**Web-based Ordering & Ingredient Estimating for Bakery Manufacturer**

Traceability Record

By

**Miss. Nontra Mahachanont 542115026**

**Mr. Parinya Panyanak 542115034**

Department of Software Engineering

College of Arts, Media and Technology

Chiang Mai University

Project Advisor

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Mr.Phudinan Singkhamfu**

**Document History**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Document Name** | **Version** | **Status** | **Date** | **Viewable** | **Reviewer** | **Responsible** |
| **Documents** | | | | | | |
| Web-based Ordering & Ingredient Estimating for Bakery Manufacturer – TR\_V.1.5.docx | V.1.5  - Add Chapter 1  - Add Chapter 2 | Drafted | 10-10-2014 | NM, PP, PS | NM, PP | NM, PP |
| Web-based Ordering & Ingredient Estimating for Bakery Manufacturer – TR\_V.1.6.docx | V.1.6  - Adjust Chapter 2  - Add Chapter 3 | Drafted | 21-10-2014 | NM, PP, PS | NM, PP | NM, PP |
| Web-based Ordering & Ingredient Estimating for Bakery Manufacturer – TR\_V.2.0.docx | V.2.0  - Adjust Sequence Diagram  - Adjust Unit Test Case | Released | 22-10-2014 | NM, PP, PS | NM, PP | NM, PP |

**\*NM = Nontra Mahachanont**

**\*PP = Parinya Panyanak**

**\*PS = Phudinan Singkhamfu**

**Table of contents**

[**Chapter One | Introduction** 4](#_Toc401675190)

[1.1 Purpose 4](#_Toc401675191)

[1.2 Scope 4](#_Toc401675192)

[1.3 Dependency 4](#_Toc401675193)

[**Chapter Two | Traceability Record Table** 5](#_Toc401675194)

[2.1 SRS and URS 5](#_Toc401675195)

[2.2 Use Case and User Requirement Specification 8](#_Toc401675196)

[2.3 Activity Diagram and User Requirement Specification 9](#_Toc401675197)

[2.4 User Interface and User Requirement Specification 10](#_Toc401675198)

[2.5 Sequence Diagram and User Requirement Specification 11](#_Toc401675199)

[2.6 Unit Test Case and User Requirement Specification 12](#_Toc401675200)

[2.7 System Test Case and User Requirement Specification 13](#_Toc401675201)

[2.8 Traceability Record 13](#_Toc401675202)

[**Chapter Three | Appendix** 17](#_Toc401675203)

[3.1 User Requirement Specification 17](#_Toc401675204)

[3.2 System Requirement Specification 18](#_Toc401675205)

[3.3 Activity Diagram 24](#_Toc401675206)

[3.4 Use Case 24](#_Toc401675207)

[3.5 User Interface 25](#_Toc401675208)

[3.6 Sequence Diagram 26](#_Toc401675209)

# **Chapter One | Introduction**

## 1.1 Purpose

The purpose of traceability record document is to show the relation of the project. The traceability linked between user requirements to system requirement specification, use case, activity diagram, sequence diagram and test case.

## 1.2 Scope

Web-based Ordering & Ingredient Estimating for Bakery Manufacturer is a management system that helps the admin to manage ordering information and estimate ingredient usage. Then the system also helps the wholesaler to manage order and record ordered history. The project focuses on implementation of general order management system. The objective of this project is to develop management system that used with bakery manufacturer. Another objective is to develop a system that support web-based ordering for wholesaler.

