

# Application of Indonesian Food Processing Recipes as an Android-based Learning Media for Students of the Culinary Study Program

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## ABSTRACT

Technological developments affect the role of an android itself. Now, all activities can be done with android. One of the obstacles in learning Indonesian food processing is the determination of a standard recipe that will be practiced. Based on this condition, the researchers made an application for Indonesian food processing recipe books for android-based students. The research process is carried out based on the Fish Bone Diagram, the testing method is the Blackbox Testing method. The testing phase of the application only focuses on the functionality of the application. Based on the conclusions, it is known from this research that it produces a responsive online application-based food recipe application, so that it can be accessed by users wherever they are as long as they are still connected to the internet, provide better information than similar services, and make it easier for users to determine the recipe menu for food to be served. Practiced.

## KEYWORDS

Indonesian Food Processing Recipes; apps; learning

## INTRODUCTION

The quick advancement of innovation influences the part of an Android itself. In this day and age, nearly all exercises can be done with Android. Each time individuals can see innovative advancements from day to day and innovation can be utilized as a human device to total a few exercises as rapidly and precisely as conceivable. Nearly all individuals can utilize Android from the lower to the upper classes, particularly within the field of instruction.

Within the world of instruction, Android can be used as a medium to communicate subject matter to understudies, specifically as instructing helps or learning media. As a instructional exercise media, Android has points of interest in terms of interaction, cultivates intrigued in free learning and can be adjusted to needs. One of the address materials instructed to culinary understudies as a prerequisite for getting a bachelor's degree is to pass the Indonesian Nourishment Preparing course. The Indonesian Nourishment Preparing course is one of the viable courses in which it contains prepared materials for all Indonesian foods from Sabang to Merauke, by prioritizing the initial crude formulas of the locale itself. One of the impediments in learning Indonesian nourishment handling at this time is the assurance of a standard formula, which is to be practiced, since fundamentally understudies will be educating in territorial nourishment to be prepared and after that understudies will hunt for the formula from different reference sources. In this formula look prepare, understudies will yield a few formulas gotten from many sources so that teachers will discover it troublesome to select the correct formula where numerous of the formulas proposed have as of now experienced adjustments or changes in shape and taste, both from the fixings and the appearance of the nourishment itself.

Android gives an open stage for engineers to form their claim applications for utilize by different portable gadgets. Android has different preferences as computer program that employments an Android code base that can be dispersed straightforwardly (open source) so that clients can make modern applications in it. In this case, it is obligatory for understudies to get to electronic learning assets. Indeed in spite of the fact that it is optional, understudies who utilize it'll certainly have extra information or understanding, complementary, to be specific in case electronic learning assets are modified to complement the learning assets that understudies get in course (Lewis, 2002). The issue that will be raised in this paper is how to form an Android-based mixed media application that examines conventional Indonesian nourishment formulas. In logical composing, the creators give impediments on issues related to the application of conventional nourishment formula learning frameworks in all areas in Indonesia by taking one illustration of a formula. The reason of this inquire about is to deliver an Indonesian food handling formula application that's valuable in making a difference clients decide formulas that are in understanding with measures and benchmarks, so that they can offer assistance clients in commonsense courses.

## **LITERATURE REVIEW**

### ***Understanding Application System***

The framework may be a collection of components that are interconnected with one another to create a single unit to attain certain objectives. (Jogiyanto: 2009) The framework could be a gather of two or more components or subsystems that are interconnected that work with the same objective. (Hall, James A: 2007).

### ***Recipe***

A recipe is a set of instructions that contains the name of the dish, ingredients, seasonings, and how to make and how to serve a dish (Marwanti: 2000). The Oxford English Dictionary defines the word recipe in a modern way as a statement of the ingredients and procedures needed to make something (now), for example a dish to cook (Klenova, 2010).

### ***Android***

According to Akhmad Dharma Kasman (2016: 2), " Android is an working framework for portable phones and touch screen tablet computers based on Linux." But along with its development, Android has turned into a platform that is very fast in innovating.

### ***Indonesian Food Processing***

The Indonesian Food Processing course is a course that must be taken by each understudy in the field of culinary expertise, in this subject they learn various knowledge and skills in the culinary field. According to Deddy Surachman (2013:108) Food processing is an activity of converting raw food ingredients into high-quality ready-to-eat food, through the process of preparing, processing, and serving food.

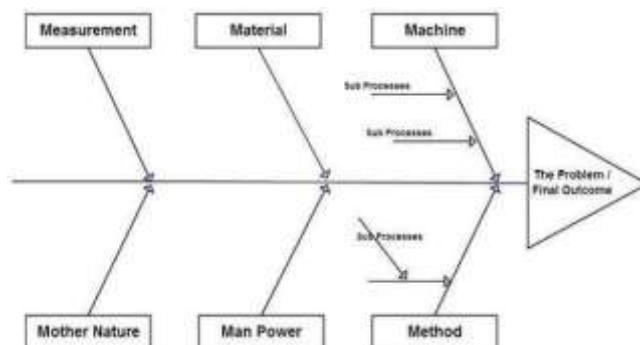
### ***Learning Media***

The term media is exceptionally well known within the field of communication, the educating and learning handle is essentially moreover a communication prepare, so the media utilized in learning is called learning media. (Sudjana and Rivai; 2013).

## RESEARCH METHODS

### *Research design*

To plan this android-based Indonesian nourishment formula application, analysts conducted a writing consider to get research-related information from different perusing sources such as Indonesian nourishment preparing diktat books, manuals for making applications utilizing programming dialects, diaries and reference books approximately nourishment formulas. Indonesia. This investigate will go through a few stages. The stages in this research can be modeled on the Fish Bone diagram. The several stages used in this study can be seen in Figure 1.



