

UNIVERSITI TEKNOLOGI MARA

**IMPLEMENTATION OF QR CODE
TECHNOLOGY FOR TEXTBOOK
MANAGEMENT SYSTEM**

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STUDENT'S DECLARATION

I certify that this report and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

Textbook Management System, named as e-SPBT, is a system for the Skim Pinjaman Buku Teks (SPBT) staffs that can be used at schools for a better textbooks management, which using the QR code technology for the textbook identification. This system will be able to help the SPBT staffs to manage the textbooks and the processes of borrowing and returning the textbooks in more efficient way. The e-SPBT process was organize and guide by using four phases methodology, known as System Development Life Cycle (SDLC), starting with planning and analyzing the system requirement and suitable technique for the e-SPBT, to design the interface of the system, develop a web-based system using the QR code technology, and evaluate the functionalities of the e-SPBT that is implemented for the school use. The e-SPBT use the technology of QR Code, which is suitable to be implemented in the system as a unique textbook identification. From the SPBT staffs' evaluation, as the user of the system, they found that this system is really useful for the SPBT management because computerized system is considered to be a good choice for the school as less papers will be used for the data storing. All the functionalities in the e-SPBT system are tested in the Functionality Testing to ensure that the functions are working and well-functioned. The QR codes are successfully generated from the textbooks' ISBN and the QR code tagging and reading are well-functioned for the textbooks identification. The user will be notified with the proper message for the wrong user input. This system currently use a localhost as the server which is limited for other users' access. There are some limitation that can be improved especially for the future such as the system can be done as a centralized web-based system which is more efficient and also on the part of security can be improved. In addition, the system can be improved for the textbook fine payment management as this system project is only focusing on the textbook borrowing and returning.

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