

DEPARTMENT OF INFORMATION SYSTEMS
SYSTEMS DESIGN & DEVELOPMENT



SYSTEMS SPECIFICATION FOR POPPEL

TEAM MEMBERS

Student Number: CLNSIH001	Student Name: Sihle Calana
Student Number: KHNAHM006	Student Name : Ahmed Khan

PLAGIARISM DECLARATION

1. We know that plagiarism is wrong. Plagiarism is to use another's work and pretend that it is one's own.
2. This Systems Specification is our own work.
3. We have not allowed, and will not allow, anyone to copy our work with the intention of passing it off as their own work.

Full Name: _____ Sihle Calana _____ Signed:  Date: 10 / 05 / 2020

Full Name: _____ Ahmed Khan _____ Signed: _____ A.K _____ Date: 10 / 05 / 2020

TABLE OF CONTENTS

1. INTRODUCTION	1
1.1. OVERVIEW OF SPECIFICATION.....	1
1.2. CONTEXT & SCOPE OF SYSTEM SPECIFICATION	1
2. USER INTERFACE & DIALOGUE DESIGN	1
2.1. WIREFRAME DIAGRAM OR WINDOWS NAVIGATION DOCUMENT	1
2.2. SCREEN STANDARDS.....	2
2.3. DETAILED SCREEN LAYOUT	2
3. DESIGN SEQUENCE DIAGRAMS	4
4. DESIGN CLASS DIAGRAMS	5
5. ENTITY RELATIONSHIP DIAGRAM	6
6. REPORT DESIGN	6
6.1. REPORT 1	ERROR! BOOKMARK NOT DEFINED.
6.1.1. Detailed Output Requirements	6
6.1.2. Report Layout.....	8
7. IMPLEMENTATION PLAN	8

1. INTRODUCTION

1.1. OVERVIEW OF SPECIFICATION

The system specification documents the approach that will be used to develop an Order Processing system for Poppel. This will aid the marketing clerk in accepting orders and storing information on customers and their orders on a database as well as records of ingoing and outgoing inventory.

This document will detail how the user interface will look (using wireframes), the functions that occur in the background when the clerk interacts with the system (though sequence diagrams) and the information stored about objects like inventory, customers & orders (as displayed by the class diagram) as well as the relationship between these objects as shown in the entity relationship diagram.

1.2. CONTEXT & SCOPE OF SYSTEM SPECIFICATION

Poppel is a soft drink manufacturer who is looking to overhaul their aging systems. The aim for this project is to produce a piece of software that will help to smoothen the process of order placement between customers and clerks.

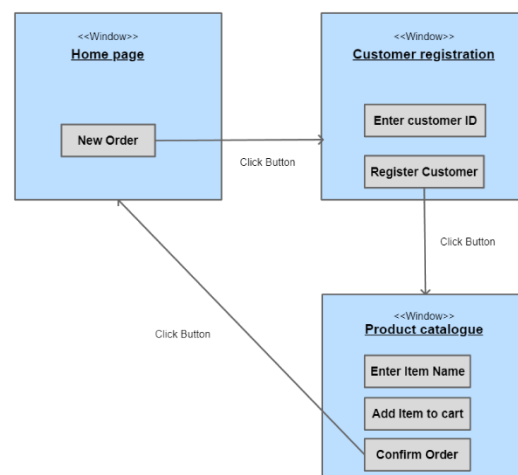
The requirements of this project are to develop an environment where are marketing clerk will be able to initiate an order on behalf of a customer. With a customer on the telephone, a clerk should be able to access that customers details using their unique customer registration number. The system should be able to check that the customer has a valid credit score, and if so, an order may be placed. The clerk will be able to view available items in the product catalogue and add them to the customers cart as he pleases, while the system will check the availability for each of these products. Once the customer is satisfied with the order, the clerk will be able to confirm it and an invoice will be sent out to the customer.

2. USER INTERFACE & DIALOGUE DESIGN

2.1. WIREFRAME DIAGRAM OR WINDOWS NAVIGATION DOCUMENT

The program will be made up of three separate forms as displayed in the windows navigation document below. The first window will act as a homepage where a new order can be initiated. The second window will allow for customer registration. This is where a customer ID will be searched, and the customer's credit status will be checked. If Credit status is good, then the clerk will be able to register the customer, and this will take him to the final window which will display the product catalogue. Here the clerk will be able

to view and add items to a cart before confirming the order. Once the order is complete the Clerk will be returned to the home screen where he can begin the next order.



