



# Water Supply Management Alert System

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## Abstract:

One of the problems for water supply systems with intermittent supply is the peak flow produced at some hours of the day, which is usually much larger than that in a system with continuous supply. The main consequence is the reduction of pressure and flow at the ends or highest points of the system network. This in turn generates inequity in water supply and complaints from users. To reduce the peak flow, some sectors of the system must be assigned a different supply schedule. As a result, the supply curve is modified and the peak flow is reduced. This reorganization seeks some optimal allocation schedule and must be based on various quantitative and qualitative technical criteria. This paper hybridizes integer linear programming and multi-criteria analysis to contribute with a solution proposal to the technical management of intermittent water supply systems, which provides short-term results and requires little investment for implementation. This solution does not seek perpetuating intermittent water supply. On the contrary, this methodology can be a useful tool in gradual transition processes from intermittent to continuous supply.

**Keywords:** Water supply schedule, Optimization.

## I. INTRODUCTION

Water supply to different wards or areas is one of the most important activities for the municipal corporations. The current system of water supply is un-useful and can cost a major waste of water as the people don't get the information of water supply is started. The main purpose to design this application is provide an environment where people will know the information about started water supply. The necessity of designing this application is that let the people know supply is started and they will be ready to store water. The disadvantage of current system is that which is irregular and not for certain period of time.

A normal user may login and get the all information about water supply timing. This Application will provide user a information about their area and a user that who is unknown to that area will get information about water supply, garbage collection van time in this Android Application. As per the growing demands of wireless communication there is enormous new technologies participating to make sophisticated environment for an end user. In a recent survey of International Telecommunication Union (ITU) it was found that the number of mobile phone subscribers exceeds seven billion subscriptions at the end of 2014 using more than 10 to 15 Internet utility apps which is more than the entire population of planet.

## II. RELATED WORK

The most of the people are using Android smartphones devices. which will be useful for to deliver wireless Internet access surrounded our home, offices, schools, and some public places also. Water is an essential resource for all life on the planet. Of the water resources on Earth only three percent of it is fresh and two-thirds of the freshwater is locked up in ice caps and glaciers. Of the remaining one percent, a fifth is in remote, inaccessible areas and much seasonal rainfall in monsoonal deluges and floods cannot easily be used. As time advances, water is becoming scarcer and having access to

clean, safe, drinking water is limited among countries. At present only about 0.08 percent of all the world's fresh water is exploited by mankind in ever increasing demand for sanitation, drinking, manufacturing, leisure and agriculture. Due to the small percentage of water remaining, optimizing the fresh water we have left from natural resources has been a continuous difficulty in several locations worldwide. Much effort in water resource management is directed at optimizing the use of water and in minimizing the environmental impact of water use on the natural environment. The observation of water as an integral part of the ecosystem is based on integrated water resource management, where the quantity and quality of the ecosystem help to determine the nature of the natural resources. Successful management of any resources requires accurate knowledge of the resource available, the uses to which it may be put, the competing demands for the resource, measures to and processes to evaluate the significance and worth of competing demands and mechanisms to translate policy decisions into actions on the ground.

## III. PROPOSED SYSTEM

For water as a resource this is particularly difficult since sources of water can cross many national boundaries and the uses of water include many that are difficult to assign financial value to and may also be difficult to manage in conventional terms. Examples include rare species or ecosystems or the very long term value of ancient ground water reserves. Agriculture is the largest user of the world's freshwater resources, consuming 70 percent. As the world population rises it consumes more food (currently exceeding 6%, it is expected to reach 9% by 2050), the industries and urban developments expand, and the emerging biofuel crops trade also demands a share of freshwater resources, water scarcity is becoming an important issue. An assessment of water resource management in agriculture was conducted in 2007 by the International Water Management.

