Final Project Report

TEA EXPORT FACTORY MANAGEMENT SYSTEM

COSC 31093

Enterprise Software Design and Architecture

Group 03

Table of Contents

Client Information:

Company Name: UniWorld TEAS (Pvt) Ltd

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Introduction

The proposed project aims to design and develop an Enterprise Resource Planning (ERP) system for UniWorld TEAS (Pvt) Ltd. This ERP system will streamline the process of collecting tea powders from various sources across Sri Lanka and efficiently manage the exportation process to international markets.

Description about the project

UniWorld TEAS (Pvt) Ltd is a prominent tea exporting company that collects tea powder from local tea producers and exports it to various international markets. To streamline their operations, enhance efficiency, and maintain high-quality standards, we propose the development of a comprehensive Tea Factory Management System(TFMS). The TFMS will be a robust software solution designed to manage the entire tea production process, from tea leaf collection to packing and export. This system will enable UniWorld TEAS(Pvt) Ltd to monitor and control each aspect of their operations, resulting in improved productivity and quality control.

Objectives

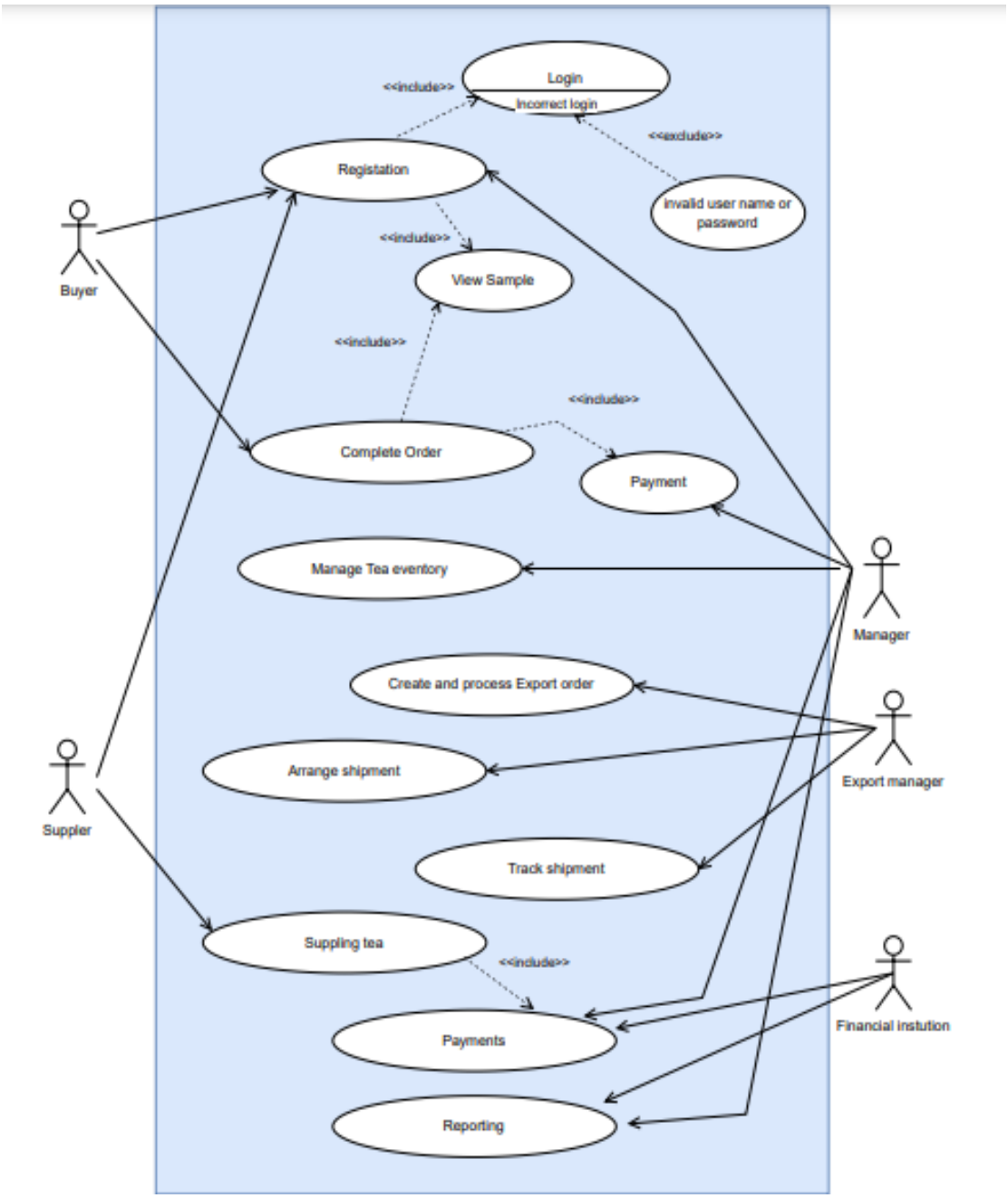
1. Design and Develop an ERP system tailored to the needs of UniWorld TEAS (Pvt) Ltd.
2. Create a centralized database for tea powder inventory management.
3. Implement modules for procurement, production, quality control, and export management.
4. Develop a user-friendly web-based interface for easy access and monitoring.
5. Integrate reporting and analytics features to provide valuable insights.
6. Ensure data security and compliance with relevant regulations.