We felt that it was important to split each activity up into its own form in order to keep information on each page as simple and relevant as possible.

2.2. SCREEN STANDARDS

Each form will have the Poppel logo set in the top left corner. Underneath this will be the form heading, followed by whatever controls may exist in that form. When required, search bars will be used to find various customers and products. The bulk of the contents within each page will be displayed within a rich edit box aligned to the left of the screen

2.3. DETAILED SCREEN LAYOUT

Main Screen

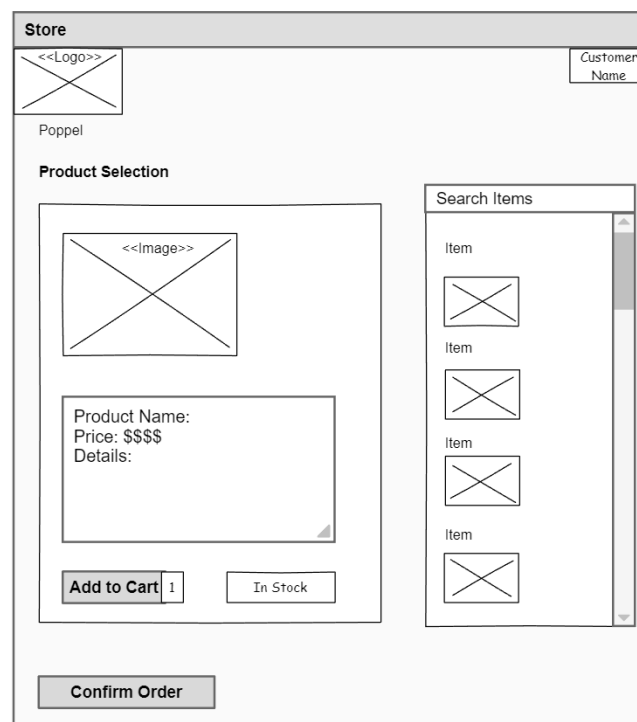


Customer Registration



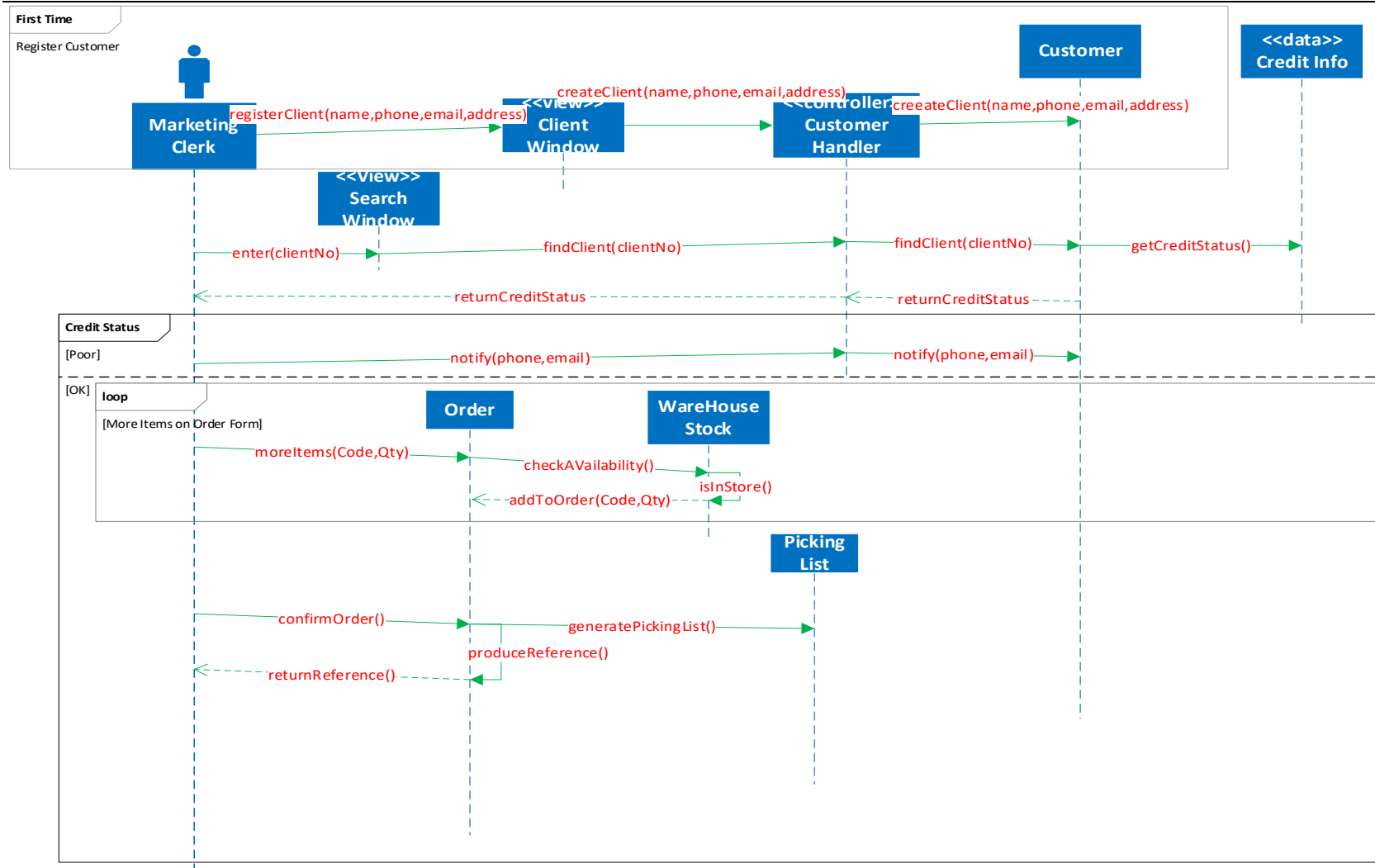
A screenshot of a 'Customer Registration' window. The window has a title bar with standard OS controls. Inside, there is a logo placeholder (a box with an 'X') and the name 'Poppel'. Below this is the section 'Customer Registration' which contains a text input field for 'Search Customer ID' and a 'Search' button. Underneath is the 'Customer Details' section, which is a large box containing the text: 'Customer ID: xxx xxxx xxx', 'Surname:', 'Name:', and 'Credit Status:'. At the bottom of the window is a 'Register customer' button.

