Use Case Narration 1: Deposit Items

Use case Name: Deposit Items
Actors: Customer, Recycling Machine
Goal: To deposit returnable bottles or cans for recycling.
Preconditions: Machine is powered on and ready to accept items.
Post conditions: Items are recorded, and receipt is generated if requested.

Main Flow:

1. Customer starts a new session.
2. System displays instructions for depositing items.
3. Customer inserts bottles or cans one by one.
4. System identifies each item type and records it.
5. System shows total number of items and deposit value.
6. Customer chooses to print a receipt or continue depositing.
7. System prints receipt (if requested) and ends the session.

Alternative Flow:
If an unrecognized or damaged item is inserted, the system rejects it and displays a message to the customer.

Use Case Narration 2: Trigger Alarm

Use case Name: Trigger Alarm
Actors: System, Recycling Machine.
Goal: To alert the operator in case of malfunction or security issue.
Preconditions: Machine is operational and sensors are active.
Post conditions: Alarm is triggered, and alert notification is sent to the operator.

Main Flow:

1. System detects an issue (e.g., jammed item, full container, or system error).
2. System activates visual and sound alarms.
3. System sends an alert message to the operator panel.
4. Operator checks the issue and takes corrective action.
5. Once resolved, the operator resets the alarm.

Alternative Flow:
If the alarm was triggered accidentally, the operator can verify and cancel it from the control panel.