ABSTRACT

The development of the Merah Putih Laptop was initiated by the Ministry of Education, Culture, Research, and Technology in collaboration with several universities to assist learning in frontier, remote, and underdeveloped areas that still have difficulty carrying out learning activities due to internet network limitations. Supporting the program is in the form of designing an IoT-based laptop smart adapter using Bluetooth communication with the aim of helping laptop users maintain battery life by limiting the charging and discharging process to a certain level, as well as preparing the Diktiedu learning module with a series of processes for preparing materials according to the format needed to be integrated into the education system. learning media in the form of Diktiedu laptops and tablets. The result of developing a smart adapter is in the form of a prototype unit that can connect and disconnect electricity to a laptop adapter with instructions from the Console, but has not been able to adjust the required battery level, which starts charging at 20% and stops at 80% due to incomplete development of supporting applications. The preparation of the Diktiedu learning module resulted in a package of learning modules that were successfully injected into the Diktiedu laptop and tablet learning device, with access through the Catalog application.

Keywords: Laptop, Tablet, Diktiedu, Smart adapter, IoT, Bluetooth.