

Research Article

# Building an Online 'Bunda' Restaurant Based on Android App

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## Abstract:

The needs of restaurants today are not only in conventional matters, but in boosting turnover, the restaurant must be able to show its creativity through online sales, there are several steps, namely building its own food sales WEB and not only food, in the region or tourist area can sell souvenirs also in the restaurant, so it is very flexible in making online sales, can join certain platforms, for example, such as online stores that already exist today. Some tools that can be used to develop this sales application are java, kotlin, C++, Dart, Lua, JavaScript, and Python. While turnover may increase due to promotions, restaurants are more flexible and accessible, discounts, and several other smart steps that can be taken. This research focuses on designing a food sales WEB at the 'Bunda' restaurant.

**Keywords:** Android, online restaurant, turnover, online shoppers

## 1. INTRODUCTION

The rise of online stores and some skyrocketed with very high level sales such as Shopee and tokopedia, as well as other online stores that provide offers, extraordinary advertisements that attract consumers extraordinarily, the level of trust and the greater public anemo, making these online stores grow very rapidly, among others, the increasing number of outlets or stores that join the two largest platforms, if in China there is Alibaba, and America, Japan there is Amazon, then in Indonesia it is not inferior to tokopedianya, but keep in mind that android-based applications are also continuously developed with the specifications of the goods sold. This paper will specifically discuss a new store, namely the Bunda food store. Bunda's food store was developed using the Android platform. Of course, it has advantages over several other online stores, from the level of price, quality, specifications, and other advantages.

Online stores [1,2,3] must continue to provide a novelty, especially in terms of innovation, especially in terms of price. The advantages of the Bunda Food Store store include competitive or cheaper prices without reducing the quality of the goods sold. Specifically, it will be discussed in the discussion and results chapter. There is also a need to develop new marketing methods. If ditokopedia and shopee introduce the type or pattern of COD (Cash on Delivery) sales, it means that it will make it easier for buyers to be able to pay on the spot, but COD has drawbacks if the item that has been purchased does not match the buyer's expectations, it could be that the item is returned or returned, this will definitely have an impact that is not good for the seller, including losses in terms of shipping money. So that sellers or sellers can sell their goods through the largest application or platform by not activating the COD menu on their store platform. In this

Bunda Food Store online store, it immediately provides convenience with menus of goods or musical instruments that can be selected in detail at relatively cheaper prices, from the results of surveys collected by developers from the Bunda Food Store online store.

## 2. THEORY

Android is an operating system developed by Google for the purpose of building devices such as smartwatches, tablets and other devices, built using the linux kernel and customized with all needs such as email, navigation and email management, including in this article, specifically showing images in the form of musical instruments that can be selected quickly and instantly by customers, the price system is added with the calculation of taxes and shipping costs, making it transparent. android is built using java, kotlin, and C++ languages.

Java is a commonly used programming language for developing Android applications, including for creating e-commerce programs. Java's performance in creating Android e-commerce programs can be considered excellent for several reasons: java has fast performance: Java is known to have fast and efficient performance, mainly because of the JVM (Java Virtual Machine) used to run Java code on Android devices. This is important in creating e-commerce applications [4,5,6,7,8,9], as the application must be able to handle many requests and transactions quickly and without lag. java is a multiplatform programming language: Java is also a multiplatform programming language, meaning that code written in Java can be run on various platforms, including Android. This allows developers to create e-commerce applications that can be accessed by users from different devices and operating systems.

Java is easy to learn: Java is a relatively easy programming language to learn, especially for beginners who want to get started with Android app development. There are many online resources and tutorials available for learning Java, and a large number of Java libraries and frameworks that can be used to accelerate e-commerce app development. And Java has good security: Java has good security because of the security features integrated in the language. These security features are especially important in e-commerce applications, where users will be conducting online transactions and submitting sensitive information such as credit card information and other personal data.