## 1.3 Dependency

This traceability record is depended on the following documents:

- Software Project Management Plan

- Software Requirement Specification

- Software Design Document

# **Chapter Two | Traceability Record Table**

## SRS and URS

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **URS**  **SRS** | URS - 07 | URS - 08 | URS - 09 | URS - 10 | URS - 11 | URS - 12 | URS - 13 | URS - 14 |
| SRS - 01 |  |  |  |  |  |  |  |  |
| SRS - 02 |  |  |  |  |  |  |  |  |
| SRS - 03 |  |  |  |  |  |  |  |  |
| SRS - 04 |  |  |  |  |  |  |  |  |
| SRS - 05 |  |  |  |  |  |  |  |  |
| SRS - 06 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| SRS - 07 |  |  |  |  |  |  |  |  |
| SRS - 08 |  |  |  |  |  |  |  |  |
| SRS - 09 |  |  |  |  |  |  |  |  |
| SRS - 10 |  |  |  |  |  |  |  |  |
| SRS - 11 |  |  |  |  |  |  |  |  |
| SRS - 12 |  |  |  |  |  |  |  |  |
| SRS - 13 |  |  |  |  |  |  |  |  |
| SRS - 14 |  |  |  |  |  |  |  |  |
| SRS - 15 |  |  |  |  |  |  |  |  |
| SRS - 16 |  |  |  |  |  |  |  |  |
| SRS - 17 |  |  |  |  |  |  |  |  |
| SRS - 18 |  |  |  |  |  |  |  |  |
| SRS - 19 |  |  |  |  |  |  |  |  |
| SRS - 20 |  |  |  |  |  |  |  |  |
| SRS - 21 |  |  |  |  |  |  |  |  |
| SRS - 22 |  |  |  |  |  |  |  |  |
| SRS - 23 |  |  |  |  |  |  |  |  |
| SRS - 24 |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **URS**  **SRS** | URS - 07 | URS - 08 | URS - 09 | URS - 10 | URS - 11 | URS - 12 | URS - 13 | URS - 14 |
| SRS – 25 |  |  |  |  |  |  |  |  |
| SRS – 26 |  |  |  |  |  |  |  |  |
| SRS – 27 |  |  |  |  |  |  |  |  |
| SRS – 28 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SRS – 29 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SRS – 30 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SRS - 31 |  |  |  |  |  |  |  |  |
| SRS – 32 |  |  |  |  |  |  |  |  |
| SRS – 33 |  |  |  |  |  |  |  |  |
| SRS - 34 |  |  |  |  |  |  |  |  |
| SRS – 35 |  |  |  |  |  |  |  |  |
| SRS - 36 |  |  |  |  |  |  |  |  |
| SRS – 37 |  |  |  |  |  |  |  |  |
| SRS – 38 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SRS – 39 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SRS – 40 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |  |
| SRS - 41 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |  |
| SRS – 42 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SRS – 43 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SRS - 44 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |
| SRS – 45 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SRS - 46 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |  |
| SRS – 47 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |  |
| SRS – 48 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |  |
| SRS – 49 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |
| SRS – 50 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |  |
| SRS - 51 |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **URS**  **SRS** | URS - 07 | URS - 08 | URS - 09 | URS - 10 | URS - 11 | URS - 12 | URS - 13 | URS - 14 |
| SRS – 52 |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |
| SRS – 53 |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SRS – 54 |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SRS – 55 |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SRS – 56 |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| SRS – 57 |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SRS – 58 |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SRS – 59 |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |
| SRS – 60 |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |
| SRS – 61 |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |
| SRS – 62 |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |
| SRS - 63 |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |
| SRS – 64 |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |
| SRS – 65 |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |
| SRS – 66 |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |
| SRS – 67 |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |
| SRS – 68 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |
| SRS – 69 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| SRS – 70 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| SRS – 71 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| SRS – 72 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| SRS – 73 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |
| SRS – 74 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |
| SRS – 75 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |
| SRS – 76 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |
| SRS – 77 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| SRS - 78 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| **URS**  **SRS** | URS - 07 | URS - 08 | URS - 09 | URS - 10 | URS - 11 | URS - 12 | URS - 13 | URS - 14 |
| SRS – 79 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| SRS – 80 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| SRS – 81 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| SRS – 82 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |

