## A RESEARCH ON THE IMPLEMENTATION OF MATRIX KEYPAD IDENTIFICATION MECHANISM IN A SPORT COMPLEX RESERVATION SYSTEM

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## **ABSTRACT**

The majority sports complex available throughout Malaysia provides days-time-time-time and facilities reservation in form of online and telephone reservations. Online sport reservations anyway are the most unpopular method applied within Malaysia, therefore congestions and inconvenience in sport complexes today increases. A typical telephone reservation cost money, time, and inflexibility to the patrons. An online reservation overcomes the following issues, but it is unpopular among Malaysian users. The author has then employed an idea by creating a reservation system that is deployed within the sport complex environment which includes the implementation of matrix keypad identification mechanism to provide user privacy, user convenience, and better resources management.

This reservation system is implemented within the sport complex environment and applied to registered members in a sport complex only. The member logs in, selects the facilities, confirms the days and time, creates a reservation and finally retrieves the reservation number by receiving the particular number through a SMS. Member then proceeds by entering the reservation number on the confirmed date and time on the matrix keypad which will be installed on every main door of facilities hall. The only prerequisites to employ this system are by becoming a member which consists of annually membership fee.