**Point of Sales Transaction System for Domino’s Pizza**

**Software Requirements Specification**

**Version 2.1**

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**Number One Best Professional Development Practices**

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**Revision History**

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| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Authors** |
| 9/23/14 | 1.0 | Initial version outlining all requirements | Abu Kebbie-Anthony, Chris McEligot, Nicolas Mouriski, and Richard Tyaba |
| 10/23/14 | 2.0 | Updated to include feedback from version 1.0 | Abu Kebbie-Anthony, Chris McEligot, Nicolas Mouriski, and Richard Tyaba |
| 10/28/14 | 2.1 | Made corrections to minor errors introduced by last update | Abu Kebbie-Anthony, Chris McEligot, Nicolas Mouriski, and Richard Tyaba |

# Introduction

The Software Requirements Specification (SRS) outlines the purpose and scope of the document, system overview, and all product requirements for the Domino’s Pizza Point of Sale (POS) Transaction System.

## Purpose

This document’s purpose is to outline the requirements and functions of the POS Transaction System. This will assist the software development team in the design, development, and testing of the software system.

## Scope

This document shall describe all requirements for the Domino’s Pizza POS Transaction System. Our scope is to supply our client with a functional POS software system that allows regular account users to place orders and view a receipt of the order.

## Definitions, Acronyms, and Abbreviations

#1BPDP – Number One Best Professional Development Practices

CPU – Central processing unit

GB – Gigabyte

GUI – Graphic User Interface

Initial user account – the first user account that is available when the system is run for the first time after installation, with “Admin” and “0000” as its employee name and four-digit code

MB – Megabyte

POS – Point of Sales

RAM – Random access memory

SDD – Software Design Document

SDP – Software Development Plan

SRS – Software Requirements Specification

STP – Software Test Plan

USB – Universal serial bus

## References

* Customer requirements specified on September 4th, 2014
* Software Development Plan (SDP) version 2.0; October 21, 2014; Number One Best Professional Development Practices (#1BPDP)
* Traceability Matrix version 1.0; October 2, 2014; #1BPDP
* Software Design Document (SDD) version 1.0; October 7, 2014; #1BPDP
* Software Test Plan (STP) version 1.0; November 11, 2014; #1BPDP

## System Overview

The objective of this project is to develop a POS Transaction System for Domino’s Pizza. The system will have the ability to log on with different user accounts, contain a Graphical User Interface (GUI) for placing orders consisting of common items for sale by Domino’s Pizza, and display an onscreen receipt for a completed order.

# Function Description

These software requirements are the software development team’s interpretation of the needs as communicated by the customer representative.

The following statements describe the essentiality of each requirement to the system:

* The verb “must” included in a statement describes a requirement that is necessary for the system.
* The verb “should” included in a statement describes a requirement that is optional for the system.

## Login Screen

### Login Screen Components

The following components must be present on the login screen.

#### Employee Code Field

This field must accept valid four-digit employee codes.

#### Login Button

When valid login information is entered, this button must allow the user to proceed to the POS screen.

### Invalid Login Information

When invalid login information is entered, the system must display a message to the user indicating that invalid login information was entered.

#### Validation Message

When the invalid login message is displayed, the system must also display the invalid employee code that was entered. Acknowledging the message will return the user to the login screen.

## POS Screen

### Order Management

#### Order Placement

The system must allow any regular user to add the following items for sale to an order in progress:

* Two-liter sodas
* Small, medium, and large pizzas
* Small, medium, and large specialty pizzas

##### Item Quantity

The system must allow any regular user to add between 0 and 100 total sodas and 0 and 100 total pizzas.

##### Adding a Pizza

The system must require the user to select the pizza size before adding toppings to the pizza.

##### Specialty Pizzas

The system must contain the following specialty pizzas as items for sale:

* Hawaiian Pizza
* Meat Lovers’ Pizza

##### Toppings

The system must allow adding any combination of the following toppings in quantities of either 0 or 1 per topping to an entire pizza:

* Pepperoni
* Sausage
* Ham
* Bacon
* Extra Cheese
* Chicken
* Onions
* Green Peppers
* Mushrooms
* Black Olives
* Pineapple

##### Toppings Display

The system must display the toppings of the pizza on the running receipt.

##### Price Display

The system must display the prices for items in an order on the running receipt.

#### Order Cancellation

When an order is cancelled, the system must clear all items from the current order.

#### Order Completion

When an order is completed, the system must display an onscreen receipt for the order unless the order contains no items.