## 2.2 Use Case and User Requirement Specification

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **User Requirement Specification**  **Use Case** | URS - 07 | URS - 08 | URS - 09 | URS - 10 | URS - 11 | URS - 12 | URS - 13 | URS - 14 |
| UC - 07: Order Bakery Product | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |  |
| UC - 08: Manage Own Order |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| UC - 09: View Order Information |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |
| UC - 10: Mark Order Status |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |
| UC - 11: View Order Status |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |
| UC - 12: Manage Ingredient Information |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| UC - 13: View Ingredient Information |  |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |

## 2.3 Activity Diagram and User Requirement Specification

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **User Requirement Specification**  **Activity Diagram** | URS - 07 | URS - 08 | URS - 09 | URS - 10 | URS - 11 | URS - 12 | URS - 13 | URS - 14 |
| AD - 12: Wholesaler order new bakery product | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |  |
| AD - 13: Wholesaler repeat a previous order information | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |  |
| AD - 14: Wholesaler save unfinished product list |  |  |  |  |  |  |  |  |
| AD - 15: Wholesaler send order | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |  |
| AD - 16: Wholesaler update own order information |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| AD - 17: Wholesaler cancel own order |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| AD - 18: Wholesaler view own order information |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |
| AD - 19: Admin view all order information |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |
| AD - 20: Admin mark order status |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |
| AD - 21: Wholesaler view their order status |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |
| AD - 22: Admin create ingredient information |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| AD - 23: Admin update ingredient information |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| AD - 24: Admin delete ingredient information |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| AD - 25: Admin view ingredient information |  |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |

## 2.4 User Interface and User Requirement Specification

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **User Requirement Specification**  **User Interface** | URS - 07 | URS - 08 | URS - 09 | URS - 10 | URS - 11 | URS - 12 | URS - 13 | URS - 14 |
| UI - 01: Home page |  |  |  |  |  |  |  |  |
| UI - 02: Login page |  |  |  |  |  |  |  |  |
| UI - 03: Admin main layout page |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |
| UI - 04: Wholesaler main layout page | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |
| UI - 05: Create user information page |  |  |  |  |  |  |  |  |
| UI - 06: Edit user information page |  |  |  |  |  |  |  |  |
| UI - 07: Delete user page |  |  |  |  |  |  |  |  |
| UI - 08: User list page |  |  |  |  |  |  |  |  |
| UI - 09: User details page |  |  |  |  |  |  |  |  |
| UI - 10: Create bakery product page |  |  |  |  |  |  |  |  |
| UI - 11: Edit bakery product page |  |  |  |  |  |  |  |  |
| UI - 12: Delete bakery product page |  |  |  |  |  |  |  |  |
| UI - 13: Bakery product list page |  |  |  |  |  |  |  |  |
| UI - 14: Bakery product details page |  |  |  |  |  |  |  |  |
| UI - 15: Logout page |  |  |  |  |  |  |  |  |
| UI - 16: Validation form page | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| UI - 17: Create ingredient information page |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| UI - 18: Edit ingredient information page |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| UI - 19: Delete ingredient information page |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| UI - 20: Ingredient list page |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |
| UI - 21: Ingredient information page |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |
| UI - 22: Order product page | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| UI – 23 Bakery product cart page | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **User Requirement Specification**  **User Interface** | URS - 07 | URS - 08 | URS - 09 | URS - 10 | URS - 11 | URS - 12 | URS - 13 | URS - 14 |
| UI - 24: History page |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |
| UI - 25: Order list page |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |

2.5 Sequence Diagram and User Requirement Specification

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **User Requirement Specification**  **Sequence Diagram** | URS - 07 | URS - 08 | URS - 09 | URS - 10 | URS - 11 | URS - 12 | URS - 13 | URS - 14 |
| SD - 11: Wholesaler order bakery product | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SD - 12: Wholesaler add bakery product to cart | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| SD - 13: Wholesaler view own order information | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |
| SD - 14: Admin view all order information |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |
| SD - 15: Admin create ingredient information |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| SD - 16: Admin update ingredient information |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| SD - 17: Admin delete ingredient |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| SD - 18: Admin view ingredient list |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |
| SD - 19: Admin view ingredient information |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |

