

真光女書院 True Light Girls' College

隊名
Team Name :

垃圾桶小分隊
Insieme

原型方案名稱
Prototype Name :

智能垃圾桶
TrashUre



環境衛生
ENVIRONMENT
AND HYGIENE

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九龍城區不少唐樓缺乏管理，天井、走廊和樓梯經常堆滿垃圾，衛生情況欠佳。街上大型垃圾桶數量亦較少，導致違法棄置垃圾現象日益嚴重。

解難方案主要針對增加垃圾桶容量和污水處理，從而解決違法棄置垃圾和蟲鼠滋生的問題。智慧垃圾桶設有紅外線感應器，當桶內垃圾累積至八成滿時將會進行壓縮，讓容量比一般垃圾箱超出三倍。桶內亦設有污水箱，蓋面加上活性炭，避免食物殘渣水分導致的衛生問題。當垃圾桶滿載，感應器會發出訊號至應用程式，從而顯示並讓市民了解該垃圾桶的使用情況。此功能亦方便清潔工適時清理，避免垃圾在街道上堆放。市民更能使用地圖定位拍照匯報垃圾桶情況和作出評分，有助有關機構跟進，改善環境及市民生活質素。

In view of the lack of management of many old Tang buildings in Kowloon City, it is not surprising to see illegally disposed trash in patios, corridors and staircases and these places have become the breeding place for bacteria, insects and rats because of the poor hygienic conditions. At the same time, inadequate number of large rubbish bins on the streets worsens the problem of illegal trash disposal.

Our problem-solving plan mainly focuses on the increase in capacity of the garbage cans and improve sewage treatments to solve the problem of illegal disposal of waste and the hygienic problems created. First of all, the compressing function will be added to increase the capacity of garbage collection which will create at least three times of the capacity larger than a typical trash can. The automatic open-lid function introduced to prevent people from touching the surface of the bin with their hands as to be more hygienic. In addition, sewage tanks will be built to prevent sewage leakage from food residues or wastes to stop bacteria and insects from breeding. The problem of odour from rubbish can be solved as well.

