APLHA – AN ONLINE SOLUTION FOR CHILDREN TO ENGAGE IN VARIOUS ACTIVITIES TO LESSEN SCREEN TIME BASED ON THEIR PERSONAL INTERESTS

Tharahy John Kennedy

A dissertation submitted in partial fulfilment for the requirement for Bachelor of Science (Honours) degree in Business Information Systems

Business School
Informatics Institute of Technology, Sri Lanka
in collaboration with
University of Westminster, UK

Abstract

A child's social, emotional, and overall wellbeing are dependent on preschool and primary education. However, the COVID-19 pandemic forced the closure of schools, leading to an increased reliance of remote learning, resulting in a significant increase in screen time among children, with adverse effects on behaviors. This dissertation addresses the mentioned problem supported by pilot study, relevant literature, and industrial survey along with a proposed solution using latest technologies.

As society gradually returns to normalcy, it is essential to address the after-effects of increased screen time on children's behavior. The transition to a new way of living following the pandemic-imposed challenges on children, necessitating innovative strategies to help them adapt. This research intends to contribute to the discussion surrounding the use of technology to mitigate excessive screen time and facilitate holistic child development.

Literature findings stood as pillars to build a work around the defined problem, and the results of pilot study and the industrial survey helped to get a clear picture and to narrow down areas that needed to be focused on the context of parents and children in the Western province, Sri Lanka. The thesis further focuses on how the problem of screen time existed even before the pandemic as well how it drastically increased and impacted on both the parents and the child with their day-to-day activities. To overcome the problem of screen time and to improve child's behavior the author proposed a solution "Alpha", which helps to track and monitor screen time and behaviors such as sleep pattern, food pattern and mobility patterns of children. It also visualizes trend charts of the recorded behaviors and suggest activities for the child to engage than using screen based on their interest areas. To implement the solution proper requirements engineering was followed, designs were created, and tech stacks were used, tested, and evaluated.

Keywords: Increased screentime, children, electronic device, post COVID, behavioral changes, recommended guidelines