2.6 Unit Test Case and User Requirement Specification

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **URS**  **UTC** | URS - 07 | URS - 08 | URS - 09 | URS - 10 | URS - 11 | URS - 12 | URS - 13 | URS - 14 |
| UTC – 22 |  |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |
| UTC – 23 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| UTC – 24 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| UTC – 25 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| UTC – 26 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| UTC – 27 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| UTC – 28 |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| UTC – 29 | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| UTC - 30 |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |
| UTC - 31 |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |
| UTC – 32 |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |
| UTC – 33 |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |

## 2.7 System Test Case and User Requirement Specification

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **User Requirement Specification**  **System Test Case** | URS - 07 | URS - 08 | URS - 09 | URS - 10 | URS - 11 | URS - 12 | URS - 13 | URS - 14 |
| STC - 11: Wholesaler can order bakery product | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |  |
| STC - 12: Wholesaler can edit own order |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| STC - 13: Wholesaler can cencel own order |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |  |
| STC - 14: Wholesaler can view own order information |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |  |
| STC - 15: Admin can view all order information |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |  |
| STC - 16: Admin can mark order status |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |  |
| STC - 17: Wholesaler can view order status |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |  |
| STC - 18: Admin can create ingredient information |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| STC - 19: Admin can edit ingredient information |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| STC - 20: Admin can delete ingredient information |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |  |
| STC - 21: Admin can view all ingredient information |  |  |  |  |  |  |  | http://www.decodeunicode.org/en/data/glyph/196x196/2714.gif |

