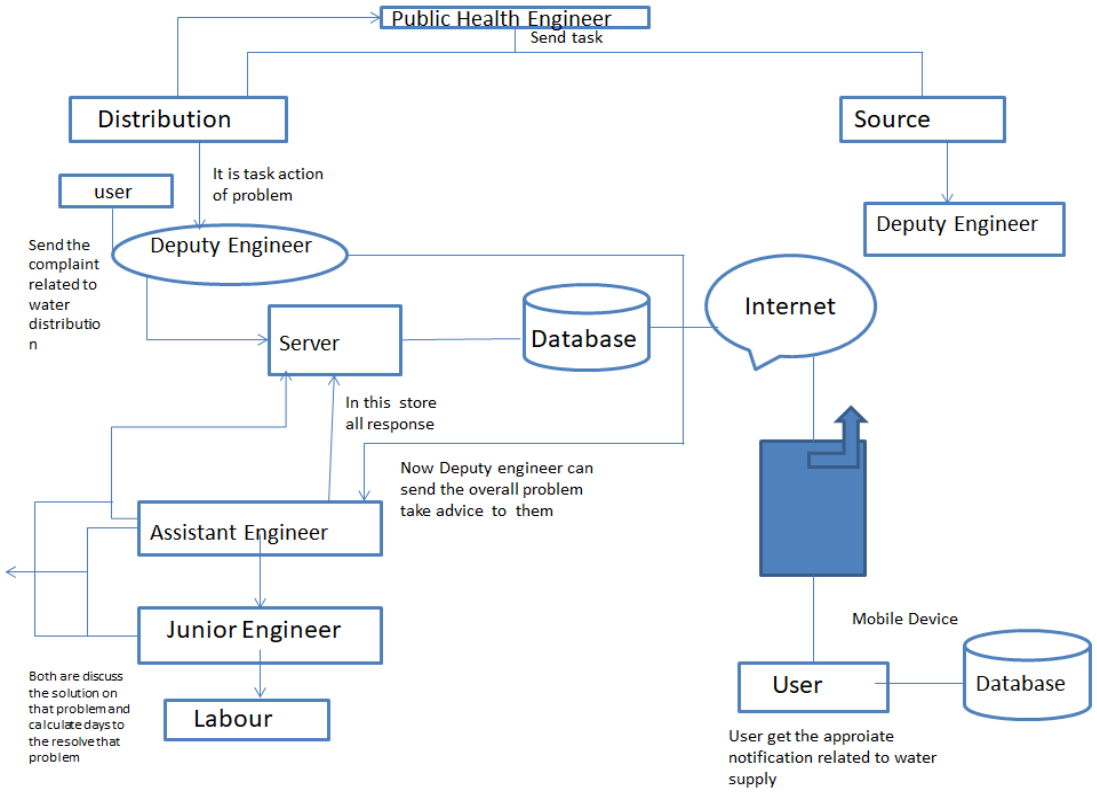

Fig 1:- System Architecture

In this system architecture users are PHE, Deputy Engineer, Junior Engineer, Assistant Engineer.

III. ALGORITHM

Admin Algorithm:

- STEP 1: User first login to the website.
- STEP 2: Add citizen, department user.
- STEP 3: He can send the notifications related to water to all citizen.

User Algorithm:

- STEP 1: User first register the application.
- STEP 2: Second step is to login to the application.
- STEP 3: He can view the notifications related to water, send complaint related to water

