

Private Project Explanation



What to Learn Today?



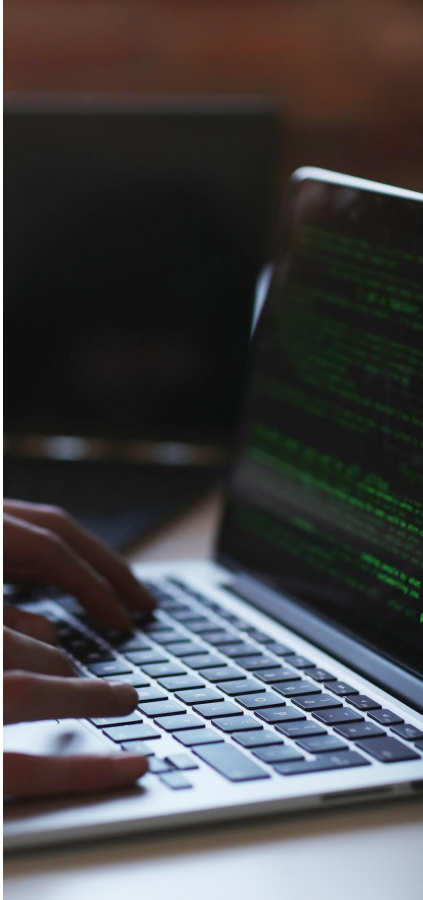
API Implementation



1. Net/Http Part 2
2. Private Project Explanation

GORM

1. Introduction to GORM
2. Database Connection and Migration



Tokopaedi

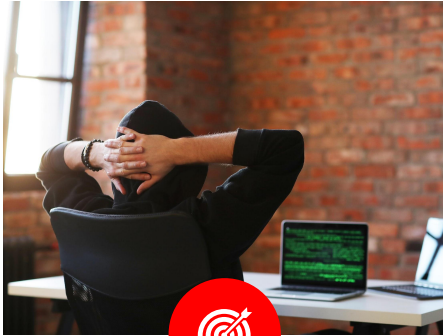


Tokopaedi is a shop that sells all office needs that has been established since 2020. In 2021, it will be a year that will change the business pattern of Tokopaedi. From previously relying on in-store sales, where customers come to the store to shop, they have turned into customers who shop from home. This strategy was carried out because it was affected by the PPKM Darurat set by the Government of Indonesia. Thus, in-store sales are no longer possible. In order for Tokopaedi to continue to serve its customers, steps to shop online must be taken. Tokopaedi implements a shopping system through WhatsApp, where customers can send letters to Tokopaedi's WhatsApp number to shop.

This strategy turned out to be very successful, the level of sales from Tokopaedi remained stable and even increased because people could shop online. Related to this, the owner of Tokopaedi thought to create an e-commerce website for Tokopaedi.

As a back-end developer, you are paid by the owner of Tokopaedi to create the back-end system of this e-commerce website.

Tokopaedi Background And Problems



PROBLEM 1

Because of PPKM Darurat, Tokopaedi choose shopping by WhatsApp method. This strategy is carried out by means that customers can WhatsApp the Tokopaedi's phone number to shop.



PROBLEM 2

After running for several months selling online by WhatsApp, Tokopaedi's sales increased rapidly so that buying and selling transactions became very frequent. In this case, the level of employee workload becomes higher as the level of sales increases.



PROBLEM 3

Currently, the Tokopaedi stock system is still in manual recording by employees by recording it in the product stock record. Tokopaedi has 2 product stock records, one is a display stock record and the other is a warehouse stock record. Then, the transaction still rely on the employees, because employees should standby and reply incoming WhatsApp message from customer.