Moreover, Java program for class creation on price list in e-commerce online sales:

```
public class Product {
    private String name;
    private String description;
    private double price;
    private int stock;

    // Constructor
    public Product(String name, String description, double price,
int stock) {
        this.name = name;
        this.description = description;
        this.price = price;
        this.stock = stock;
    }
}
```

```
// Getter methods
public String getName() {
    return name;
}

public String getDescription() {
    return description;
}

public double getPrice() {
    return price;
}

public int getStock() {
    return stock;
}
}
```

Furthermore, A java program to calculate shopping total or cart:

```
import java.util.ArrayList;

public class ShoppingCart {
    private ArrayList<Product> items;

    // Constructor
    public ShoppingCart() {
        items = new ArrayList<Product>();
    }

    // Add a product to the cart
    public void addProduct(Product product) {
        items.add(product);
    }

    // Remove a product from the cart
    public void removeProduct(Product product) {
        items.remove(product);
    }

    // Calculate the total price of all products in the cart
    public double getTotalPrice() {
```

```
        double totalPrice = 0;
        for (Product item : items) {
            totalPrice += item.getPrice();
        }
        return totalPrice;
    }
}
```

Kotlin is a relatively new and increasingly popular programming language for Android application development, including e-commerce programming. Kotlin has several advantages that can affect the performance and quality of Android e-commerce applications, including:

- More concise code:** Kotlin allows developers to write more concise and readable code compared to Java. This can speed up development time and reduce the number of errors that occur during development.
- Null safety:** Kotlin features null safety, which allows developers to avoid bugs associated with null values. This can improve the stability and security of e-commerce applications.
- Interoperability with Java:** Kotlin is designed for interoperability with Java, which allows developers to use existing Java libraries, and vice versa. This allows developers to utilize the vast Java ecosystem in the development of e-commerce applications.
- Support from Google:** Kotlin has been officially supported by Google as a programming language for Android app development, which means that developers can expect good support from Google in the development of e-commerce apps that use Kotlin.

In addition, here are some reasons why building an online store for food includes:

**Wider market reach:** The internet has a very wide reach, so you can reach customers in different regions and countries

1. **24-hour operations:** Online stores can operate 24 hours, allowing you to take orders from different regions and sell products non-stop
2. **Lower operational costs:** Creating an online store costs less compared to opening an offline store. You don't need to rent space and manage physical inventory, and you can save time and labor
3. **Easy to develop and manage:** Advanced technology makes it easy to build and manage an online store. You can use existing e-commerce platforms and modify them according to your needs
4. **Enhance brand reputation:** By having an online store, you can enhance your brand reputation and reach more customers by offering the products you sell.
5. **Easy to find new customers:** By having an online store, you can find new customers more efficiently. Customers can search for your products through the internet and buy easily
6. **Ease in the sales process:** An online store makes the selling process easier, because you and your customers can communicate directly through chat or email, and you can deliver products directly to your customers' homes.

7. Manage inventory and supplies more efficiently: By having an online store, you can manage your supplies and inventory more efficiently using your existing database and inventory management system.

### 3. METHOD

The first step is how to create connections between tables, connections between pages, and connections between databases, this is very important to display all the important components in Bunda's food shop.

App Name

Bunda

Primary Color  
#212121

Secondary Color  
#c068fa

Fig.1 Determination of the main color of the website

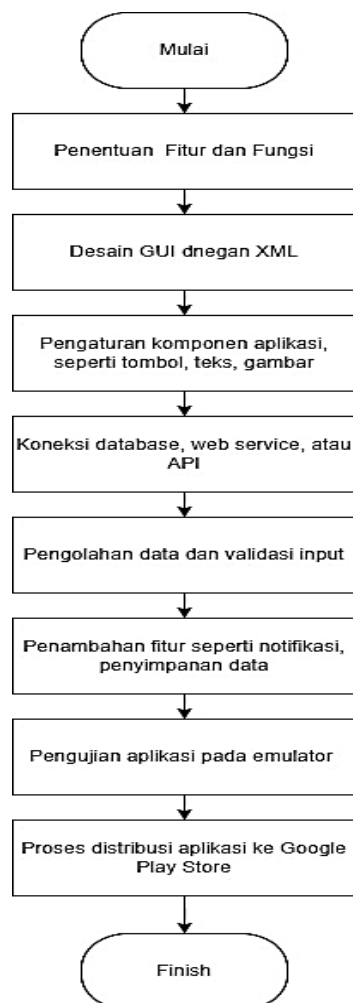


Fig.2 Bunda Restaurant App Flowchart

#### 4. RESULT AND DISCUSSION

In this discussion, we will go directly to the design of this Bunda food shop, step by step so that it can be read by readers properly and precisely from scratch.