Functional Requirements

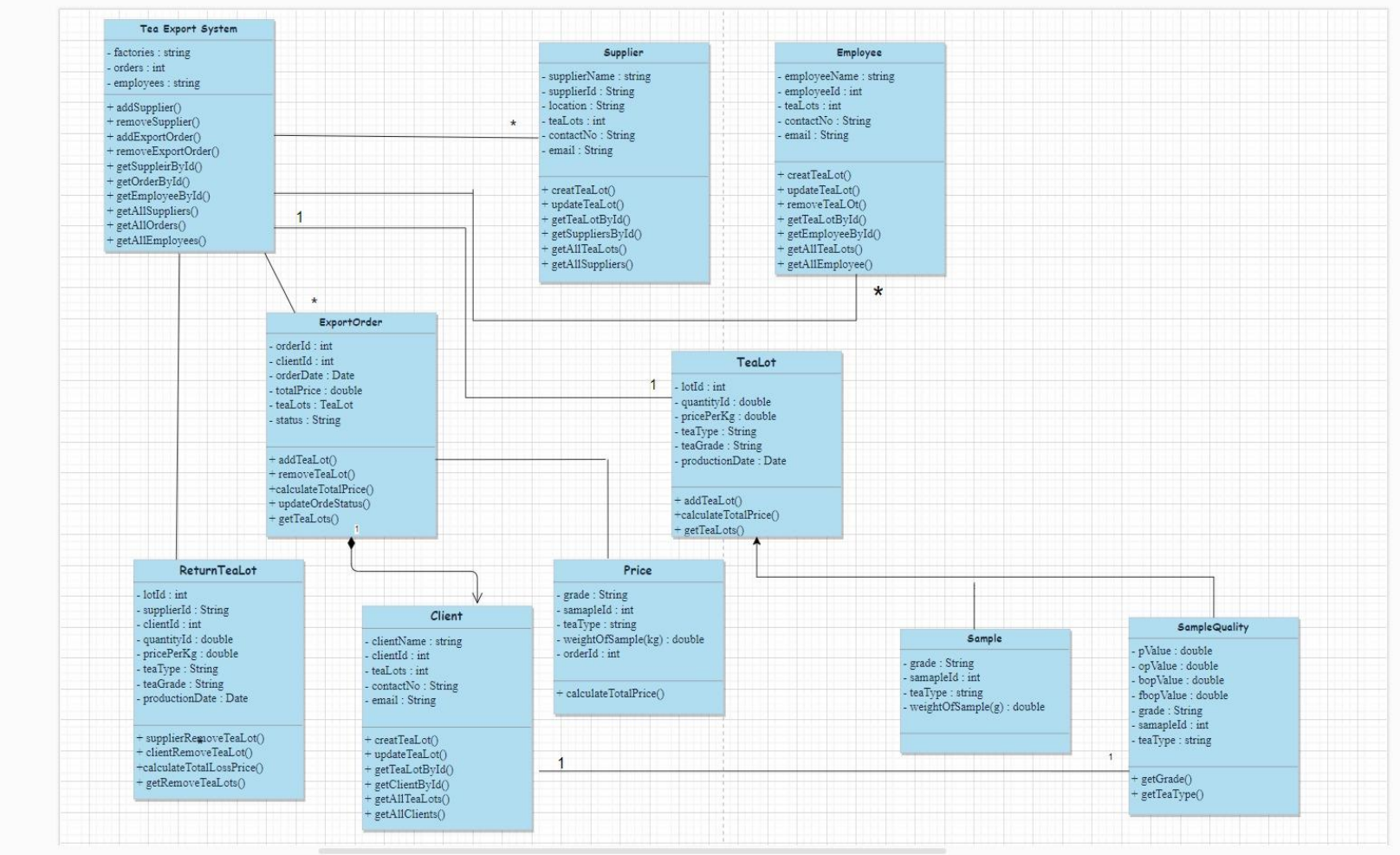
- Inventory Management
- Quality Control
- Supplier Management
- Order Processing
- Shipping and Logistics Integration
- Financial Management
- Forecasting and Demand Planning
- Customer Relationship Management (CRM)
- Staff Management

