

PANDUAN INSTALASI APOTEK POS

Development Environment Setup

Windows & MacOS

JagoFlutter Academy - AFC6
Apotek POS System Fullstack
Flutter 3.38 • Laravel 12 • Filament 4

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1. PERSYARATAN SISTEM

Minimum Requirements:

Komponen	Versi
PHP	8.3 atau lebih baru
Composer	2.x
MySQL/MariaDB	8.0+ / 10.4+
Node.js	18.x atau lebih baru
NPM	9.x atau lebih baru
Git	2.x

Software yang Dibutuhkan:

Windows	MacOS
Laragon	Herd Laravel
TablePlus	TablePlus
VS Code	VS Code
Git Bash	Terminal

2. INSTALASI DI WINDOWS

Langkah 1: Install Laragon

Laragon adalah development environment yang mudah digunakan untuk Windows.

- bullet Download Laragon dari: <https://github.com/leokhoa/laragon/releases>
- bullet Jalankan file installer yang sudah didownload
- bullet Pilih lokasi instalasi (default: C:\laragon)
- bullet Klik 'Next' dan tunggu proses instalasi selesai
- bullet Buka Laragon dan klik 'Start All'

Langkah 2: Setup Environment Variables (PHP)

- bullet Tekan Windows + R, ketik 'sysdm.cpl'
- bullet Klik tab 'Advanced' → 'Environment Variables'
- bullet Di 'System variables', cari dan edit 'Path'
- bullet Tambahkan: C:\laragon\bin\php\php-8.3.x-nts-Win32-vs16-x64

```
# Verifikasi instalasi
php -v
composer -V
```

Langkah 3: Install Composer

- bullet Download dari: <https://getcomposer.org/download/>
- bullet Jalankan Composer-Setup.exe
- bullet Pilih PHP executable dari Laragon
- bullet Ikuti wizard instalasi

Langkah 4: Install TablePlus

Download dari: <https://tableplus.com/windows> dan jalankan installer.

Langkah 5: Install VS Code

Download dari: <https://code.visualstudio.com/> dan install extensions berikut:

- bullet Laravel Extension Pack
- bullet PHP Intelephense
- bullet Laravel Blade Snippets
- bullet DotENV

Langkah 6: Install Git

Download dari: <https://git-scm.com/download/win>. Pastikan 'Git Bash' terinstall.

3. INSTALASI DI MACOS

Langkah 1: Install Herd Laravel

Herd adalah development environment modern untuk Laravel di MacOS.

- bullet Download dari: <https://herd.laravel.com/>
- bullet Buka file .dmg yang sudah didownload
- bullet Drag Herd ke folder Applications
- bullet Buka Herd - akan otomatis install PHP, Composer, dan tools

```
# Verifikasi instalasi
php -v
composer -V
```

Langkah 2: Install MariaDB

Opsi A: Menggunakan Homebrew (Recommended)

```
# Install Homebrew (jika belum ada)
/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"

# Install MariaDB
brew install mariadb

# Start MariaDB
brew services start mariadb

# Secure Installation
sudo mysql_secure_installation
```

Langkah 3: Install Node.js

```
brew install node

# Verifikasi
node -v
npm -v
```

4. KONFIGURASI DATABASE

Buat Koneksi di TablePlus:

- bullet Buka TablePlus
- bullet Klik '+' atau 'Create new connection'
- bullet Pilih MySQL/MariaDB
- bullet Isi detail koneksi:

Field	Value
Name	Apotek POS
Host	127.0.0.1
Port	3306
User	root
Password	(password yang sudah diset)

Buat Database:

```
CREATE DATABASE apotek_pos
CHARACTER SET utf8mb4
COLLATE utf8mb4_unicode_ci;
```

5. SETUP PROJECT LARAVEL

Langkah 1: Clone Repository

```
# Windows (Git Bash) / MacOS (Terminal)
cd ~/development
git clone https://github.com/[username]/laravel-apotik-be.git
cd laravel-apotik-be
```

Langkah 2: Install Dependencies

```
# Install PHP dependencies
composer install

# Install Node.js dependencies
npm install
```

Langkah 3: Setup Environment

```
# Copy file .env
cp .env.example .env

# Generate Application Key
php artisan key:generate
```

Konfigurasi .env:

```
APP_NAME="Apotek POS"
APP_ENV=local
APP_DEBUG=true
APP_URL=http://localhost:8000

DB_CONNECTION=mysql
DB_HOST=127.0.0.1
DB_PORT=3306
DB_DATABASE=apotek_pos
DB_USERNAME=root
DB_PASSWORD=password_anda
```

Langkah 4: Migrasi Database

```
# Jalankan migrasi  
php artisan migrate  
  
# Jalankan seeder (data awal)  
php artisan db:seed
```

Langkah 5: Setup Storage Link & Build Assets

```
php artisan storage:link  
npm run build
```

6. MENJALANKAN APLIKASI

Development Mode:

```
# Jalankan Laravel Server
php artisan serve

# Jalankan Vite (untuk hot reload CSS/JS) - terminal terpisah
npm run dev

# Atau jalankan sekaligus (jika tersedia)
composer run dev
```

Akses Aplikasi:

URL	Keterangan
http://localhost:8000	Landing Page
http://localhost:8000/admin	Filament Admin Panel
http://localhost:8000/pos	POS (Point of Sale)

Default Login (Setelah Seeder):

Role	Email	Password
Admin Panel	admin@apotek.com	password
POS	kasir@apotek.com	password

7. TROUBLESHOOTING

Error: Vite manifest tidak ditemukan

TIP: Solusi: Jalankan 'npm run build' untuk build assets.

Error: SQLSTATE[HY000] [2002] Connection refused

- bullet Pastikan MySQL/MariaDB sudah running
- bullet Periksa konfigurasi database di .env
- bullet Windows: Buka Laragon dan klik 'Start All'
- bullet MacOS: brew services start mariadb

Error: Class not found

```
composer dump-autoload
php artisan cache:clear
php artisan config:clear
```

Error: Permission denied (MacOS)

```
sudo chmod -R 775 storage bootstrap/cache
sudo chown -R $USER:staff storage bootstrap/cache
```

Port 8000 Already in Use

```
# Gunakan port lain
php artisan serve --port=8001

# Atau hentikan proses yang menggunakan port 8000
# Windows:
netstat -ano | findstr :8000
taskkill /PID [PID] /F

# MacOS:
lsof -i :8000
kill -9 [PID]
```

8. TIPS DEVELOPMENT

Gunakan Tinker untuk Testing:

```
php artisan tinker

# Contoh query
App\Models\Product::count();
App\Models\User::first();
```

Fresh Database:

```
php artisan migrate:fresh --seed
```

Clear All Cache:

```
php artisan optimize:clear
```

Generate IDE Helper (Optional):

```
composer require --dev barryvdh/laravel-ide-helper
php artisan ide-helper:generate
php artisan ide-helper:models
```