

Software Requirements Specification (SRS)

Recycling Machine Application

1. Introduction

The Recycling Machine Application automates the process of accepting returnable bottles and cans. It identifies items, records transactions, issues receipts, and manages refunds. The system also assists operators in monitoring usage, adjusting settings, and resolving machine issues.

2. Overall Description

The system interacts with customers for item returns and operators for maintenance and reporting. It recognizes item types, calculates refunds, prints receipts, and generates daily reports. The system also monitors hardware conditions and triggers alarms for faults.

3. Functional Requirements

- Identify and record returned bottles and cans.
 - Calculate and display total refund amounts.
 - Print receipts listing items, values, and totals.
 - Generate daily summary reports for operators.
 - Trigger alarms for issues (e.g., jammed items, empty receipt roll).
 - Allow operators to update deposit values and system settings.
-

4. Non-Functional Requirements

- **Reliability:** Continuous operation with minimal downtime.
 - **Accuracy:** Correct item detection and refund calculation.
 - **Usability:** Simple interface for customers and operators.
 - **Performance:** Fast response and receipt generation.
 - **Maintainability:** Easy configuration updates.
-

5. External Interfaces

- **Customer Interface:** Touch display for returns and receipt requests.
- **Operator Interface:** Dashboard for reports and maintenance tasks.
- **Printer:** Prints receipts for customers.
- **Sensors:** Detect and identify bottles or cans.
- **Alarm System:** Alerts operator to machine errors.