### **SUPERVISOR'S APPROVAL**

#### **Tracking Total Purchased By Scanning Price Tag In Mobile Application**

By

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This report was prepared under the supervision of the project supervisor, Madam Zainura Idrus. It was submitted to the Faculty of Computer and Mathematical Sciences and was accepted in partial fulfilment of the requirements for the degree of Bachelor of Computer Science (Hons).

Approved by	
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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 discipline.

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#### **ABSTRACT**

Shopping for grocery is necessary for living purpose. Budgeting in shopping for grocery is important as cost of living is rising. Due to budget constraint, shoppers have to limit their total purchased to stay within budget. Some ways are used in order to stay within budgets which are calculator and shopping list. However, shopping list cannot show the exact total purchased and calculator needs a lot of pressing key to get the total purchased. Shoppers will refuse to use it and tend to calculate the total purchased mentally which can bring uncertainty in calculation. Therefore, this project is intended to built a mobile application that keep track the total purchased just by scanning the price tag. The objective is to design and develop mobile application that keep track the shoppers spending cost by using Optical Character Recognition (OCR) technique and test the application via functionality test. Optical Character Recognition (OCR) technique is used to recognize the price number on the price tag. Method used in the methodology is agile model. Agile model is used as it is incremental and easy to change the process according to the user needs and requirements. As a result, this application can store shopping list and calculate continuously the total purchased. Unfortunately, it depends on the quality of image such as if the image is blur, the application will not be able to recognize the number captured thus, will not be able to calculate the total purchased correctly. The objective is achieved and there are some recommendation to improve the project which is alert the shopper by popping a notification or sound when they reached their budget.

Keyword: OCR, shopping list, budget

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