### AbuByte POS - Windows Setup Guide

### Production-Ready Windows Desktop Point of Sale System

## PAGE 1 — QUICK START GUIDE

#### **System Requirements**

• **OS:** Windows 10 or higher (64-bit)

• Flutter: Version 3.13.0+ (for development)

• Firebase Account: Full project included

• RAM: 4GB minimum, 8GB recommended

• Storage: 500MB free space

#### **15-Minute Setup Process**

#### **Step 1: Receive Assets**

You'll receive:

- Complete Flutter source code
- Firebase project credentials
- Admin user creation script
- Pre-configured database

## **Step 2: Environment Setup**

# Extract the AbuByte POS package

cd C:\AbuByte POS

# Install Flutter for Windows (if not already installed)

# Download link: https://flutter.dev

## **Step 3: Firebase Project Access**

- Complete Firebase project ownership is transferred
- No manual configuration needed
- Immediate access to live database and authentication

## **Step 4: Create Admin User**

cd firebase-admin-script

npm install

node createAdminUser.js

## **Interactive Prompts:**

- Owner email: admin@yourbusiness.com
- Temporary password: [your-password]
- Owner display name: [Your Name]

## **Step 5: Launch Application**

# Run in development mode

flutter run -d windows

# Or build executable

flutter build windows

## PAGE 2 — ARCHITECTURE & FIREBASE SETUP

## **Complete Firebase Project Included**

Features provided:

- Firebase Authentication (email/password users)
- Firestore Database (business data)
- Firebase Storage (product images)
- Pre-configured Security Rules
- Existing Data Structure

## **Firebase Project Structure**

your-firebase-project/

— Authentication/

Users (admin/cashier roles)

Firestore/
businesses/{businessId}
users/{userId}
products/{productId}
sales/{saleId}
categories/{categoryId}
settings/{businessId}
L—Storage/
product-images/{imageId}

## **Admin User Creation Script**

#### **Location:**

AbuByte\_POS/

\_\_\_\_ firebase-admin-script/

\_\_\_\_ createAdminUser.js

\_\_\_\_ package.json

\_\_\_\_ serviceAccountKey.json

# **Functionality:**

- 1. Creates Firebase Auth user via REST API
- 2. Assigns 'admin' role in Firestore
- 3. Creates business document for admin
- 4. Sets up full user profile

## **Running the Script:**

cd firebase-admin-script

npm install

node createAdminUser.js

Follow interactive prompts for email, password, display name — script handles the rest automatically.

## **Application Architecture (Windows-Specific)**

#### **Features:**

- Native Windows window management
- System tray integration
- Windows file system access
- Receipt printing support
- Desktop-optimized keyboard shortcuts

#### **Data Flow:**

Windows UI  $\rightarrow$  Flutter Providers  $\rightarrow$  Hive Local DB  $\rightarrow$  Sync Queue  $\rightarrow$  Firebase  $\downarrow$ Instant Offline Operation  $\leftarrow$ 

#### PAGE 3 — DEPLOYMENT & MAINTENANCE

## **Production Deployment**

#### **Build Windows Executable:**

flutter build windows --release

# Output: build/windows/runner/Release/AbuByte POS.exe

## **Distribution Options:**

- 1. Direct EXE deployment
- 2. Network deployment across multiple stores
- 3. Windows installer package (optional)

## **Firebase Management**

## **Post-Purchase Steps:**

- 1. Transfer Firebase project to your Google account
- 2. Update billing information

- 3. Review pre-configured security rules
- 4. Monitor usage via Firebase console

## **Cost Management:**

- Firestore:  $\sim$ \$0.06/100K reads ( $\sim$ \$10–50/month typical)
- Authentication: Free up to 50K monthly users
- Storage: ~\$0.026/GB/month

## **Multi-Store Setup**

# Run admin script for each store

node createAdminUser.js

- $\# \rightarrow$  Enter store-specific details
  - Each store has isolated data and users
  - No cross-business data access

## **Backup & Maintenance**

#### Data Backup:

- Export Firestore via console
- Or CSV export from Reports section

## **Regular Maintenance:**

- 1. Monitor sync status
- 2. Clear completed sync tasks
- 3. Update product images
- 4. Review sales reports

## **Troubleshooting**

**Issue Solution** 

Sync Not Working Check internet, verify Firebase access, review security rules

Admin Script Fails Ensure Node.js installed, serviceAccountKey.json present, verify API key

**Build Errors**Check Flutter desktop setup, Visual Studio build tools, Windows 10 SDK installed

### **Support Resources**

- Full source code documentation
- **2** 30-day transition support
- Firebase handover guidance
- Windows deployment instructions

## **Next Steps After Purchase**

- 1. Receive Firebase transfer
- 2. **V** Build Windows executable
- 3. Create admin users
- 4. Load product catalog
- 5. Train staff on POS interface
- 6. Deploy to terminals
- 7. Go live with confidence!

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Ready for Immediate Deployment 8