

# A Scrutiny on Trends in Study Tipitaka as an Electronic and Mobile Sources

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## Abstract

During the reign of King *Walagambahu*, the *Tipitaka* which contains lord Buddha's philosophical doctrines was transcribed to text for the first time in 80 AC at *Aluwihare* cave temple, *Matale*, Sri Lanka, for the preservation and use of future generations. Recently, *Tipitaka* is available as an electronic source via the internet which includes advantages such as user friendliness, cost effectiveness and good accessibility as well as carrying Buddhist philosophy to the whole world. However, there are various issues encountered by the users in referring the current electronic versions of *Tipitaka*. These were identified during the current research and it was apparent that an e-book would be more suitable than the conventional PDF format.

Main focus of this study was to identify the possibilities of developing a user-friendly electronic interface for *Tipitaka*. In this study, few selected sections of *Tipitaka* were used to develop a multifunctional e-book that can be read efficiently with accurate pronunciation, with automatic page system as well as possibilities to use internet extensions which enable user-friendly searching facilities. In this work, an efficient Graphical User Interface (GUI) was designed that loads only the thumbnail of the target page, saving time without loading any pdf material.



Designed GUI in a desktop (left image), and in a mobile app (right image)

Conventionally in pdf based e-books, when a user demands for a specific word / phrase search, the result is shown scrolling through the whole pdf document. When referring the *Tipitaka* a summarized result of the searching content is expected to be more useful, rather than directly displaying each and every page. Considering this need, an efficient searching facility was designed in this work, using Optical Character Recognition (OCR) to display a summarized list as the primary result. Since the keywords are already indexed at the editorial stage, the searching function quickly generates the primary result where the user is allowed to choose the exact target page efficiently from that summarized list. This application was developed in Java Programming Language by using the Android Studios Integrated Development Environment (IDE). Android Software Development Kit (SDK) was used to develop the mobile application, embedding a variety of customized tools, on the Android platform. Especially, Android Emulator and the Android Development Tools (ADT) plug-in for Android Studios were very useful in this implementation. Among the growing number of Android based mobile applications available on this area, this *Tipitaka* application is also expected to stimulate the interest of many researchers, encouraging unique prototype mobile applications aligned with their research works.

**Keywords:** *Tipitaka, Android, e-book*