Product Catalogue

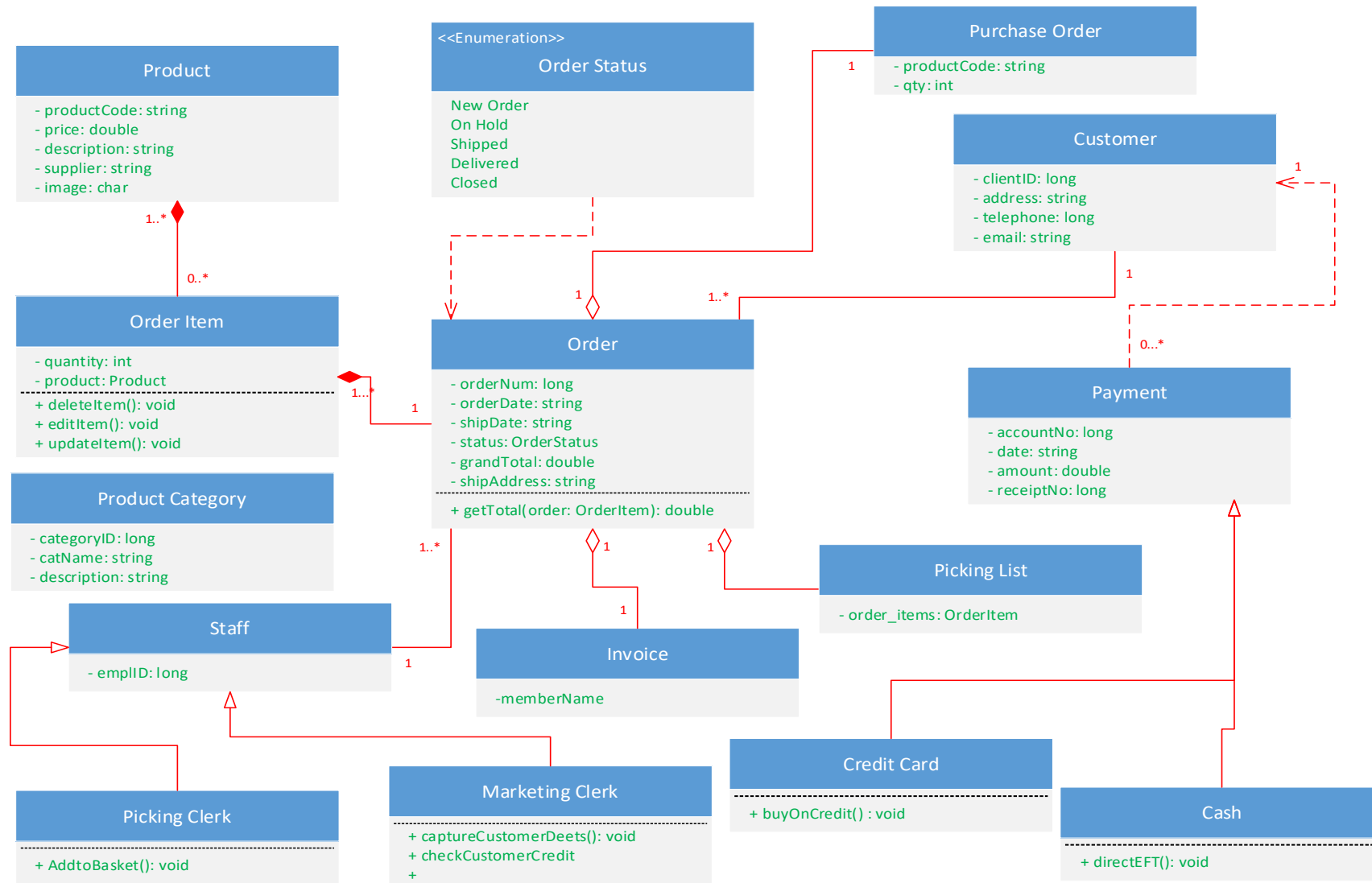


A screenshot of a 'Store' window. The title bar says 'Store'. The window contains a logo placeholder (a box with an 'X') and the name 'Poppel'. In the top right corner, there is a 'Customer Name' label. The main area is divided into two columns. The left column is titled 'Product Selection' and contains a large box with a placeholder for an image (a box with an 'X') and a text area with 'Product Name:', 'Price: \$\$\$\$' and 'Details:'. Below this box are two buttons: 'Add to Cart' with a quantity of '1' and 'In Stock'. The right column is titled 'Search Items' and contains a list of four items, each represented by a placeholder box (a box with an 'X'). At the bottom of the window is a 'Confirm Order' button.

3. DESIGN SEQUENCE DIAGRAMS



4. DESIGN CLASS DIAGRAMS



5. ENTITY RELATIONSHIP DIAGRAM



6. REPORT DESIGN

This Section will be where you describe the reports that the system will generate. Ensure to add valuable relevant reports only, and to outline complete Requirements Definitions for each Report discussed. You should have at least 1 report outlined in this section.

6.1. DETAILED OUTPUT REQUIREMENTS

Report type & ID: Operational report

Report Objectives: The objective of this report is to record the daily transactions occurring within the business, as well as act as a confirmation message for the customer who is making the purchase

Audience: This report may be viewed by marketing clerks but are primarily for customers in order to confirm their purchase

Report Content: Content will include information regarding details of a purchase. This will include customer name, order number, date of purchase as well as a list of all purchased items and their quantity and prices.

Layout: A list of purchased items will be displayed in rows

Selection: The data displayed will be any relevant information to the customer's order

Sequence: Items within the order will be organized in the order in which they were added to the cart