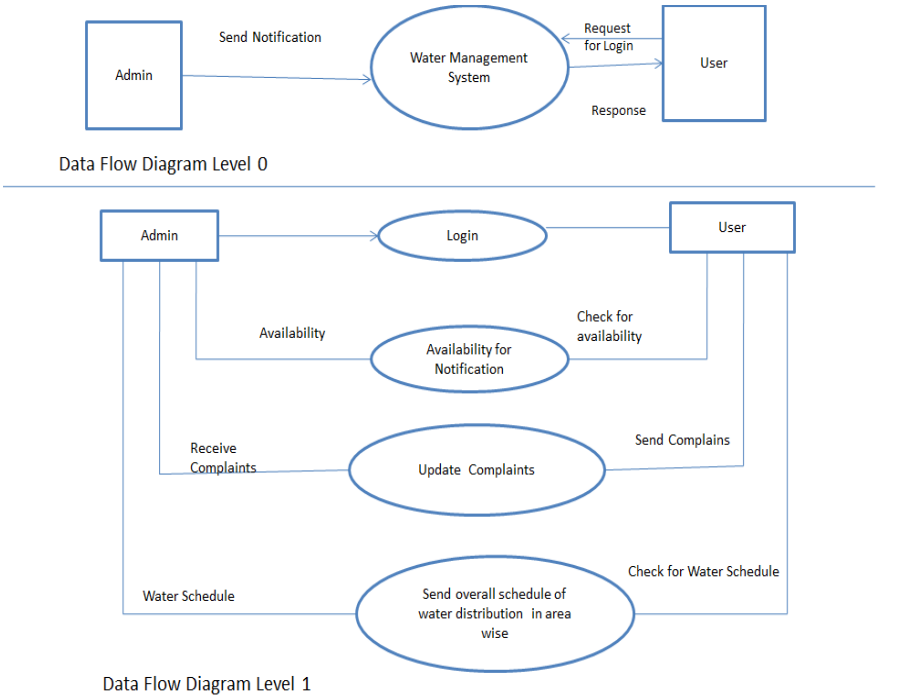

Fig 2:- Data Flow Diagram

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IV. USER LIST

A. User: Admin

Admin is key user of this entire system. He is responsible person to update timetable of the water management system. Admin will generate report of department user and citizen user.

B. User: Deputy Engineer

The Deputy Engineer can post Notification and also resolve problem related to water management system. He can also view complaints of user related to water management system.

C. User: PHE

PHE plays main role he grants permission to deputy engineer to resolve any problem related water such as water pipeline leakage.

V. EXISTING SYSTEM

It is comparatively more and more amount of paper is needed to do this work. For example, if any issue happen related water it will take more time to convey information to people. The deputy engineer solve issue and then send information to people. Manual work will take more time and human resource as well as energy.

This application become popular due to its highly convenient and greater work.

The study highlighted out with a solution on convenient platform, user satisfaction and future work done.

VI. PROPOSED SYSTEM

Proposed System is based on water distribution. The main aim of this application is digitally providing the news to user. In this application PHE adds different category. For post notification PHE select one of the categories. and enter the title of notification and also full description with attachment. After post notification user get the notification on his mobile phone. For that user first registered to that application is necessary. After that only user will get notification.

- Admin can view all citizens information department user and also the report of department user and citizens.
- User can register to the application .
- After login to the application he can view notifications related to water.
- User can also send his complaints such as water pipeline leakage, impure water and many more.

VII. RESULT AND DISCUSSION

A. General Introduction

This mobile application provides notification related to water management system. Firstly, mobile application should be installed on the required android handset. Then do registration to the application. After login user can send complaints related to water through this application.

B. Formal Description

If the application is successfully installed on the android mobile, then by clicking on the application following home screen will appear. As shown in following screenshots:

