

Antonio's Pizza Pub Inventory System

A Flutter-based inventory management system

Features:

- Real-time inventory tracking
- Low stock alerts
- Remote access capabilities
- Cross-platform support

Version: 1.0.0

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Prerequisites

Before you begin, ensure you have the following installed:

- **Flutter SDK** (version 3.9.2 or higher)
 - Installation: docs.flutter.dev/get-started/install
 - Verify: `flutter --version`
- **PocketBase** (latest version)
 - Download: pocketbase.io/docs/
- **Dart SDK** (included with Flutter)
- **An IDE** (VS Code, Android Studio, or IntelliJ IDEA)

Installing PocketBase

Step 1: Download

- Visit pocketbase.io/docs/
- Download for your OS:
 - Windows: `pocketbase_x.x.x_windows_amd64.zip`
 - macOS: `pocketbase_x.x.x_darwin_amd64.zip` or `darwin_arm64.zip`
 - Linux: `pocketbase_x.x.x_linux_amd64.zip`

Step 2: Extract

```
# Windows (PowerShell)
Expand-Archive pocketbase_x.x.x_windows_amd64.zip -DestinationPath ./pocketbase

# macOS/Linux
unzip pocketbase_x.x.x_darwin_amd64.zip -d ./pocketbase
```

Running PocketBase

Start the server:

```
# Windows
.\pocketbase\pocketbase.exe serve

# macOS/Linux
./pocketbase/pocketbase serve
```

Access Admin UI:

- Opens at `http://127.0.0.1:8090`
- First run: Create admin account at `http://127.0.0.1:8090/_/`

Important: Keep PocketBase running while using the app!

Configuring PocketBase Database (1/2)

Step 1: Create Collection

- Open `http://127.0.0.1:8090/_/` in browser
- Click "Collections" → "+" button
- Name: `inventory` (case-sensitive)

Step 2: Add Fields

Field Name	Type	Options
<code>item_name</code>	Text	Required: Yes
<code>quantity</code>	Number	Required: Yes, Integer, Min: 0
<code>unit</code>	Text	Required: Yes

Configuring PocketBase Database (2/2)

Step 3: Set Permissions

- Go to "API rules" tab
- Set all rules to: `@request.auth.id != ""`
 - List/Search rule
 - View rule
 - Create rule
 - Update rule
 - Delete rule

Step 4: Enable Anonymous Access (Optional - for testing)

- Settings → API Settings
- Enable "Allow anonymous access to collections"

Running the Application - Setup

1. Navigate to project:

```
cd inventory_app
```

2. Install dependencies:

```
flutter pub get
```

3. Ensure PocketBase is running!

The app connects to `http://127.0.0.1:8090`

Running the Application - Commands

Desktop:

```
flutter run -d windows    # Windows  
flutter run -d macos      # macOS  
flutter run -d linux      # Linux
```

Mobile:

```
flutter devices           # List devices  
flutter run -d <device-id>
```

Web:

```
flutter run -d chrome
```

Building for Production

Windows:

```
flutter build windows  
# Output: build/windows/x64/runner/Release/
```

macOS:

```
flutter build macos
```

Android:

```
flutter build apk
```

iOS:

```
flutter build ios
```

Home Page

The main entry point displays:

- **Welcome Message:** "Welcome to the Inventory System!"
- **Navigation Buttons:**
 - Check Stock
 - Update Stock
 - Website (opens antonios-pizzapub.com)
- **Low Stock Alert:** Red warning card if items < 3
- **Low Stock List:** Up to 5 items shown

Refresh: Pull down to refresh data

Checking Stock

Navigate: Tap "Check Stock" button

Features:

- **Search Bar:** Filter items by name (case-insensitive, real-time)
- **Sort Menu** (≡ icon):
 - Name A-Z / Z-A
 - Quantity Low→High / High→Low
 - Low Stock First

Update Quantities:

- Use "-" button to decrease by 1
- Use "+" button to increase by 1
- Cannot go below 0

Adding Stock Items

Navigate: Tap "Update Stock" button

Fill in the Form:

1. **Item Name:** e.g., "Mozzarella Cheese"
2. **Quantity:** e.g., "10"
3. **Unit:** e.g., "lbs", "gal", "boxes"


Save:

- Tap "Add Stock" button
- Green success message appears
- Form clears automatically
- Item appears in list below

Updating Stock Items

Navigate: Tap "Update Stock" button

Edit an Item:

1. Find item in the list
2. Tap **edit icon** ()
3. Form auto-fills with current data
4. Button changes to "Update Stock"


Modify & Save:

- Change any fields
- Tap "Update Stock"
- Green success message confirms update

Removing Stock Items

Navigate: Tap "Update Stock" button

Delete an Item:

1. Find item in the list
2. Tap **delete icon** ()
3. Item immediately removed
4. List auto-refreshes

 **Warning:** Deletion is permanent!

Quick Updates:

- Use + / - buttons on Check Stock page
- Changes save immediately

Features

- ✓ Real-time Inventory Management
- ✓ Low Stock Alerts (threshold: 3 units)
- ✓ Search Functionality
- ✓ Multiple Sort Options
- ✓ User-Friendly Interface
- ✓ Remote Access
- ✓ Cross-Platform (Windows, macOS, Linux, Android, iOS, Web)

Troubleshooting - Connection Issues

Problem: "Failed to load stock" error

Solutions:

1. Verify PocketBase is running: `curl http://127.0.0.1:8090/api/health`
2. Check port 8090 is correct
3. Check firewall settings
4. Verify `inventory` collection exists
5. Access admin UI at `http://127.0.0.1:8090/_/`

Troubleshooting - Common Issues

Cannot Add/Update Items:

- Check collection permissions
- Verify all fields filled (Name, Quantity, Unit)
- Ensure quantity is valid integer
- Check PocketBase logs

Low Stock Alert Not Showing:

- Pull down to refresh
- Verify quantity < 3
- Check unit is set correctly

App Won't Start:

Troubleshooting - Advanced

Data Not Syncing:

- Pull down to refresh
- Ensure same PocketBase instance
- Check network connectivity
- Use device IP for cross-machine access

Port Already in Use:

```
# Windows
netstat -ano | findstr :8090
taskkill /PID <PID> /F

# macOS/Linux
lsof -ti:8090 | xargs kill -9
```

Additional Resources

- Flutter Documentation:
docs.flutter.dev
- PocketBase Documentation:
pocketbase.io/docs
- Dart Language Tour:
dart.dev/guides/language/language-tour

Support

For issues or questions:

1. Check the Troubleshooting section
2. Review PocketBase logs
3. Check Flutter console output

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Thank you!