

# Traceability Document

Version 1.0

Client: A software toolbox for small retail shops

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# Introduction

A project such as this can get really messy if we don't have a clear structure tying everything together. This document aims to provide such structure through the use of traceability.

Traceability allows verification that requirement specifications have been:

- Carried forward to the design specifications
- Implemented in the code
- Included in the test plan and cases
- Provided to the customer and user in the resulting system

We achieve this by creating a table that lists every requirement, critical ones being the first in the table, nice-to-haves being the last, and listing the affected module and files. This gives us a nice overview of which requirements have been realized, and/or how far in development they are.

# Traceability Matrix

In the table below, requirements (Rqmt) whose label have the prefix *c* are *critical* requirements, prefix *i* are *important* and prefix *u* are *useful*.

Please note, that in order to avoid clutter, we don't include a ✓ after each test. A singular ✓ under the 'Passed' column indicates that all tests, for requirements with multiple tests, have been passed.

| Rqmt | Module             | Files affected                                  | Tests  | Passed |
|------|--------------------|---|--|--------|
| c1   | Frontend           | All frontend files                              | Testing-Checklist-Client   | ✓      |
| c2   | Backend & Frontend | sales.py<br>SalesChart.jsx                      | test_sales.py<br>test_product_info.py<br>SalesChart-test.jsx<br>ProductInfo-test.jsx | ✓      |
| c3   | Parser             | bootstrap.py<br>database_sender.py<br>parser.py | test_inventory_list.py   | ✓      |
| c4   | Frontend           | -   | retaily.site   | ✓      |
| i1   | Frontend           | -   | retaily.site   | ✓      |
| i2   | Barcode Scanner    | BarcodeScanner.jsx<br>scanner.css               | BarcodeScanner-test.jsx  | ✓      |
| i3   | KoppelVerkoop      | koppelverkoop.py<br>KoppelVerkoopTable.jsx      | test_koppelverkoop.py<br>KoppelVerkoopTable-test.jsx                                 | ✓      |
| i4   | Frontend           | SalesInfo.jsx                                   | SalesInfo-test.jsx   | ✓      |
| i5   | Frontend           | SalesInfo.jsx                                   | SalesInfo-test.jsx   | ✓      |
| u1   | Frontend           | ProductInfoTable.jsx                            | ProductInfoTable-test.jsx  | ✓      |
| u2   | Backend & Frontend | sales.py<br>SalesChart.jsx                      | test_sales.py<br>SalesChart-test.jsx<br>ProductInfo-test.jsx                         | ✓      |

Note\*: Tests that state "Testing-Checklist-Client" aren't coded tests, but rather a physical checklist (as a pdf, located under frontend tests and documents) that tests functionality of the product. This checklist has been filled in by several employees of the store, whom all gave the same (positive) results.

Note\*\*: Tests that state "retaily.site" aren't necessarily tests, however, visiting the website 'retaily.site' would pass that specific requirement.

## Additional Tests

Although the traceability matrix above includes all major tests for all requirements, we have added several features that weren't part of the requirements, but require testing nonetheless. These tests are visible in the matrix below. Since they don't coincide with a requirement, we included a small description of its functionality.

| Description   | Affected sections                                | Tests   | Passed |
|---|--|---|--------|
| The button that is pressed in order to retrieve data. | All retaily.site pages                           | RetrieveButton-test.jsx<br>RetrieveError-test.jsx | ✓      |
| Selecting an interval, via a calendar.                | All retaily.site pages<br>(Except standard info) | IntervalDatePicker-test.jsx                       | ✓      |
| Searching for a product auto suggests options.        | Extended info<br>retaily.site page               | ProductAutosuggest-test.jsx                       | ✓      |
| Testing parent/sub classes inheritance.               | All frontend files                               | Wrapper-test.jsx                                  | ✓      |

## Change log

| Who            | When     | Which section       | What   | Time  |
|----------------|----------|---------------------|--|-------|
| Abel & Florian | 16.04.20 | Whole document      | Wrote version 0.1  | 2h    |
| Abel           | 25.05.20 | Traceability Matrix | Updated requirements to the up-to-date ones  | 30min |
| Abel           | 31.05.20 | Traceability Matrix | Added existing test files to appropriate requirements                              | 30min |
| Abel           | 31.05.20 | Traceability Matrix | Added affected files to appropriate requirements                                   | 30min |
| Abel           | 11.06.20 | Whole document      | Added 'Additional Tests' subsection, updated traceability matrix with latest tests | 1h    |