Grouping / Summarization: Reports on daily transaction will be summarized in columns

Comparison: select_order

Media to be used: Reports will be generated digitally and be presented electronically, or may be printed and mailed to customer

Frequency, Timing, Delivery: Reports will be generated upon the confirmation of an order by the marketing clerk

Distribution: Reports will be emailed to customers or if requested they will be mailed to them

Privacy, security & integrity requirements: Reports should only be available to the customer and the clerk who is assigned to place that customers order

6.2. REPORT LAYOUT

Order Confirmation

Order Number: XXX XXX

Order Date: XX-XX-XXXX

Customer Name

Items in this order

	generic item name	1	R XXX
	generic item name	1	R XXX
			Total
			R XXX

7. IMPLEMENTATION PLAN

Build Object Classes - To be completed by 11 October

- The first step towards implementation will be the development of the class entities which will form the building blocks of this project

Build database classes – To be completed by 17 October

- The second step will be the development of the database classes. These will store information regarding the Customer and Product entities.

Build UI – To be completed by 23 October

- Next will be the constructing of windows forms in order to create the UIs depicted in the wireframes above

Create functionality between the various layers – To be completed by 29 October

- The next stage will be the development of functionality within the entire program. All layers previously created must be able to link together and communicate with each other in order to present the experience outlined in the system specification

Bug testing - To be completed by (4 November)

- The final stage will be the testing of what should be a virtually completed project. The date 4 November is the due date outlined in the specification document however this may be subject to change

Submit

- The completed project will be submitted on the due date