Cash Register – Software Architectural Design Requirements

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# Introduction

A small stand-alone Cash Register needs to be designed that reads barcodes of products that a Customer has selected.

This document lists the **requirements** of the **software architectural design.**

Every requirement is composed of:

* One unique ID following this pattern: HLR\_XXXXX (Five digits),
* A name, which is always a small introduction of the requirement,
* A text, describing what is this requirement for.

# Software Architectural Design Requirements

HLR\_00100

Name: Add products

Text: The cashregister application shall add products to the shopping basket when scanned

Covers: SYS\_00100, ?, ?

Module: Cashregister

HLR\_00200

Name: Display when scanned

Text: When an existing product is scanned the cashregister application shall display the product name

Covers: SYS\_00200, ?

Module: Cashregister

HLR\_00300

Name: Empty when end

Text: When the cashregister application session is ended, the shopping basket shall be emptied

Covers: SYS\_00100

Module: Cashregister

HLR\_00350

Name: Generate ticket when end

Text: When the cashregister application session is ended, the shopping basket shall generate a ticket

Covers: SYS\_00300

Module: Cashregister

LHR\_00400

Name: Cancel session

Text: When the cancel key is pressed the cashregister application shall end the session

Covers: SYS\_00400

Module: Cashregister

HLR\_0500

Name: Scan process barcodes

Text: The cashregister application shall process scanned barcodes for the shopping basket

Covers: SYS\_00500

Module: Cashregister

HLR\_00600

Name: Start with empty

Text: When the cashregister application starts the shopping basket shall be emptied

Covers: SYS\_00100

Module: Cashregister

HLR\_00650

Name: Key in process barcodes

Text: The cashregister application shall allow for manually entered barcodes

Covers: SYS\_00500

Module: Cashregister

HLR\_00700

Name: Count shopping basket product

Text: The cashregister application shall count the number of each product in the shopping basket

Covers: SYS\_00100, SYS\_00600

Module: Cashregister, Productdatabase

HLR\_00800

Name: Generate ticket

Text: The cash register application shall generate a ticket of all items in the shopping basket

Covers: SYS\_00300

Module: Cashregister

HLR\_00900

Name: Display removed product

Text: When a product is removed from the shopping basket the cashregister application shall display the product name via the user interface

Covers: SYS\_00200, ?

Module: Cashregister

HLR\_01000

Name: Manage user interface session

Text: The cashregister application will start and maintain the User Interface session until it is ended

Couvre: SYS\_00400

Module: Main

HLR\_01200

Name: Incorporate special offer

Texte: The cashregister application shall factor in available special offers to calculate the final ticket prices

Covers: SYS\_00300, ?

Module: Specialoffer

HLR\_1300

Name: Inform end session

Text: Upon the completion of a session, the cashregister application user interface shall inform the user that the session has ended

Covers: SYS\_00400

Module: Specialoffer

SYS\_01400

Name: Display help when requested

Text: When requested through menu selection the cashregister shall provide a help menu item with instructions for all sections to guide the user through its use

Covers: SYS\_00250

Module: Userinterface

HLR\_01500

Name: User input

Text: The cashregister application user interface shall capture all possible cash register user operations

Covers: ?

Module: Userinterface

HLR\_01600

Name: Display help when incorrect input

Text: When a menu selection is selected that is not the list of menu options, the cash register application shall display the user interface help

Covers: LLR\_00250

Module: Userinterface

HLR\_01700

Name: Print ticket

Text: When a shopping session ends the cashregister application shall print ticket totalling the cost for all items in the shopping basket

Covers: SYS\_00200

Module: Userinterface

HLR\_01800

Name: Display ticket

Text: When a shopping session ends the cashregister application shall display the cashregister output to the user interface

Covers: ?

Module: Userinterface

HLR\_01900

Name: Product list

Text: The local database of products should be:

* "Coconuts", ID 12345U
* "Lychees", ID 12346U
* "Kiwis", ID 12347U
* "Pears", ID 12348U
* "Pomegranates", ID 12349U
* "Watermelons", ID 12350U

Covers: ?

Module: Productdatabase