

## **ABSTRACT**

*Background process that running uncontrollable, lead to high usage of battery in Android smartphone. Killing the background processes is one of the solution for saving the battery energy. Wakelock is a background processes that run when Android smartphone sleep. Some of wakelock processes are needed by user, so application mustn't kill the all other application with force. For that reason, a mechanism that arrange wakelock processes into list based on user preferences is needed, so user won't be disturbed when that process is killed. This research suggest a battery saver application that use sorting mechanism for wakelock processes, and with priority that defined, application will kill some of wakelock processes that using a lot of energy from Android smartphone, with corresponding user preferences. By using this battery saver, energy used from Android smartphone battery will be reduced, without bothering user activity.*

*Keywords : wakelock processes, background processes, battery saver, user preference, Android, smartphone.*