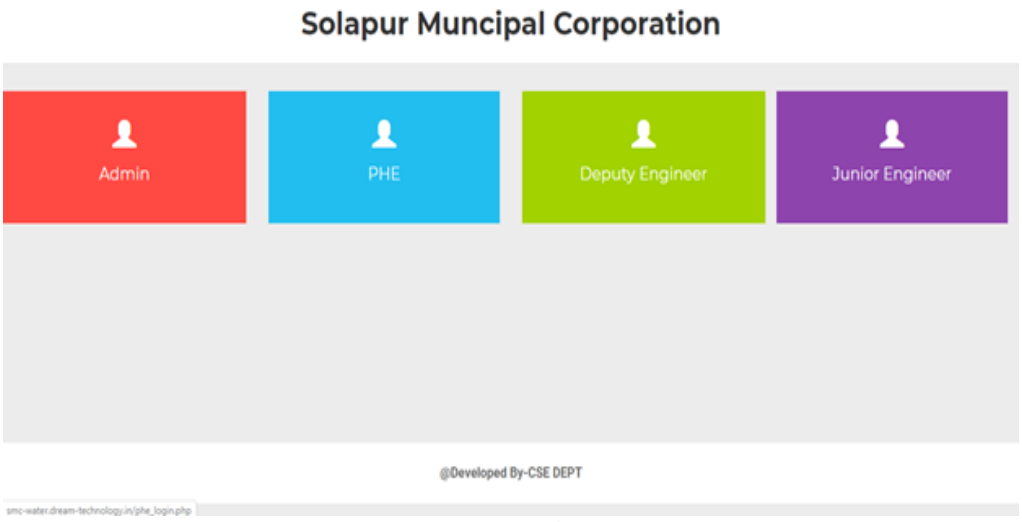

Fig 4:- Home Screen

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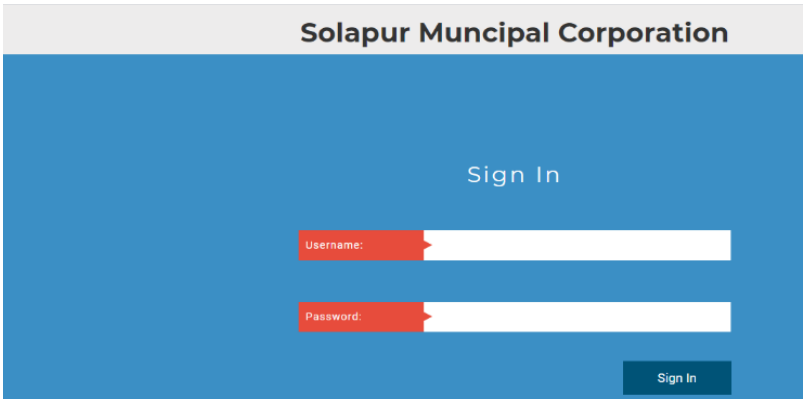


Fig 5:-Admin Sign In screen

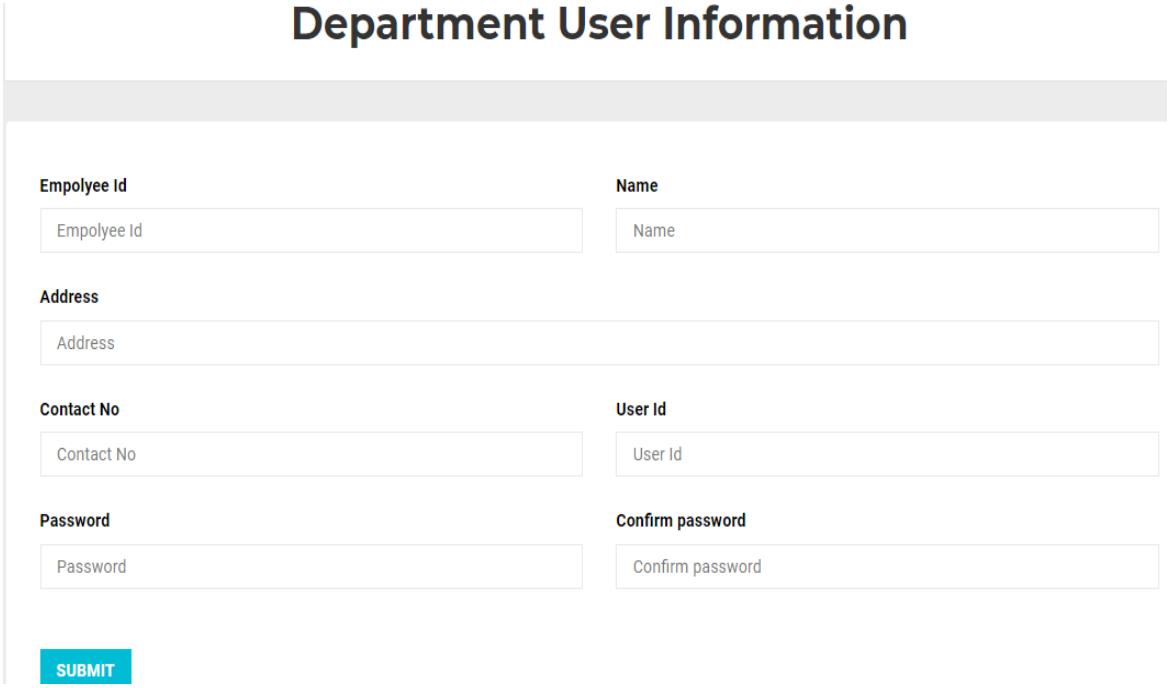
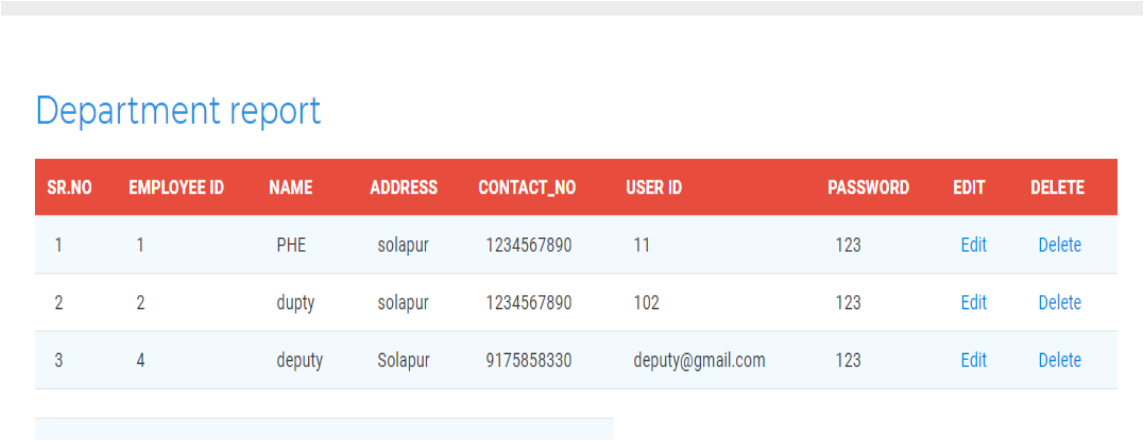