## 2.8 Traceability Record

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **URS** | **Function Name** | **SRS** | **UI** | **SD** | **AD** | **UC** | **UTC** | **STC** |
| URS-01 | Admin can register to activate member to access the application. | SRS-02  SRS-03  SRS-04  SRS-05  SRS-06  SRS-07 | UI-03  UI-06  UI-16 | SD-01 | AD-01 | UC-01 | UTC-06  UTC-07 | STC-01 |
| URS-02 | Admin and wholesaler authenticate the web application account. | SRS-01  SRS-04  SRS-08  SRS-09  SRS-10  SRS-11  SRS-12  SRS-13  SRS-14 | UI-01  UI-02  UI-03 UI-14  UI-15 | SD-02 SD-03 | AD-02  AD-03 | UC-02 | UTC-01  UTC-02 UTC-20  UTC-21 | STC-02 STC-03 |
| URS-03 | Admin can manage all member information. | SRS-01  SRS-04  SRS-07  SRS-14  SRS-15  SRS-16  SRS-17  SRS-18  SRS-19 SRS-20  SRS-21  SRS-22  SRS-23 SRS-24 | UI-05  UI-07  UI-08 UI-16 | SD-04  SD-05 SD-06 | AD-04  AD-05 AD-07 | UC-03 | UTC-03  UTC-04 UTC-05  UTC-08 UTC-09  UTC-10 UTC-11 | STC-04 STC-05 |
| URS-04 | Wholesaler can update own information. | SRS-01  SRS-04  SRS-07  SRS-14  SRS-15  SRS-16  SRS-17  SRS-18  SRS-19 SRS-20  SRS-21 | UI-09 UI-16 | SD-04  SD-06 | AD-06 | UC-04 | UTC-08 UTC-09 | STC-06 |
| URS-05 | Admin can manage all bakery product information. | SRS-26  SRS-27  SRS-28  SRS-29 SRS-30  SRS-31 SRS-32  SRS-33  SRS-34  SRS-35 SRS-36  SRS-37 | UI-10 UI-11 UI-12 UI-13 UI-16 | SD-07  SD-08 SD-09 SD-10 | AD-08 AD-09 AD-10 | UC-05 UC-06 | UTC-12  UTC-13 UTC-14  UTC-15 UTC-16  UTC-17 UTC-18  UTC-19 | STC-07 STC-08 STC-09 |
| URS-06 | Wholesaler can view all bakery product information by search keyword. | SRS-01  SRS-04  SRS-28  SRS-29  SRS-30 | UI-14 | SD-10 | AD-11 | UC-06 | UTC-12 | STC-10 |
| URS-07 | Wholesaler can order bakery products from the product list. | SRS-06  SRS-28  SRS-29  SRS-30 SRS-38  SRS-39  SRS-40  SRS-41  SRS-42 SRS-43  SRS-44 SRS-45  SRS-46  SRS-47  SRS-48  SRS-49 SRS-50 | UI-04 UI-16 UI-22 UI-23 | SD-11 SD-12 SD-13 | AD-12 AD-13 AD-14 AD-15 | UC-07 | UTC-29 | STC-11 |
| URS-08 | Wholesaler can manage own order information. | SRS-38  SRS-39  SRS-42  SRS-43  SRS-44 SRS-45  SRS-49 SRS-51  SRS-52  SRS-53  SRS-54  SRS-55 SRS-56 SRS-57 SRS-58 | UI-04 UI-16 UI-22 UI-23 UI-24 UI-25 | SD-11 SD-12 SD-13 | AD-16 AD-17 | UC-08 | UTC-29 | STC-12 STC-13 |
| URS-09 | Wholesaler can view their current order’s information. | SRS-44 SRS-52  SRS-59 SRS-62 | UI-04 UI-22  UI-23 UI-25 | SD-13 | AD-18 | UC-09 | UTC-32 | STC-14 |
| URS-10 | Admin can view current order’s information of all members by search keyword. | SRS-49 SRS-59  SRS-61 SRS-62 SRS-63 | UI-03 UI-23 UI-25 | SD-14 | AD-19 | UC-09 | UTC-30  UTC-31  UTC-33 | STC-15 |
| URS-11 | Admin can mark progressive of order status while the order in the preparation stage. | SRS-06 SRS-56  SRS-61 SRS-62 SRS-63 SRS-64 SRS-65 SRS-66 | UI-03 UI-25 | SD-14 | AD-20 | UC-10 | UTC-33 | STC-16 |
| URS-12 | Wholesaler can view their progress order status while the order in the preparation stage. | SRS-51 SRS-59  SRS-67 | UI-04 UI-25 | SD-13 | AD-21 | UC-11 | UTC-32 | STC-17 |
| URS-13 | Admin can manage all ingredient information. | SRS-06 SRS-56 SRS-68 SRS-69 SRS-70 SRS-71 SRS-72 SRS-73 SRS-74 SRS-75 SRS-76 SRS-77 SRS-78 SRS-79 SRS-80 SRS-81 SRS-82 | UI-03 UI-16 UI-17 UI-18 UI-19 UI-20 UI-21 | SD-15 SD-16  SD-17 SD-18 SD-19 | AD-22 AD-23 AD-24 | UC-12 | UTC-23 UTC-24  UTC-25 UTC-26  UTC-27 UTC-28 | STC-18 STC-19 STC-20 |
| URS-14 | Admin can view all ingredient information by search keyword. | SRS-68 SRS-73 SRS-74 SRS-75 SRS-76 | UI-03 UI-20 UI-21 | SD-18  SD-19 | AD-25 | UC-13 | UTC-22 | STC-21 |

# **Chapter Three | Appendix**

## 3.1 User Requirement Specification

**URS-01:** Admin can register to activate member to access the application by

create new member information; username, password, first name, last name, phone number, address, user type and profile picture into database.

**URS-02:** Admin and wholesaler authenticate the web application account.

**URS-03:** Admin can manage all member information; username, password, first

name, last name, phone number, address, user type and profile picture in the database.

