

# Terminal Application

Manufacturing Inventory System

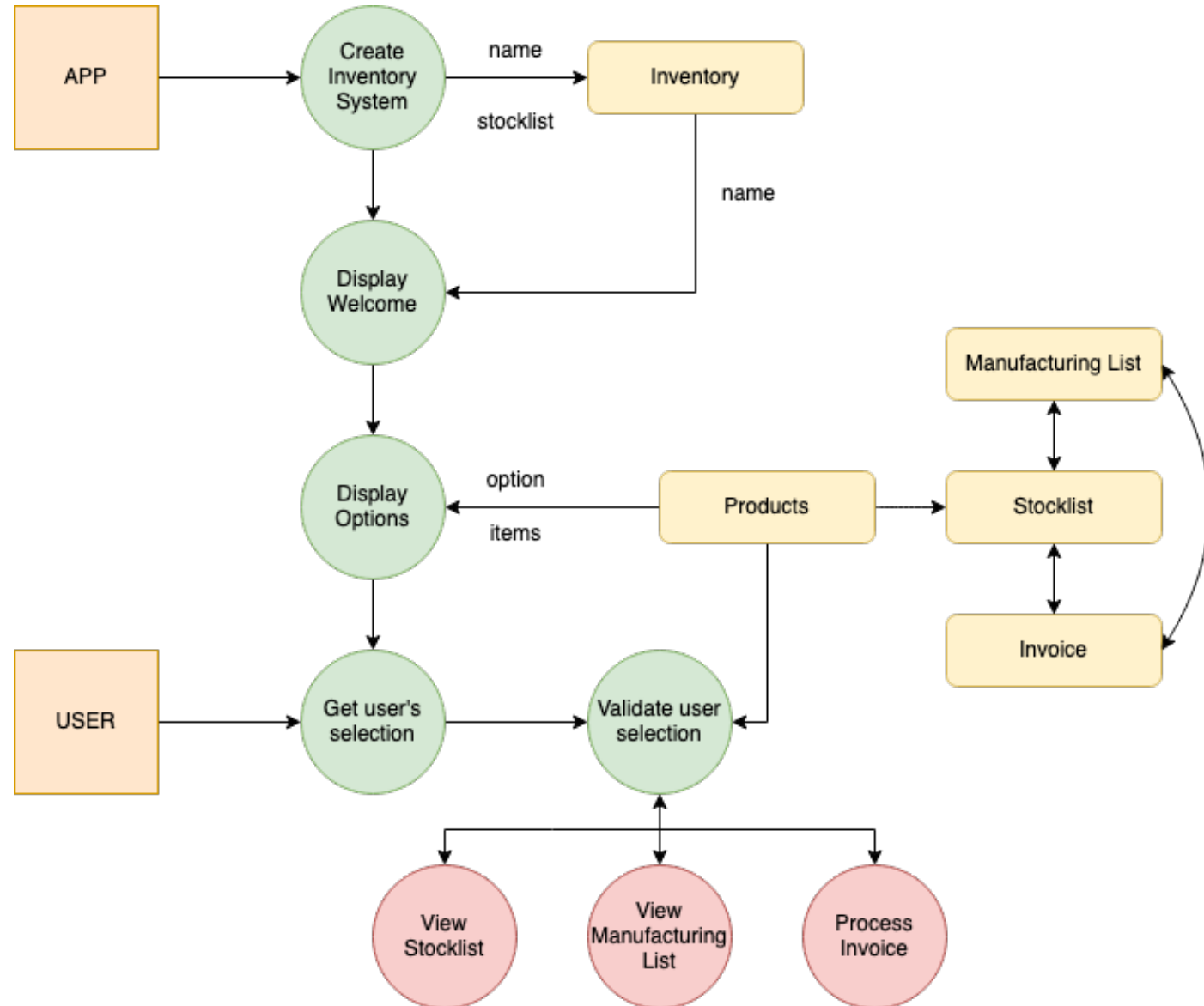
