

## HamiSkills Internship – Python Development Track

### Week 3 Task: GUI-Based Inventory & Order Tracker for Hami MiniMarket

#### Project Brief

Hami MiniMarket wants a simple desktop app to manage inventory and customer orders. Your task is to build a **GUI-based Python application** using **Tkinter**, where staff can view products, process orders, and generate daily sales reports all backed by CSV files.

#### Deliverables

##### 1. GUI Features (Tkinter)

- Product list view (name, price, stock)
- Input fields for selecting product and quantity
- “Add to Cart” button
- Cart display with itemized list and total
- “Confirm Order” button that:
  - Updates inventory
  - Saves order to `sales\_YYYY-MM-DD.csv`
  - Shows confirmation popup

##### 2. Class-Based Architecture

- `Product`: holds product data
- `Inventory`: loads from `inventory.csv`, updates stock
- `Order`: manages cart and totals
- `SalesReport`: saves order and generates summary

##### 3. Advanced Features

- Validate stock before adding to cart
- Show low-stock alerts (e.g., quantity < 5)
- Save order with timestamp and customer name

#### 4. Optional Bonus

- Add a **restock button** to load new stock from `restock.csv`
- Add a **search bar** to filter products by name
- Add a **dashboard tab** showing total sales and most sold item

#### Submission Guidelines

- Upload your project to **GitHub** with:
- Clear folder structure (`gui.py`, `inventory.py`, `order.py`, `report.py`)
- Sample CSV files (`inventory.csv`, `sales\_YYYY-MM-DD.csv`)
- `README.md` explaining:
  - How to run the app
  - How the GUI and classes interact
  - How to test the system
  - Submit your GitHub repo link on [hamiskills.dev](https://hamiskills.dev) under Week 3 tasks

#### Professional Practice Requirement

- Post a short **LinkedIn update** with:
  - Screenshot or screen recording of your GUI in action
  - Caption explaining your use of Tkinter and class-based design
- Submit the LinkedIn post link in the system

#### Evaluation Criteria

- Functionality and usability of the GUI
- Code modularity and readability
- Correctness of inventory and order logic
- Professional presentation (GitHub repo + LinkedIn post)

