

## **Trash Dash: An Educational Android Game Application for Proper Waste Segregation**

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**Abstract :** Trash Dash is an android game application developed to serve as an alternative tool to practice proper waste segregation for children ages 3 years old and above. The researchers designed the application using Unity 3D and developed the text file that served as the database of the game application. An observation of a pre-school teacher shows that children know how to throw their garbage but they do not know yet how to segregate wastes. After launching the mobile application to K-2 pupils 4 - 5 years of age, the researchers have noticed that children within this age are active and motivated to learn the difference between biodegradable and non-biodegradable. Based on the result of usability test conducted, it was concluded that the game is easy to use and children will most likely use this application frequently. Furthermore, the children may need assistance from their parents and teachers when playing the game. An actual testing of the application has been conducted to different devices as well as functionality test by Thwack Application and it can be concluded that the mobile application can be launched and installed on a device with a minimum API requirement of Gingerbread (2.3.1).

**Keywords :** waste segregation, android application, biodegradable, non-biodegradable

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