**URS-04:** Wholesaler can update own information; username, password, first

name, last name, phone number, address, user type and profile picture in the database.

**URS-05:** Admin can manage all bakery product information; bakery product ID,

bakery product name, description, price, category and product picture in the database.

**URS-06:** Wholesaler can view all bakery product information by search keyword

of bakery product ID, bakery product name, information, price, category and product picture in the database.

**URS-07:** Wholesaler can order bakery products from the product list. An order can

select by input bakery product name, bakery product quantity and delivery date.

**URS-08:** Wholesaler can manage own order information; bakery product

name, bakery product quantity and delivery date in the order page.

**URS-09:** Wholesaler can view their current order’s information; all list of bakery

product name, bakery product quantity, price of each bakery product, the total price and discount of the order.

**URS-10:** Admin can view current order’s information of all members by search

keyword of wholesaler name, bakery product ID, bakery product name and delivery date in the database.

**URS-11:** Admin can mark progressive of order status while the order in the

preparation stage.

**URS-12:** Wholesaler can view their progress order status while the order in the

preparation stage.

**URS-13:** Admin can manage all ingredient information; ingredient ID, ingredient

name, category and ingredient picture in the database.

**URS-14:** Admin can view all ingredient information by search keyword of

ingredient ID, ingredient name category and category in the database.

## 3.2 System Requirement Specification

**SRS-01:** The system can connect to the phungnoi database and access tables.

**SRS-02:** The system shall provide a link for registering new member information in member management page.

**SRS-03:** The system shall provide a registration form in a create member page for admin input username, first name, last name, phone number and user type.

**SRS-04:** The system shall provide service for validation input information with the existing information in the database.

**SRS-05:** The system shall provide notification to display a message after a registration form has been submitted.

**SRS-06:** The system shall provide service to store information into the database.

**SRS-07:** The system shall provide a user interface to display the new member information which are username, first name, last name, phone number, address, user type and profile picture on view information of member management page.

**SRS-08:** The system shall provide a link for logging in to the web application.

**SRS-09:** The system shall provide a login form in user interface for admin and wholesaler login users as a different role.

**SRS-10:** The system can hide the characters in the password field.

**SRS-11:** The system shall provide notification to display a message after authenticates.

**SRS-12:** The system can take wholesaler or admin to the index page of their user type.

**SRS-13:** The system shall provide a link for logging out from the web application.

**SRS-14:** The system shall provide confirmation dialog box after the link has been chosen.

**SRS-15:** The system shall provide a textbox in member management interface to search the member information; username, first name, last name, phone number and user type in the database.

**SRS-16:** The system shall provide a user interface to display member list. In each label shall display member name text and profile picture on member list.

**SRS-17:** The system shall provide a user interface to display the existing member information which are username, first name, last name, phone number, address, user type and profile picture on view information of member management page.

**SRS-18:** The system shall provide a link for update member information in the member management interface.

**SRS-19:** The system shall provide a member form in updating member information page to user update new username, first name, last name, phone number, address, user type and profile picture.

**SRS-20:** The system shall provide confirmation button.

**SRS-21:** The system shall provide service to update member information into the database.

**SRS-22:** The system shall provide a link for deleting member information in the member management interface.

**SRS-23:** The system shall provide service to delete member information into the database.

**SRS-24:** The system shall provide service to get new member information to display in member management interface.

**SRS-25:** The system shall provide a link for creating new bakery product information in the bakery product interface.

**SRS-26:** The system shall provide a bakery product form in a create bakery product information page for admin input new bakery product ID, bakery product name, product description, product price, product category and product picture.

**SRS-27:** The system shall provide notification to display a message after bakery product form has been submitted.

**SRS-28:** The system shall provide a textbox in bakery product interface to search the bakery product information; bakery product ID, bakery product name, price and category in the database.

**SRS-29:** The system shall provide a user interface to display all bakery product list. In each label shall display bakery product name text and bakery product picture on bakery product list.