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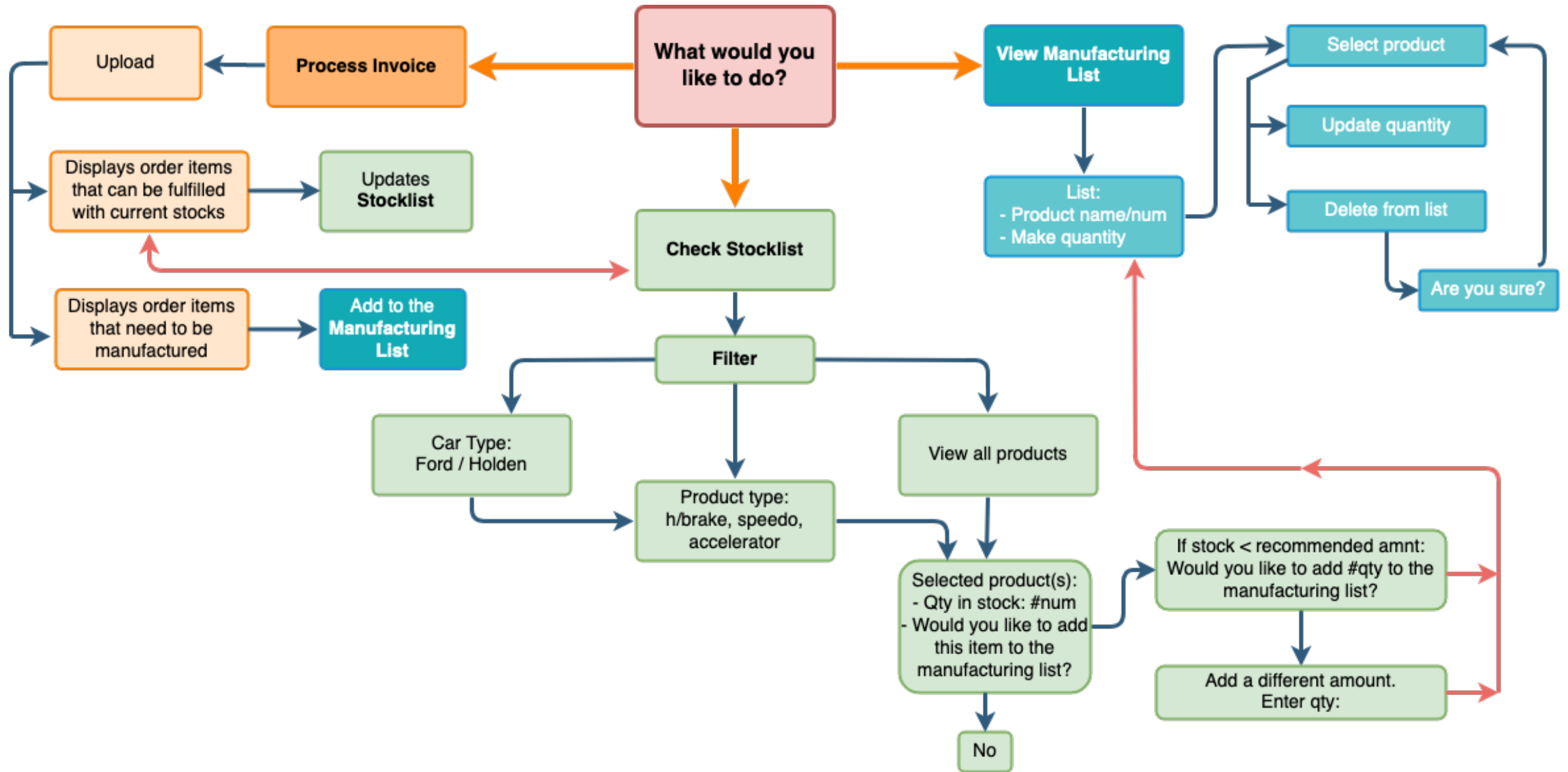
# The Problem

