

# The Design and Development of a Mobile-Based Application to Increase Awareness of Personal Care Products

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**Abstract.** Personal care products are becoming more popular, and many of the people involved in buying and selling them are aware of some of their benefits and drawbacks. Many individuals expect a product's effects to alter quickly without considering the risk or potential adverse effects. Lack of ingredient awareness may also lead customers to purchase skin-incompatible products. As a result, this study team designed and created a personal care products awareness application to help people become more conscious of the items they use every day. By snapping or uploading a picture of the product, this application can assist users in identifying the product's details. The system also can assist in making recommendations for a useful product to utilise in accordance with the response the user selects in the quiz section. Three questions about skin conditions are included in the quiz section of the homepage in order to help the user choose the product which might work best for them. The data is stored in Google Sheet and Firebase, and the system is being developed using Thinkable software and the Mobile Application Development Life Cycle (MADLC).

*Keywords:* Personal Care Products, Mobile-Based Application, Awareness, Cosmetics, Halal Cosmetic Ingredients

## INTRODUCTION

Personal care products (PCPs) is the general term for cosmetics and drug such as facial tonic, hair conditioners, body cream and more [1]. Certain people have knowledge of the ingredients in the PCPs. People with educational background tends to recognize the products' ingredients [2]. However, the remaining individuals either have knowledge from prior experience or have no knowledge of the ingredients [3]. In order to overcome the situation, people tend to search through the internet or seek a professional's advice. Age matters also should be taken into consideration when choosing suitable PCPs. As the usage of PCPs is now growing, illegal and harmful substances in PCPs are also increasing. [4]. PCPs People are starting to change their behaviour when it comes to buying products which enhance their appearance [5-7]. Becoming a hygienic and picturesque person is common these days. As a result, PCPs are receiving more attention, and business growth is starting to increase. Knowing if a product's ingredients are safe or not should be taken seriously because there are risks involved. It is significant to distinguish between the good and bad ingredients which will impact our body [8-10]. The desire of having an attractive feature made people to overlook the ingredients of the PCPs [11]. People ought to know the contents are fitting or not towards the user. For example, people of Caribbean use skin lightening products to achieve eye-catching appearance without knowing the danger of Mercury and Arsenic content in the cream which can cause the user to experience Mercury or Arsenic poisoning [12].