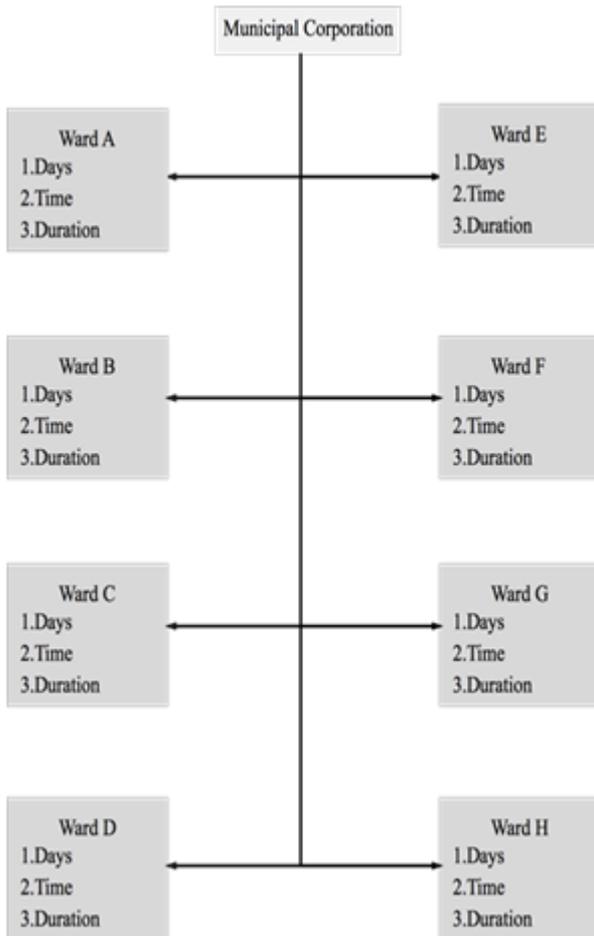


Figure .1. Architecture

**IV. PROJECT DESCRIPTION**

**1] Software Requirements: -**

- Operating System: Android OS
- Language of Implementation
- : Java Programming Language.
- PHP Programming Language.
- SQL (Structured Query Language).

**Challenges:**

1. To provide an optimal solution to the water supply.
2. Most of them suffer from chronic skin problem disorders ,allergies, headaches and eye infections.
3. Maintaining the water supply.
4. Water supply for specific period of time.
5. Unnecessary waste of water.

**Goals and Objective:**

1. The goal of this project is to produce an Social Awareness About water saving Activity and Municipal Corporation application for the Android marketplace.

2. This application will be serve information one of which is open source, the rest custom made.

3. They will be playable on any phone supporting the android operating system with access to the Internet.

**V. OUTPUTS**

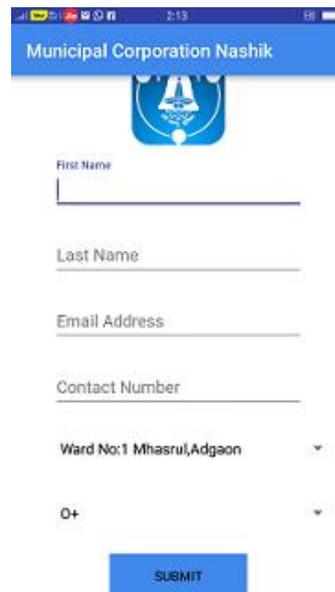


Figure .2. Registration Window

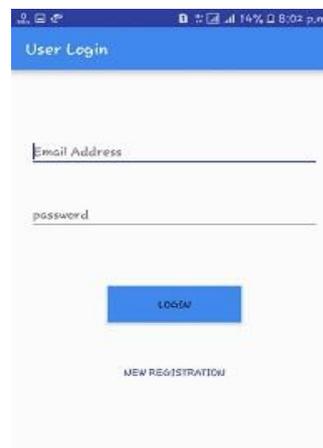
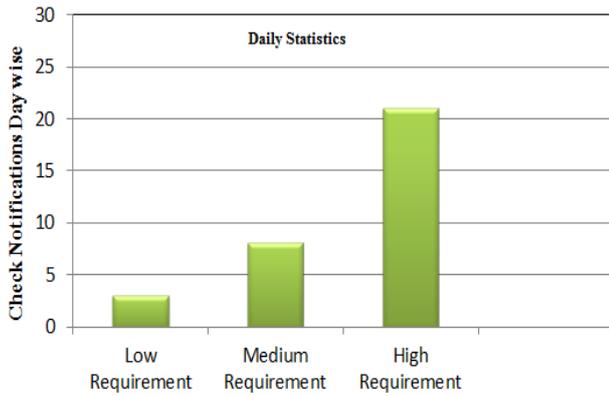


Figure .3. User Login



Figure .4. Home Screen Window

## VI. RESULT ANALYSIS



In the above Chart, the statistics reports for daily Notification of water supply and Garbage collection van are generated. The reports are generated as per the requirement basis. If the user is already known about the timing the chances of using the Application are low. If the user wants to know the timings of the water supply and garbage van then he uses the Application. Other than this if user wants to perform other activities like complaint, find blood donors, emergency numbers, etc the chances of using application are high.



Figure.5. Water Demand Upto Year 2041

## VII. CONCLUSION

We are trying to develop an environment where we can save the waste of water as conservation of water is an essential task for humanity. The increasing temperature affecting the resources already and waste of water can cause another major problem. This system will provide an appropriate solution to the daily problems faced by municipal corporations. We believe this system will be one of the most promising for the current and coming generation.

## VIII. REFERENCES

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