

Project Summary

We're building a **web-based inventory management platform** that replaces the current Google Form + Google Sheets system. The new platform will let users submit collected item data, automatically update inventories, and allow admin users to review totals, manage withdrawals, and oversee all operations — all in one seamless interface.

The system should support both **data-entry users** (who log new item collections) and **admin users** (who monitor totals, view reports, and manage items).

AI automation will replace Google Sheets formulas and Apps Script triggers, providing a more robust, scalable, and easy-to-use platform.

Product Requirements Document (PRD)

1. Goal

Create a centralized, automated platform that:

- Streamlines item collection entry and tracking.
 - Automatically updates daily and master inventory records.
 - Supports role-based access (entry users vs. admins).
 - Allows for easy addition of new items without breaking formulas or workflows.
 - Provides a clear UI for data input, inventory visualization, and withdrawals.
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2. Core Features

Data Entry (Collection Interface)

- Simple, form-like interface for users to log collected items.
- Each item input includes: **item name** and **quantity collected**.
- Ability to add **new items** on the fly — system automatically creates the new field in the database and adds it to future entry forms.
- Automatically timestamps each entry and associates it with a user.

Inventory Management

- **Daily Inventory Table:**
 - Tracks quantities collected per item, per day.
- **Master Inventory Table:**

- Aggregates total quantities for each item.
 - Automatically sums data from the daily entries.
- When a new item is added, it automatically appears in both daily and master tables.

User Roles

- **Data Entry Users:** Can submit item collection data.
- **Admin Users:**
 - View dashboards of all collected data.
 - Withdraw or adjust quantities.
 - Approve or delete items.
 - Export reports (CSV/PDF).



Analytics / Dashboard

- Overview of total inventory by item.
 - Daily summaries and trends.
 - Visual graphs of collection over time.
 - Color indicators for low-stock or high-collection items.
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3. Automation and Logic

- Automatic syncing between **Daily Inventory** and **Master Inventory**.
- Newly added items propagate through the entire data model without breaking existing formulas.
- Scheduled background jobs handle daily resets, summary generation, and notifications.
- Optional AI validation to catch entry errors or duplicates.

5. Key Workflows

A. Data Entry Workflow

1. User logs in.
2. Opens “New Collection” form.
3. Enters item(s) and quantity(ies).
4. If item is new → system creates it globally.
5. Submission updates both **Daily Inventory** and **Master Inventory**.

B. Admin Workflow

1. Admin logs in.
2. Views dashboard of all inventory totals.
3. Can search, filter, or export reports.
4. Can edit or delete items and adjust quantities.

7. Success Criteria

- ☒ Fully replaces Google Forms and Sheets system.
- Can transfer current google sheet data to integrate with the new platform
- ☒ New items automatically integrate without breaking formulas.
- ☒ Admin dashboard accurately reflects total and daily counts.
- ☒ Form submissions are simple and reliable for non-technical users.
- ☒ Platform supports multiple users with different permissions.