

Implementation of Smart Pet Care Applications in an IoT Based Environment

WLSV Liyanage# and N Wedasinghe

*Department of Information Technology, General Sir John Kotelawala Defence University,
Sri Lanka*

35-it-0055@kdu.ac.lk

The idea of Information Technology and machines has become a rising demand, leading to the concept of interconnection between humans and machines. This concept has adopted a negative impact on human lives and their well-being. Because of this negativity, people tend to adopt pets to get emotional support. Pets require extra care and it is not easy as it used to be with today's busy lifestyle. As a result, one of the significant challenges has been figuring out how to grow pets in a simple manner. The best solution for this kind of problem is to use new innovative technologies. For this matter, an IoT-based solution should be included. The question that led to this research was, "How to implement a Smart Pet care Application within a proper IoT based Environment?". Implementation of a smart pet care application that satisfies every requirement of petting would ensure greater comfort and peace of mind for pet owners. This paper discusses the characteristics and technologies of the latest smart Pet Care applications and proposes solutions that satisfy the current requirements of pet owners. Before implementing this smart pet care application, a study was performed to identify features and facilities of existing pet care applications using related research papers. This research explores the impact of the IoT concept on the potential of smart Pet Care applications across modern technologies to facilitate human contact with pets. The outcome is an IoT-based mobile application that satisfies users' requirements by analyzing data.

Keywords: *pet care, Internet of Things (IoT), smart pet care system, monitoring systems*