##### Onscreen Receipt Components

The onscreen receipt must contain the following components:

* Employee name associated with the order
* Unique order number
* Items ordered
* Subtotal
* Tax
* Grand total

###### Order Number Construction

Order numbers must increase by 1 successively, starting from 0.

###### Order Number Persistency

The system must keep track of order numbers that have already been used across sessions on the same computer system.

#### Empty Order Notification

When a regular user attempts to complete an order that contains no items, the system must display a message notifying the user that the order is empty. After acknowledging the message, the system must return the user to the POS screen.

## User Accounts Administration Screen

The system must display a list of all users’ account information on the user accounts administration screen to any user.

### Add New Employee

The system must allow any user to create a new user account by providing new login information consisting of an employee name and unique four-digit code.

#### Existing Four-Digit Code

When a user attempts to create a new user account using a four-digit code that is already in use, the system must notify the user that the entered four-digit code is already in use, prompting the user to enter a different four-digit code to use for the new user account.

### Edit Employee

The system must allow any user to change another user’s account information.

### Delete Employee

The system must allow any user to delete any other user’s account unless the account to be deleted is the initial user account.

#### Attempt to Delete Initial User Account

When any user attempts to delete the initial user account, the system must display a message indicating that the initial user account cannot be deleted.

### Account Persistency

Valid user login information must be recognized from session to session on the same computer system.

## Price Configuration Screen

### Configurable Items

The following items must be configurable:

* Soda price
* Small pizza price
* Medium pizza price
* Large pizza price
* Small specialty pizza price
* Medium specialty pizza price
* Large specialty pizza price
* Topping price
* Tax rate

#### Configuration Ranges

The configurable items must fall within the following ranges:

* $0-100
* 0-20%

### Configuration Persistency

The system must save the values for the configurable items across all user sessions.

## User Account Management & Navigation

### Current User Display

While a user is logged into the system, the system must display their employee name.

### User Logout

When a user logs out, the system must return to the login screen unless there are one or more items in the current order.

#### Order in Progress Prompt

When the user attempts to log out while there is at least one item in the current order, the system must display a prompt notifying the user that an order is in progress.

### Initial User Account

The system must provide an undeletable initial user account with “Admin” as the employee name and “0000” as its associated four-digit code when the system is run for the first time after installation.

#### Initial Account Permissions

The system must allow the initial user account to only administrate user accounts and configure prices and rates, preventing the completion of any orders.

### Navigation Links

The system must allow all users to navigate to any of the following screens from any other screen unless there are one or more items in the current order:

* POS Screen
* User Accounts Administration Screen
* Price Configuration Screen

# System Requirements

This section describes the minimum hardware and software requirements to run the program.

## Hardware Requirements

The Domino’s Pizza POS Transaction System must run on a computer with the following minimum specifications:

* 1 GB RAM
* 2.0 GHz Dual Core CPU (Intel or AMD)
* 500 MB free hard drive space
* Keyboard
* Mouse

## Software Requirements

The system must be compatible with the following versions of the Windows Operating System:

* Windows 7

# Interfaces

This section examines all external interfaces used by the program.

## Hardware Interfaces

The system must utilize keyboard and mouse input for application controls.

## Standalone Program

The program must run without interacting with any networks.

# Performance

This section specifies performance requirements for the system, including loading and response times.

## Load Time

The system must load within 5 seconds.

## Response Times

### Adding Item to Order Response Time

The system must update the order within 1 second of adding an item.

### Order Completion Response Time

The system must display the onscreen receipt within 1 second of completing an order.

### Navigation Response Time

The system must navigate to a new screen within 1.5 seconds.

# Delivery

This section details how the program will be delivered, what documentation with accompany the software, and what training will be provided.

## Delivery Media

The system must be installed by file transfer from a USB flash drive or by unzipping a zip file attached to an email.

## Training

The software development team must demonstrate use of the system during their scheduled presentation time.

# Schedule

The software development team must provide the following artifacts on the corresponding delivery dates:

* SRS – September 23, 2014
* Traceability Matrix – September 30, 2014
* SDD – October 7, 2014
* Updated SDP – October 21, 2014
* Updated SRS – October 23, 2014
* Updated Traceability Matrix – October 28, 2014
* Updated SDD – November 6, 2014
* STP – November 11, 2014
* Updated STP – November 20, 2014
* List of Documentation, Media, and Miscellaneous – December 2, 2014

# Miscellaneous

There are currently no miscellaneous requirements.