

Buy More Ops System

Overview

Buy More Ops is a government-operated system designed to manage both the day-to-day operations of the Buy More retail store and the covert spy base hidden beneath it. This system streamlines all agency-related processes involved in running the **Burbank Operation**—from employee schedules and retail inventory to secret agent missions and high-tech gadgets.

System Components

Buy More Ops

The Buy More portion of the system handles everything related to the store's operations:

- Track **employees**, their contact details, roles, wages, and schedules
- Manage **inventory** across multiple departments
- Organize **sales and shift data**
- Handle department assignments and staffing

Key Rules:

- The store has **multiple departments** (e.g., Home Appliances, Nerd Herd, Music & Gaming)
- Each department manages its **own inventory**
- **Employees can work in multiple departments**
- **Each employee** may have **multiple shifts per week**
- Each store has exactly **one Manager** and **one Assistant Manager**

Spy Ops

The Spy Ops portion supports all covert agency operations from the underground base:

- Manage **active missions**

- Store and access **agent profiles**
- Record **mission data** and **agent notes**
- Track **HQ gadget inventory**
- Assign **gadgets** to agents and monitor usage



Core Entities – Project Data Model



Buy Ops User

User

Represents a system user who has access to the Buy More Ops interface.

Attributes:

- username
- password (stored securely with hashing)



Buy More System Entities

Employee

Represents a staff member working at the Buy More store.

Attributes:

- employee_id
- first_name
- last_name
- phone_number
- address
- position (e.g., Clerk, Manager)
- start_date
- wage

Shift

Represents a scheduled work shift assigned to an employee.

Attributes:

- shift_id
- employee_id (reference to Employee)
- start_time
- end_time

InventoryItem

Represents a product in the store's inventory.

Attributes:

- item_id (UPC)
- item_name
- item_quantity
- item_price

Department

Represents a specific department within the Buy More store.

Attributes:

- department_id
- department_name

Relationships:

- One department manages many inventory items
- One department has many employees (many-to-many)



Spy Ops System



Core Entities

Agent

Represents a government agent operating from the base beneath the Buy More.

Attributes:

- agent_id
- agent_name
- code_name
- security_clearance

Relationships:

- One agent can be assigned to multiple missions
- One agent can be issued multiple gadgets/gear

Mission

Represents an operation assigned to one or more agents.

Attributes:

- mission_id
- mission_code_name
- status (Allowed values: "Planning", "In Progress", "Completed")

- mission_docs (textual notes or briefing data)

HQ (Headquarters)

Represents the underground spy base beneath the store.

Attributes:

- hq_id
- code_name
- location

Gadget / Gear

Represents a tool or device issued to agents.

Attributes:

- id
- name
- type
- Description

Tech Stack for the Project

Back End

In compliance with government technology standards, the back-end API will be developed using **Spring Boot**. This framework provides robust support for building secure, scalable, and maintainable RESTful services.

Front End

To ensure cross-device accessibility via web browsers, the front-end will be built as a responsive web application using either **React** or **Angular**. The choice of framework will be made by the development team based on preference and familiarity.

