### UNIVERSITI TEKNOLOGI MARA

# THE INVENTORY MANAGEMENT SYSTEM USING RFID: REQUIREMENTS MANAGEMENT

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#### **ABSTRACT**

The basis of this project was to examine requirements management criteria needed in producing the inventory management system and to understand and take advantage of the opportunities of RFID afford as mechanism towards better inventory management. The goal of this project is to improve the management of the conventional inventory system, by developing the computerized system with the involvement of RFID deployment. Interviews, magazines, articles, journals, books and outline documents are collected throughout the gathering of requirements and thus provide vital information to the project. The materials used to enable the capturing the present of items are RFID tags attached to items and RFID reader connected to the computer. The techniques are created in order to capture the items being tagged and store the necessary information of the items into database via the system. The overall approach was to keep track the availability of the items inside the inventory. The findings being presented are the details of the requirements gathered, the use cases, interface structures of the system and system interfaces, which contributed to the application of inventory management system. Upon completion of the project, it is found that the aspects identified in requirements management provide the basis in producing the inventory management system and the product of the project is system prototype which is being demonstrated. Future works for this system are focus on the RFID utilization and establish the stability of RFID connection with the system so it becomes more efficient, more effective and consistent. Besides, it is recommended to broaden the scope, enhancing the existing functionalities, adding new valuable elements to the system and improve the attractiveness of the system interfaces.

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