**SRS-30:** The system shall provide a user interface to display the existing bakery product information which are bakery product ID, bakery product name, product description, product price, product category and product picture on view information of bakery product page.

**SRS-31:** The system shall provide a link for updating bakery product information in the bakery product interface.

**SRS-32:** The system shall provide a bakery product form in update bakery product information page for admin update bakery product ID, bakery product name, product description, product price, product category and product picture.

**SRS-33:** The system shall provide service to update bakery product information into the database.

**SRS-34:** The system shall provide a user interface to display the new bakery product information which are bakery product ID, bakery product name, product description, product price, product category and product picture on view information of bakery product page.

**SRS-35:** The system shall provide service to get new bakery product information to display in bakery product interface.

**SRS-36:** The system shall provide a link for deleting bakery product information in the bakery product interface.

**SRS-37:** The system shall provide service to delete bakery product information into the database

**SRS-38:** The system can connect to the phungnoi database and access User, webpages\_Roles, Product, Order and OrderDetail tables.

**SRS-39:** The system shall provide service for validation input information; bakery product ID, bakery product name, price and category with the existing bakery product information in the database.

**SRS-40:** The system shall provide a link for ordering in the order product interface.

**SRS-41:** The system shall provide an order form in order product page for wholesaler input name of the bakery product, bakery product quantity and delivery date.

**SRS-42:** The system shall generate other information from input bakery name consist of bakery product ID, product price and product picture in each label of product list.

**SRS-43:** The system shall provide a calculating function to compute the total price and discount of each order.

**SRS-44:** The system shall provide a user interface to display the result of the total price and discount from all bakery product list.

**SRS-45:** The system shall provide button for sending finished order information in the order product interface.

**SRS-46:** The system shall provide button for repeating previous order information in the order history interface.

**SRS-47:** The system shall provide a user interface to display all list of the delivery date from previous order information. In each label shall display delivery date and total price on the order history list.

**SRS-48:** The system shall provide confirmation dialog box after delivery date link has been chosen.

**SRS-49:** The system shall provide a message to display a notification after the order form has been sent.

**SRS-50:** The system shall provide a link for saving unfinished product list in order product interface.

**SRS-51:** The system shall provide a user interface to display current order’s information which are wholesaler name, bakery product ID, bakery product name, bakery product quantity and delivery date on view information of order management page.

**SRS-52:** The system shall provide a link for updating current order’s information in the order management interface.

**SRS-53:** The system shall provide an update form in order product page for wholesaler input name of the bakery product, bakery product quantity and delivery date.

**SRS-54:** The system shall provide service to update order information into the database.

**SRS-55:** The system shall provide a link for deleting bakery product from order information in the order management interface.

**SRS-56:** The system shall provide confirmation dialog box after confirmation button has been chosen.

**SRS-57:** The system shall provide service to cancel order information into the database.

**SRS-58:** The system shall provide a message to display a notification after the order information has been deleted.

**SRS-59:** The system can connect to the phungnoi database and access User, webpages\_Roles and OrderDetail tables.

**SRS-60:** The system shall provide a link for view current order’s information in the view order information interface.

**SRS-61:** The system shall provide a textbox in order management interface to search the order information; wholesaler ID, wholesaler name, bakery product ID, bakery product name and delivery date.

**SRS-62:** The system shall provide service for validation input information; wholesaler ID, wholesaler name, bakery product ID, bakery product name and delivery date with the existing order information in the database.

**SRS-63:** The system shall provide a user interface to display a list of all wholesaler who has current order’s information. In each label shall display wholesaler name text and delivery date on order information list.

**SRS-64:** The system shall provide button for marking progressive of order status in the order management interface.

**SRS-65:** The system shall provide a message to display a notification after the order status in the preparation stage has been marked.

**SRS-66:** The system shall provide service to update progressive of order status to display in order management interface.