Tokopaedi Main Problems

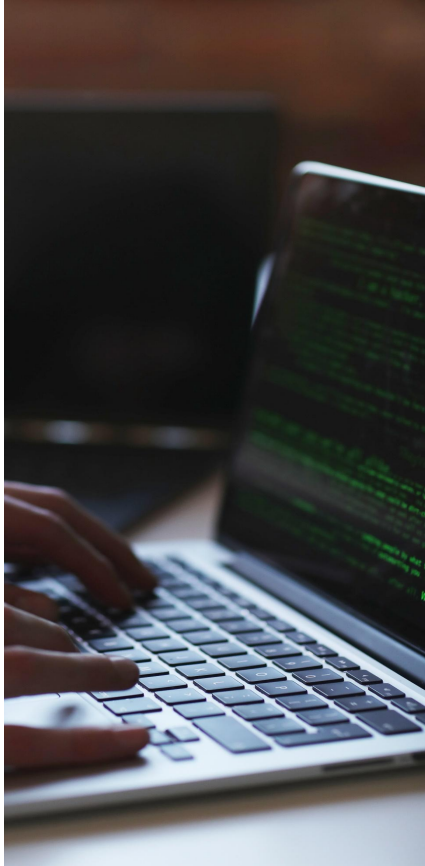


Online System

The impact of increasing online sales, it is no longer possible to use a manual system to record product stock and the shopping method.

Warehouse and Display Stock

Product stock on display and warehouse is recorded separately. This requires separate management between warehouse stock and display. If the display stock runs out, it must take the stock that is in the warehouse.



TOKOPAEDI API WORKFLOW REQUIREMENT



Shopping Method

Customer can see the displayed item that available. In order to bought the item, customer should register first to the Tokopaedi website.

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Cart Management

Customers can buy many types of goods with varying amounts as well. So, it is hoped that the shopping cart can be flexible for users.

Transaction History

Every customer could see their transaction history. This includes the detail of which product they're buying, amount of them, and the total price that customer pay.

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Report

You are assigned to also make reports of transactions that occur in Tokopaedi. this report can be filtered by date, month, and year of customer transactions.

Stock Management

In order for the goods to be purchased by the customer, the admin must first enter the stock from the warehouse into the display. The stock in the warehouse does not affect the stock on display, because if the warehouse stock is taken for display, the warehouse stock will automatically decrease, and vice versa.

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Required API Endpoint



1 Authentication

This route handle every authentication request. User can register, login, and logout.

2 Warehouse Management

This route is used to get, insert, update, and delete product from warehouse. This route also expected to receive request to show product stock by SKU.

3 Display Management

This route is used to get, insert, update, and delete product from display. This route also expected to receive request to show product stock by SKU.

4 Cart Management

This route will be frequently accessed by the Tokopaedi customers. Customer can get, add, delete, and checkout cart item.

5 Transaction

This route is still in development by the owner of Tokopaedi. For now, it should only handle request from customer for transaction history.

6 Report

This route handle every request about all transactions that occur in Tokopaedi website. It can be filtered by specific day, month, and year.

Authentication Endpoint



Method	Endpoint	Class Handler	Access Permission	Parameters
POST	/register	Login	Public	username, password, first_name, last_name, email, address, role
POST	/login	Register	User, Admin	username, password
POST	/logout	Logout	User, Admin	

Warehouse Management Endpoint



Method	Endpoint	Class Handler	Access Permission	Parameters
GET	/	GetStock	Admin	
GET	/ {sku}	GetStockBySku	Admin	
POST	/insert	InsertProduct	Admin	sku, name, price, qty
PUT	/restock	Restock	Admin	sku, qty
PUT	/update	UpdateProduct	Admin	sku, name, price, qty
DELETE	/delete/ {sku}	DeleteStock	Admin	

Display Management Endpoint



Method	Endpoint	Class Handler	Access Permission	Parameters
GET	/	GetStock	Public	
GET	/ {sku}	GetStockBySku	Public	
POST	/insert	InsertProduct	Admin	sku, price, qty
PUT	/restock	Restock	Admin	sku, qty
PUT	/update	UpdateProduct	Admin	sku, name, price, qty
DELETE	/delete/ {sku}	DeleteStock	Admin	

Cart Management Endpoint



Method	Endpoint	Class Handler	Access Permission	Parameters
GET	/	GetCart	User, Admin	
POST	/add	AddToCart	User, Admin	sku, qty
DELETE	/delete/{sku}	DeleteProductFromCart	User, Admin	
POST	/checkout	CheckoutCart	User, Admin	

Transaction Endpoint



Method	Endpoint	Class Handler	Access Permission	Parameters
GET	/	GetTransactionHistory	User, Admin	

Report Endpoint



Method	Endpoint	Class Handler	Access Permission	Parameters
GET	/	GetAllReport	Admin	filter, day, month, year