Fig.3 Design of Bunda Restaurant



Fig.4 'Bunda' App Interface and Connection Interface

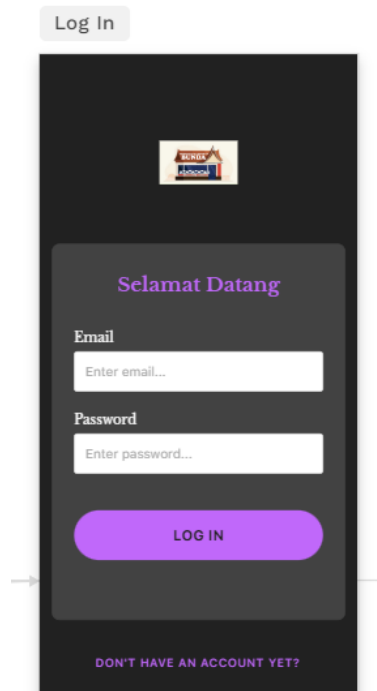


Fig.4 Login menu display 'Bunda' App

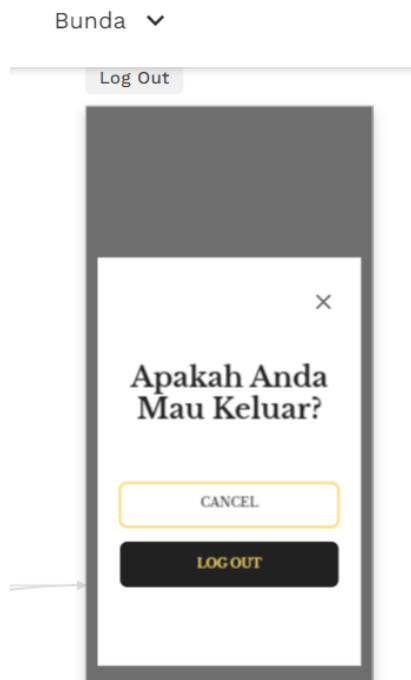


Fig.5 Logout menu display 'Bunda' App

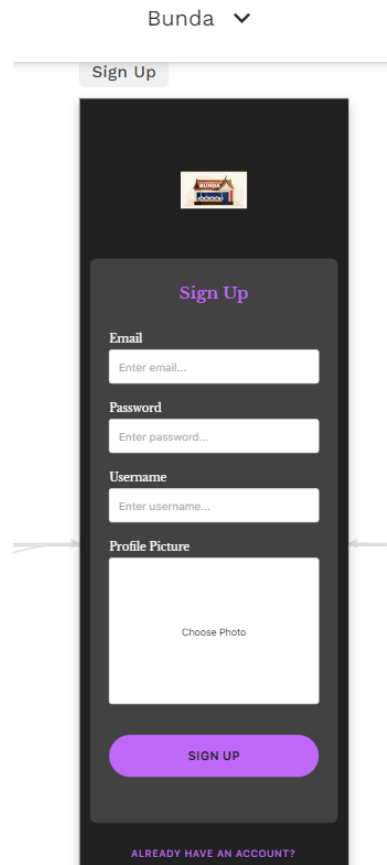


Fig.6 Menu Sign up display 'Bunda' App

## 5. CONCLUSION

The *Bunda* food application provides many benefits, namely increasing store turnover or income significantly in addition to other beneficial factors including flexible operating hours for 24 hours, cheaper operating costs, easy to develop and manage, improve brand reputation, easy to find new customers, and ease of sales process.

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## AUTHOR CONTRIBUTIONS

All Author is responsible for building Conceptualization, Methodology, analysis, investigation, data curation, writing—original draft preparation, writing—review and editing, visualization, supervision of project administration, funding acquisition, and have read and agreed to the published version of the manuscript.

## CONFLICTS OF INTEREST

The authors declare no conflict of interest.



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