Fig 3:- Add Department User



SR.NO	EMPLOYEE ID	NAME	ADDRESS	CONTACT_NO	USER ID	PASSWORD	EDIT	DELETE
1	1	PHE	solapur	1234567890	11	123	Edit	Delete
2	2	dupty	solapur	1234567890	102	123	Edit	Delete
3	4	deputy	Solapur	9175858330	deputy@gmail.com	123	Edit	Delete

Fig 6:- Department Report Screen

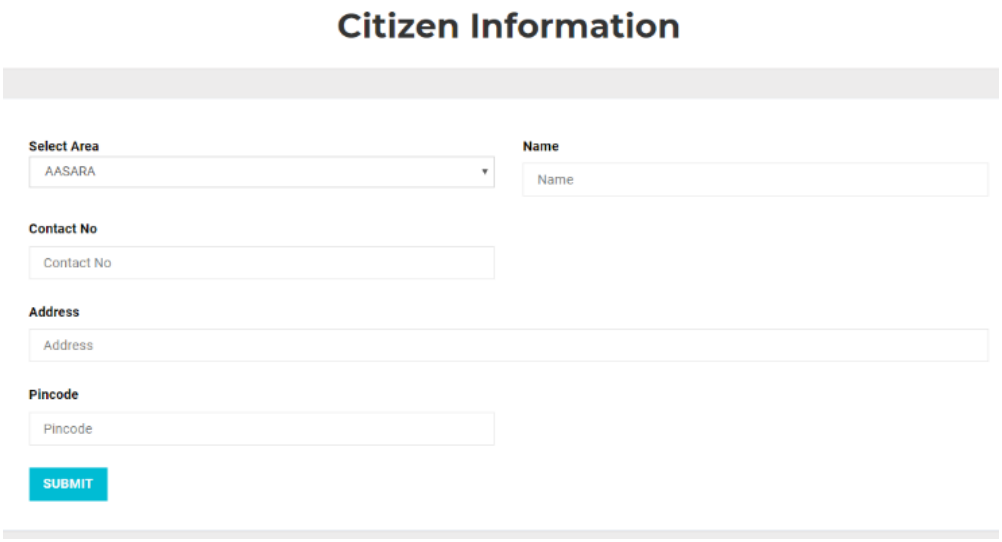


Fig 7:- Add Citizen Information Screen

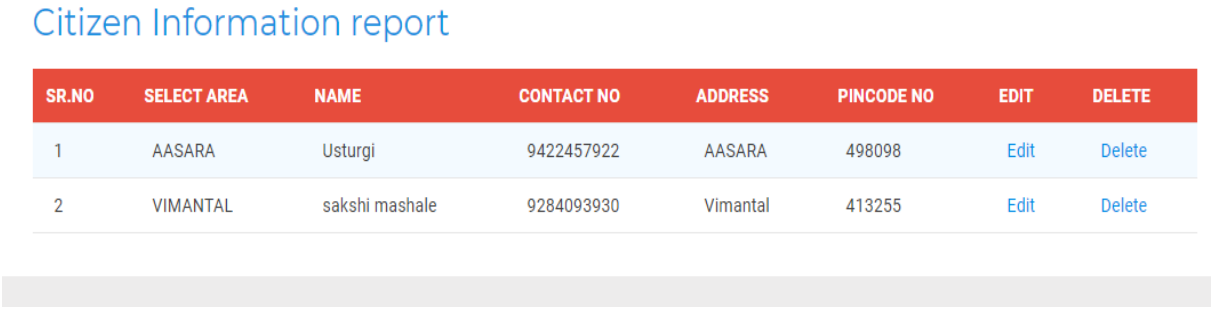


Fig 8:-Citizen Report Screen

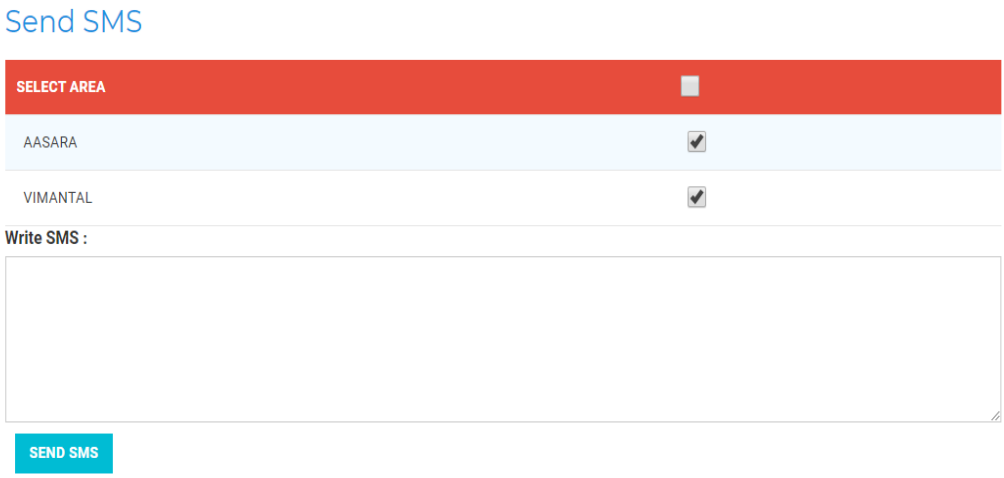


Fig 9:- Send SMS Screen

VIII. CONCLUSION

By Developing this An Android Application For Water Distribution System In Corporation will help city peoples to get notification about city updates related to Municipal corporation.

E.g. Related to water supply

REFERENCES

[1]. AWWA and EES, Inc. 2002a. Permeation and leaching. Available on-line at *http://www.epa.gov/safewater/tcr/pdf/permleach.pdf* . Accessed March 16, 2005.

[2]. AWWA and EES, Inc. 2002c. Finished water storage facilities. Available on-line

at *http://www.epa.gov/safewater/tcr/pdf/storage.pdf*. Accessed March 16, 2005.