**Figure 1.** Fishbone Diagram Research Method

### *Research Location and Time*

This research will be conducted online for culinary students of PKK Unimed Faculty of Engineering. The time of the study was carried out in June 2021.

### *Method of collecting data*

The testing method that the author uses is the Blackbox Testing method where the testing phase of the application only focuses on the functionality of the application and ignores system structures such as program code and other things.

## RESULTS AND DISCUSSION

### *Research Product Design*

To plan this android-based Indonesian nourishment formula application, analysts conducted a writing ponder to get research-related information from different perusing sources such as Indonesian nourishment preparing diktat books, manuals for making applications utilizing programming dialects, diaries and reference books approximately nourishment formulas. Indonesia.

#### 1. Design

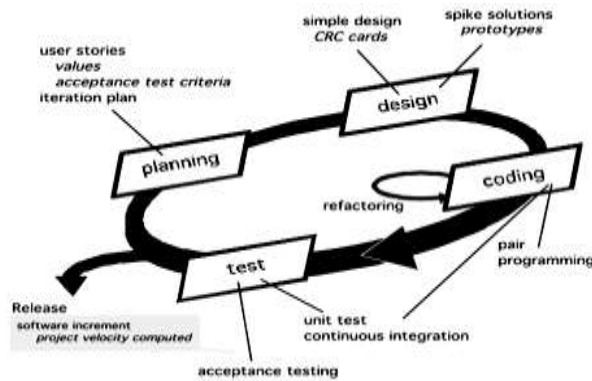
At the design stage, the system workflow design and database design are carried out based on the previously created user story.

#### 2. Coding

Coding is the arrange of making a framework based on the plan that has been made. In making this framework carried out by two individuals, to be specific a software engineer and a analyzer This arrange can be done over and over (refactoring) if there are corrections.

### 3. Testing

Testing is the arrange of framework testing, each formula that's being created will to begin with experience testing. In case it is still not in understanding with the ask, at that point the rectified portion will be made enhancements. In the event that it is in understanding with the ask at that point the framework can be actualized.



**Figure 2.** Application Program Stages

#### **Application Design**

Applications made by analysts nearly each page employments a picture foundation. In this case the point is to form the application more alluring. The already made foundation has gone through the plan prepare utilizing the Adobe Photoshop realistic preparing program. The application was made with the assistance of the WixApp program. This application in addition to making it easier to plan programs within the frame of mixed media, the ultimate comes about of the program can be compiled into an Android apk or site.

#### **Application Page View**

On the front screen of the application, you will see the application background with a menu button in the far right corner. The initial display of the application contains several menus, namely the Home menu, Recipes, About Applications.

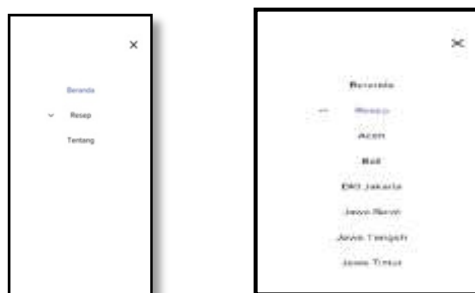
The page view of the Indonesian Traditional Food Recipe Application is as follows:

1. Initial display, This page displays the initial display when the application program is run.



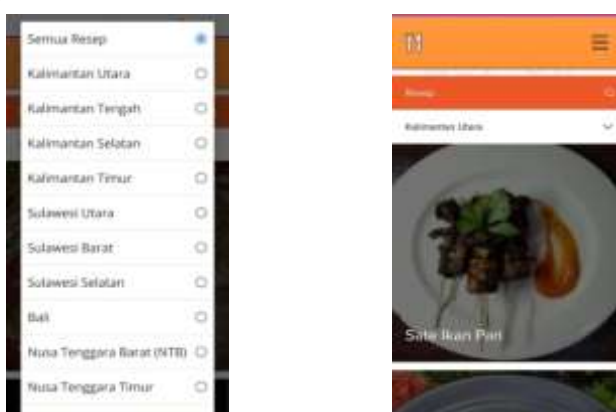
**Figure 3.** Initial display

2. Display Menu, Used to run the selected application.



**Figure 4.** Home Display

3. Recipes, Displays recipes from an area



**Figure 5.** Recipe Menu Display

4. About, Introduction of an application along with the creator of the application.



**Figure 6.** Final Appearance

### **App Trial**

The following arrange is testing the application program by the analyst. This test is planning to assess the application of nourishment formulas that have been made to run well. The testing stage of the application as it were centers on the usefulness of the application. See if the application is as expected or not.

### **Validation Test**

Validation testing is used to validate the requirements list for the implementation of the system created. This test will be tested using the input given to a function where the input will give the output. The validation test of this recipe application tests 31 functional

requirements and alternative flows. Validation tests carried out on the recipe application resulted in 100% valid.

### **Application Testing**

Application testing points to see the work of the application source code is rectify or there are still mistakes. The strategies tried in this test incorporate the survey strategy. In testing this application to see if the application is as expected. It is known that the food recipe application obtains valid results

### **CONCLUSION**

The design of this Indonesian Food Recipe application uses the WIXsite program by making application creation faster. This Android-based Indonesian Food Recipe application is the main alternative for students for practical materials. In this application, it is expected to be able to operate on various types of mobile or tablet-based Operating Systems (OS). The types of food in this Indonesian Food Recipe application can be developed by adding types of snacks, traditional cakes and regional specialties in Indonesia.

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