- Automotive Parts Manufacturing Company
- Current operations: (without a stock system)
- Product is kept in stock tubs on shelves. When an order is received, the tubs are checked for stock. If no stock: products must be manufactured to fulfil the order
- Why is this problematic?
- Time consuming, causes delays, inconvenient, difficult to keep track of

# The Solution

- **A Stock/Manufacturing Inventory System**
- **Features:**
- **Stock levels are kept electronically – can be viewed in one central location**
- **Low stock warnings, recommended stock quantities, ability to add products (and qty) to a manufacturing list**
- **Automatic updating of stock quantities with the upload of order invoices or marked completion of manufacturing list items**





## Feature 1: View Stocklist

- Displays all products and their quantity in stock
- Product search is filtered by user input
  - Make: Ford, Holden or ALL
  - Type: Accelerator, Handbrake, Speedo or ALL
- Stock quantities are displayed in the color of their status
  - Green: adequately stocked
  - Yellow: low stock
  - Red: critically low / empty
- Entering in the product number unveils more options
  - Add to manufacturing list (rec. amount or custom)
  - Back

```
ej@Ethans-MacBook-Pro termapp % ruby main.rb
Welcome to the Retro Spares Stock Inventory System!
What would you like to do? View Stocklist, View Manufacturing List or Process Invoice?
(in lowercase, enter one of the following: stock, manufact or invoice)
stock
Would you like to view Ford or Holden products?
(in lowercase, enter either: ford, holden or all)
holden
ACVSV6, Commodore VS V6, Accelerator cable, qty: 3
ACVL6, Commodore VL V6, Accelerator cable, qty: 1
ACVNV8, Commodore VN V8, Accelerator Cable, qty: 2
92005529, Commodore VB/VK, Handbrake cable, qty: 5
92024845, Commodore VL, Handbrake cable, qty: 5
92027120, Commodore VN, Handbrake cable, qty: 3
SC007, Commodore HQ-WB, Speedo Cable, qty: 3
9947987, Commodore VB/VK, Speedo Cable, qty: 2
To view more options for each product, type in the product number and hit enter
ACVL6
The recommended stock level for ACVL6 is 5, would you like to add qty: 4 to the manufacturing list?
(enter 'yes' to approve, a custom number to change qty (e.g. 2, 3, 4) or 'back' to return
yes
Thank you. 4 x ACVL6 were added to the manufacturing list
```

The background of the slide features a series of concentric, curved lines in a light gray color, creating a sense of motion or a stylized globe. These lines are more prominent on the left side and fade towards the right.

## Feature 2: View Manufacturing List

- Products needing to be manufactured are added by the user from the stocklist or invoice processor
- Product number and required manufacture quantity is displayed
- Options:
  - Update quantity / delete from list
  - Mark as complete
- If marked complete, system will update:
  - Pending order items, first
  - Stock quantities, second



```
ej@Ethans-MacBook-Pro termapp % ruby manufact.rb
Welcome to the Retro Spares Stock Inventory System!
What would you like to do? View Stocklist, View Manufacturing List or Process Invoice?
(in lowercase, enter one of the following: stock, manufacture or invoice)
manufact
Manufacturing List
ACVL6, Make: 4
ACVNV8, Make: 3
9947987, Make: 3
To view more options for each product, type in the product number and hit enter
ACVL6
ACVL6, Make: 4
- to mark as complete and remove from list, enter 'complete'
- to delete a product from the list without completing, enter 'delete'
- to increase/decrease the manufacturing quantity enter the number (e.g. -2, 1, 3) you would like to add/remove
complete
Complete! The inventory has been updated and ACVL6 has been removed from the manufacturing list
Current stock levels: ACVL6, Qty: 5
ej@Ethans-MacBook-Pro termapp %
```

## Feature 3: Process Invoice

- User can enter in the details of an order, providing the `product_number` and quantity of multiple items
- Returns an order fulfilment receipt, invoice not stored

### Scenarios:

- Order item can be fulfilled with current stock
  - order item fulfilled & stocklist quantity updated
- Order item can be partially fulfilled with current stock
  - order item updated (e.g. 2/5)
  - add product (qty: 3) to the manufacturing list
- Order item cannot be fulfilled with current stock
  - product and quantity added to the manufacturing list

### Order Details

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"ACVL6", "Qty: 3"  
"ACVNV8", "Qty: 2"  
"9947987", "Qty: 4"

### Order Fulfilment Receipt

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"ACVL6", 3/3, updated\_stock: 2  
"ACVNV8", 2/2, updated\_stock: 0  
"9947987", 2/4, updated\_stock: 0

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### Requirements

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Add qty: 2 of "9947987" to the manufacturing list

### Recommendations

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Add "ACVNV8" to the manufacturing list