**SRS-67:** The system shall provide a text to display the order status in their order page.

**SRS-68:** The system can connect to the phungnoi database and access User, webpages\_Roles and Ingredient tables.

**SRS-69:** The system shall provide a link for creating new ingredient information in the ingredient interface.

**SRS-70:** The system shall provide an ingredient form in a create new ingredient information page for an admin input ingredient ID, ingredient name, category and ingredient picture.

**SRS-71:** The system shall provide service for validation input information; ingredient ID, ingredient name, category and ingredient picture.

**SRS-72:** The system shall provide a message to display a notification after the ingredient form has been sent.

**SRS-73:** The system shall provide a textbox in ingredient interface to search the ingredient information; ingredient ID, ingredient name and category.

**SRS-74:** The system shall provide service for validation input information; ingredient ID, ingredient name and category with the existing ingredient information in the database.

**SRS-75:** The system shall provide a user interface to display all list of ingredient. In each label shall display ingredient name text and ingredient picture on an ingredient list.

**SRS-76:** The system shall provide a user interface to display the existing ingredient information which are ingredient ID, ingredient name, category and ingredient picture on view information of ingredient page.

**SRS-77:** The system shall provide a link for updating ingredient information in the ingredient interface.

**SRS-78:** The system shall provide an ingredient form in update ingredient information page for admin update new ingredient ID, ingredient name, category and ingredient picture.

**SRS-79:** The system shall provide service to update ingredient information into the database.

**SRS-80:** The system shall provide a link for deleting ingredient information in the ingredient interface.

**SRS-81:** The system shall provide service to delete ingredient information into the database

**SRS-82:** The system shall provide a message to display a notification after the ingredient information has been deleted.

## 3.3 Activity Diagram

**AD-12:** Wholesaler order new bakery product.

**AD-13:** Wholesaler repeat a previous order information.

**AD-14:** Wholesaler save unfinished product list.

**AD-15:** Wholesaler send order.

**AD-16:** Wholesaler update own order information.

**AD-17:** Wholesaler cancel own order.

**AD-18:** Wholesaler view own order information.

**AD-19:** Admin view all order information.

**AD-20:** Admin mark order status.

**AD-21:** Wholesaler view their order status.

**AD-22:** Admin create ingredient information.

**AD-23:** Admin update ingredient information.

**AD-24:** Admin delete ingredient information.

**AD-25:** Admin view ingredient information.

## 3.4 Use Case

**UC-07:** Order bakerry product

**UC-08:** Manage own order

**UC-09:** View order information

**UC-10:** Mark order status

**UC-11:** View order status

**UC-12:** Manage ingredient information

**UC-**13: View ingredient information

## 3.5 User Interface

**UI-01:** Home page

**UI-02:** Login page

**UI-03:** Admin main layout page

**UI-04:** Wholesaler main layout page

**UI-05:** Create user information page

**UI-06:** Edit user information page

**UI-07:** Delete user page

**UI-08:** User list page

**UI-09:** User details page

**UI-10:** Create bakery product page

**UI-11:** Edit bakery product page

**UI-12:** Delete bakery product page

**UI-13:** Bakery product list page

**UI-14:** Bakery product details page

**UI-15:** Logout page

**UI-16:** Validation form page

**UI-17:** Create ingredient information page

**UI-18:** Edit ingredient information page

**UI-19:** Delete ingredient information page

**UI-20:** Ingredient list page

**UI-21:** Ingredient information page

**UI-22:** Order product page

**UI-23:** Bakery product cart page

**UI-24:** History page

**UI-25:** Order list page

## 3.6 Sequence Diagram

**SD-11:** Wholesaler order bakery product

**SD-12:** Wholesaler send bakery product to own cart

**SD-13:** Wholesaler view their order information

**SD-14:** Admin view all order information

**SD-15:** Admin create ingredient information

**SD-16:** Admin edit ingredient information

**SD-17:** Admin delete ingredient information

**SD-18:** Admin view ingredient list

**SD-19:** Admin view ingredient information