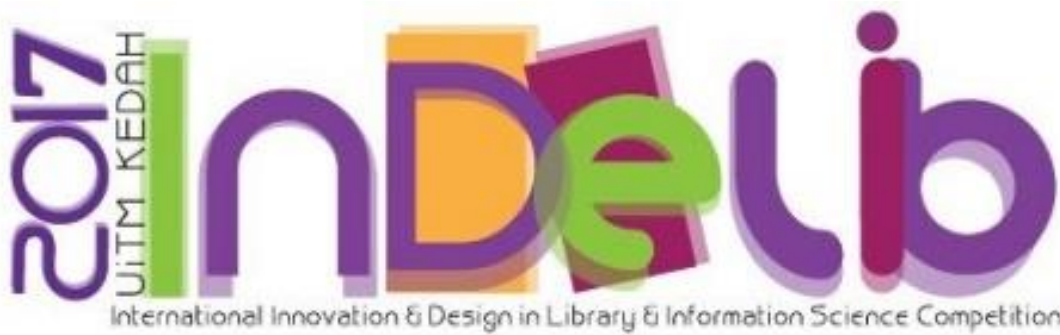




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Continuous Innovation for Excellence

ABSTRACT

13th September 2017

DEWAN TUN ABU ZAHAR
Lembaga Pertubuhan Peladang (LPP)
Kuala Lumpur.

In Collaboration With



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Smart Resource Tracking and Tracing System (SRTTS)

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Abstract

The "Smart Resource Tracking and Tracing System (SRTTS)" is a digital system to assist the library users' track and trace the exact location of resources such as books, journal article, CD, manuscripts and thesis. The purpose of the SBTTS is to solve the problems of existing system such as resources status available with call number however not in the shelf as stated and missing or hidden resources by other library users. Moreover, it will take time in tracking and collecting the resources based on call numbers and can you imagine if you are looking for several books. Thus, this system will provide solutions to cater these problems by installing detector in each of the resource and will be updated in the system once removed from the shelf. This auto-update will be one of the smart innovations in this system. For wrong location of resources, sensor installed will give an alarm sound mentioning that wrong storage for the specified resources. Other than that, the system will propose the shortest path and time in collecting the selected resources which will save time and energy for tracking and collecting resources. Method used by the system is providing an algorithm on showing the shortest path which will act as a recommender system. An alarm system installed in the shelves will avoid resource from hidden or misplaced by user and easy for library management system to detect the exact location of the resources. This system can be customized and commercialized in different fields such as courier services, arrangement or scheduling of several appointments with clients and disable people. Smart Resource Tracking and Tracing System (SRTTS) will track the books, say whether they are issued or they are in library, so that library user will get the instant information. The novelty of this method lies in its combination and slight modifications to address the underlying problem and to solve existing deficiencies in current systems. This combination satisfies the use of RFID technology in uncontrolled and heterogeneous environments for determining the flow of materials or books' movement in order to provide an efficient management of the resources of the library.

Keyword: Digital system

Potential commercialization: This user friendly, comprehensive, flexible and extensible system helps library staffs to monitor and keep track of their library collections. This system can be customized and commercialized in different fields such as courier services, arrangement or scheduling of several appointments with clients and disable people. This system can be commercialized among universities and organizations. Thus, the system can be tailored to the users' needs and requirements.



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