**UNIVERSITI TEKNOLOGI MARA**


# MOBILE APPLICATION ON INGREDIENTS OF IMPORTED HALAL FOOD PRODUCTS (SCA'N'EAT)


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# ABSTRACT

One of the most common problems facing by the consumers when they wish to purchase imported food is the authenticity of the food ingredients used in the products. Moreover, these ingredients are commonly written in specific codes known as e-codes such as E200. E-codes refer to specific food additives used by the food industry in the food products. Consumers are concerned about the food element used in the food products. However, they are not familiar with the e-codes as food producers are listing the codes instead of ingredients that can be read by consumers in the food label Therefore, this project aims to develop mobile application on ingredients of imported halal food products that help the consumers to know the e-codes used in the food products by scanning the barcode of the products. This project scope also involved about the ingredients used in canned products from United States only. Interview with the five consumers were conducted to gather the requirements needed and they mentioned that they have doubt to consume imported food products because the ingredients are written in e-codes and there are no tools to inform consumers the information of the e-codes. The methodology used in this project Mobile Application Development Life Cycle (MADLC). Through the analysis of the requirement, the design of the interface prototype was done after implemented of the mobile application assessment and created medium fidelity storyboards as an early design approach. For future work, this project will expand to the varieties of food products from other countries. Last but not least, this project acts as a platform to verify that the e-codes determine the element of the e-codes whether it derived from chemical, animal or plant sources.


Keywords: mobile application, e-codes, barcodes, halal, imported food products, mobile application development lifecycle (MADLC)

# TABLE OF CONTENTS

| CONTENT | PAGE |
|---|---|

# CHAPTER 1

# INTRODUCTION

In this chapter, it will provide an explanation about a project background and some of the study about the project in more detailed. Background study will discuss briefly about the project and also the problem statement that occur. The objective of this project is to identify and to solve the researcher questions and it will describe more on how the project is trying to achieve.

## 1.1   Problem Background

Halal issue is a sensitive issue among Muslim and it has starting to bring attention in marketplace mostly in Islamic countries (Majib et al., 2015). Halal products are viewed as the food safety and the quality assurance. In halal context, products must be free from dirt or contamination and harmful germs (Awang, 2016). In Malaysia, halal certification is issued by Malaysia's Department Islamic Development (JAKIM). JAKIM is an organization that was established by the Government of Malaysia and responsible in dealing Islamic affairs, laws and education within country (Majid et al., 2015). JAKIM's halal logo holds meaningful and important symbols as products have undergone specific and strict conditions where the food ingredients must have proof analysis from the lab stated that the food ingredients do not contain non-halal element before halal certification can be issued by JAKIM (HalalMalaysia.net, 2012).

Another issue in halal is the authenticity issue in food ingredients of the product. Moreover, consumer is particular about what they actually consumed. Thus, there may be some ingredients that non-halal but does not being mentioned in the label of the product (Mutalib, 2015). It is crucial for consumer as they have the right to know the halal integrity of the products that they have purchased (Mutalib, 2015). Health and issues are related to one another as it is becoming