[3]. "Extend access to water with the help of technology. [Social Impact]. DESAFIO. Democratization of Water and Sanitation Governance by Means of Socio-Technical Innovation (2013–2015). Framework Program 7 (FP7)". *SIOR, Social Impact Open Repository*.

[4]. AWWA and EES, Inc. 2002e. New or repaired water mains. Available on-line at *http://www.epa.gov/safewater/tcr/pdf/maincontam.pdf*. Accessed March 16, 2005.

[5]. Effects of water age on distribution system water quality. *http://www.epa.gov/safewater/tcr/pdf/waterage.pdf*. Accessed March 16, 2005.

[6]. Walmsly, N., & Pearce, G. (2010). Towards Sustainable Water Resources Management: Bringing the Strategic Approach up-to-date. Irrigation & Drainage Systems, 24(3/4), 191–203.

[7]. Fry, Carolyn The Impact of Climate Change: The World's Greatest Challenge in the Twenty-first Century 2008, New Holland Publishers Ltd

[8]. *Escolero, O., Kralisch, S., Martínez, S.E., Perevochtchikova, M. (2016). "Diagnóstico y análisis de los factores que influyen en la vulnerabilidad de las fuentes de abastecimiento de agua potable a la Ciudad de México, México". Boletín de la Sociedad Geológica Mexicana (in Spanish).* ***68*** *(3): 409–427. doi:10.18268/bsgm2016v68n3a3.*

[9]. *Howard, K.W.F (2003). Intensive Use of Groundwater: Challenges and Opportunities. A.A. Balkema Publishers.*