

Kiichigo

A Point-of-Sale system for the Raspberry Pi

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Chapter 1

Functional Requirements

1.1 Client-User

1. Track Inventory, including serial numbers
2. Create Transactions
3. Print Receipts
4. Print Labels, including barcodes
5. Scan barcodes using USB scanner
6. Receive Inventory
7. Transfer Inventory Out
8. z-report
9. cash drop
10. cash add (put money in register...)

1.2 Client-Manager

1. Create Users
2. Restrict User Privileges
3. Delete Users
4. Generate Reports (custom too)

1.3 Client-Admin

1. Add New Terminal to Cluster
2. Remove Terminal from Cluster
3. e-mail alerts to admin about problems
4. Setup for Terminals is simple (plug it in and it asks if it's the first or not, etc)

1.4 Server Database

1. SQL Changes are done local, then broadcast
2. When client is idle, then synchronize received changes
3. If server dies, automatically switch to new server
4. big changes need to roll between clients so the load is spread (1->2; 1->3, 2->4; 1->5, 2->6, 3->7, 4->8, 5->9)

1.5 Hardware

1. Compatible with wireless
2. Compatible with various printers
3. Compatible with barcode scanners
4. Compatible with Touchscreen (maybe...)
5. Compatible with employee card scanner

Chapter 2

Non-Functional Requirements

Chapter 3

Use Cases

Chapter 4

State Diagrams

Chapter 5

Database Schematic

Chapter 6

Class Diagrams

Chapter 7

Sequence Diagrams

Chapter 8

Test Cases