## U-STEMist Scheme (Smart City - Group 6)

Community Partner: Water Supplies Department (WSD)

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#### Introduction

Facing challenges such as climate change and growing population, WSD has to confront the water scarcity and manage valuable water resource in Hong Kong. Our team focuses on water saving strategies using two innovative mobile apps which assist in reporting water leakage cases, and promote the message of water saving.

### (1) Water Leakage Report App

Near one-third of fresh water is lost from leakage of water pipes in Hong Kong<sup>1</sup>.

Our app provides an alternative, relative to phoning and emailing, to report water leakage.



Through the app, the public can conveniently provide more accurate information of time and location of water leakage, as well as photos and text descriptions to WSD.

WSD can respond quickly and hopefully record and handle the cases faster and more easily.

### (2) Let's Save Water

The water consumption per capita in Hong Kong is one of the highest among the globe<sup>2</sup>. Our app is trying to help the public to build habits of saving water.



In our prototype, we focus on reducing water usage in bathing. The app records the users' bathing time and hence obtains their daily water usage and allows them to track back their water usage record.

One fascinating feature is that people can compare their records with other users and win badges interactively.



Send auto-generated

email report to WSD

**Response from WSD** 

Scheduling and treatment

Further contact to witness

on urgency

of cases on-site depending

# Difficulties & Reflections

- Difficult to design a practical and operational project with limited time and knowledge
- Hard to reach consensus with community partner
- Cooperate with fellows of different backgrounds

Faster case

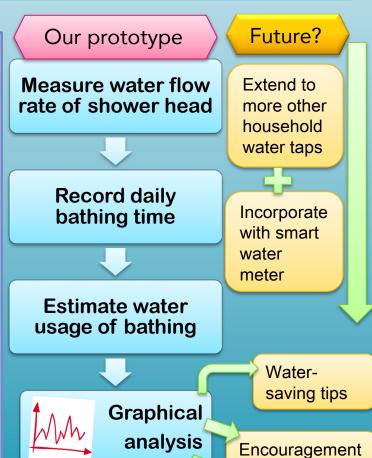
sorting

Direct

record in

database

 Know deeper about how work of WSD relates to smart city



message

Water bill

estimation

<sup>1</sup>ADM Capital Foundation. (2017). The Illusion of Plenty. Hong Kong: Civic Exchange, ADM Capital Foundation, pp.5. Hong Kong: Civic Exchange; ADM Capital Foundation.

<sup>2</sup>Water Supplies Department. (2015) Annual Report 2014/15 - Combat Against Climate Change: Exploit new water resources and foster water conservation culture, pp.74

Compare with other

app users