Diagram

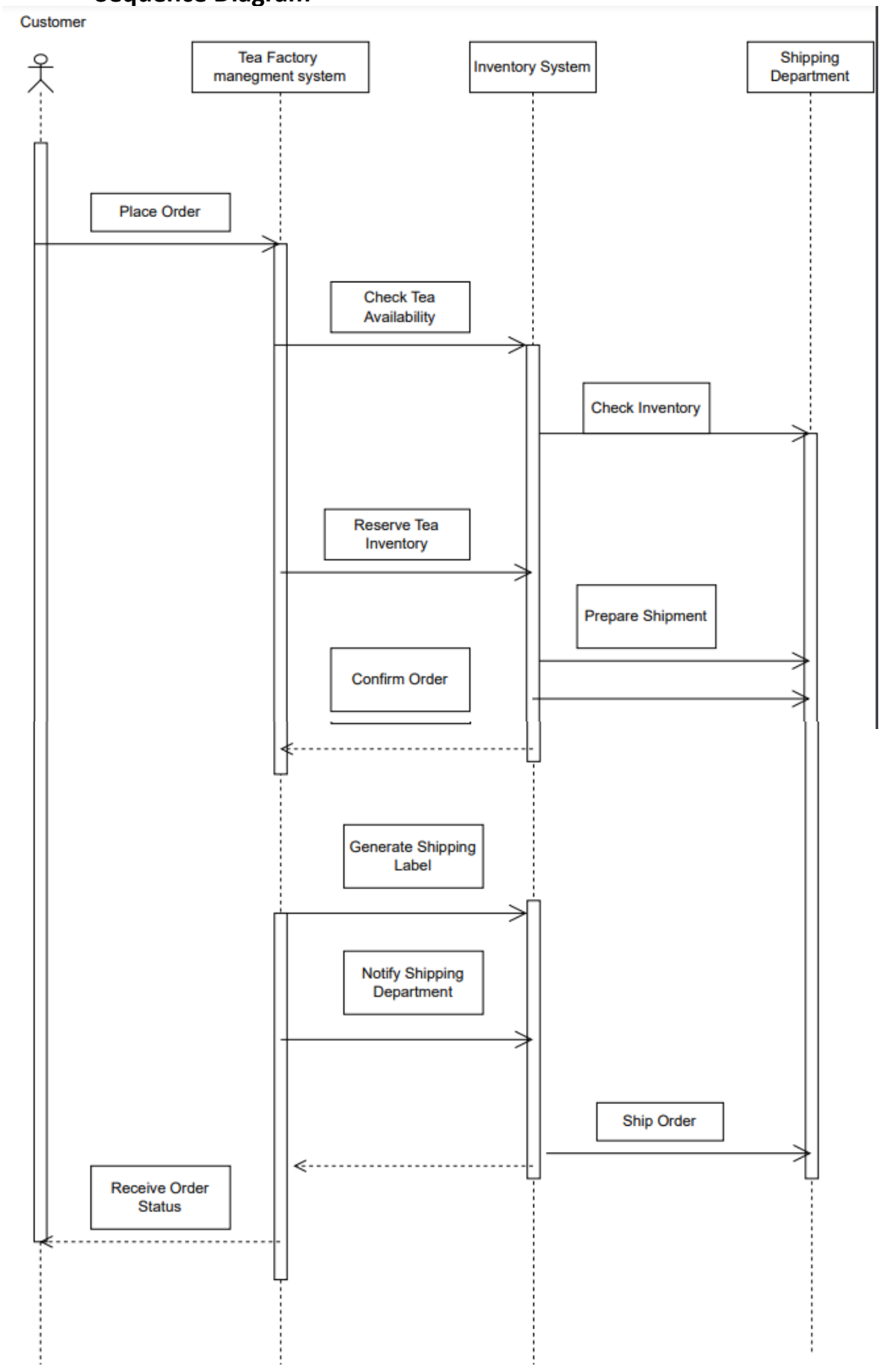
Use case Diagram



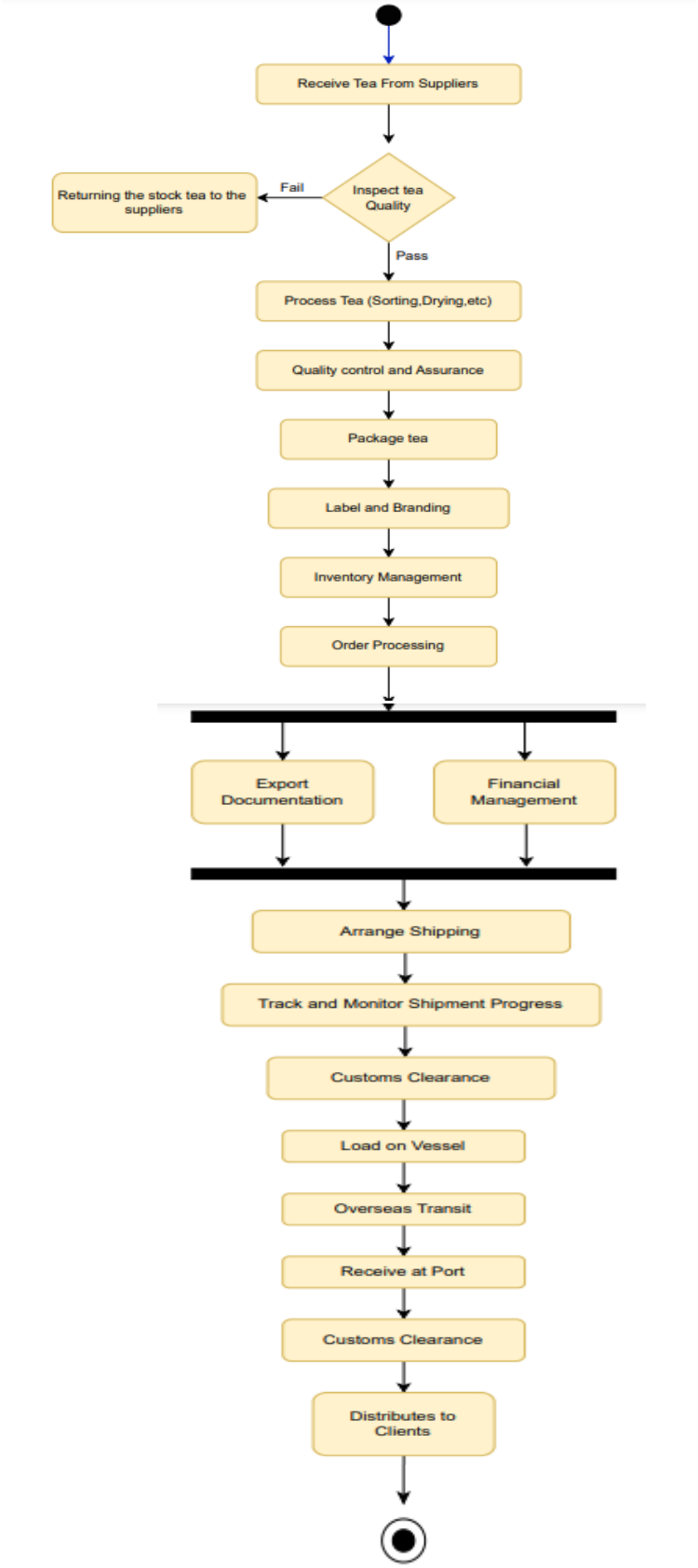
Class Diagram



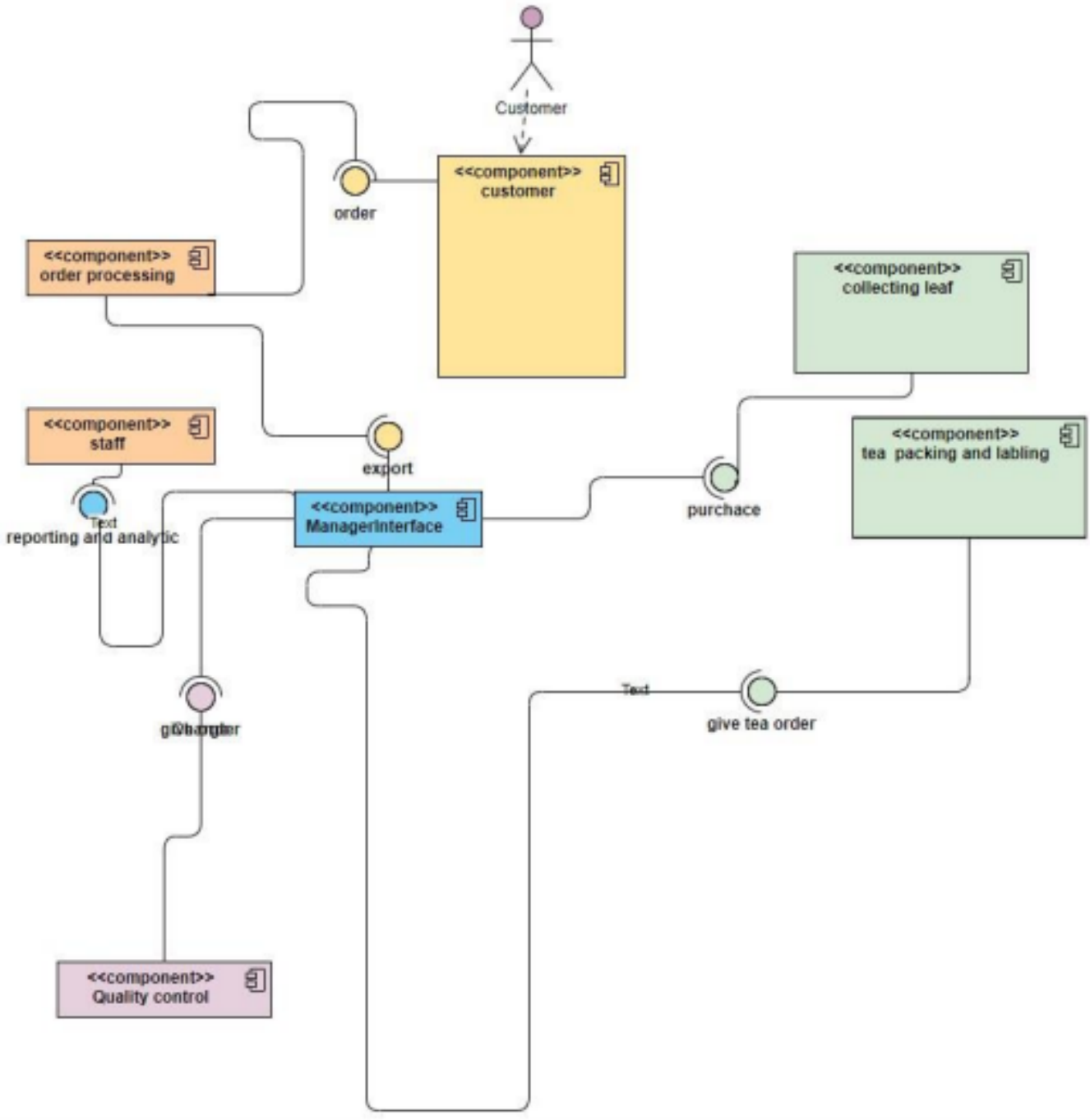
Sequence Diagram



Activity Diagram



Component Diagram



Implementation

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
namespace WindowsFormsApp1
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }
      private void login_Click(object sender, EventArgs e)
         if (textBox1.Text == "Admin" && textBox2.Text == "Password")
         {
            Form2 obj = new Form2();
            obj.Show();
            this.Hide();
         }
         else
         {
            MessageBox.Show("Wrong UserName or Password");
```

```
        }
    }
    private void Form1_Load(object sender, EventArgs e)
    {
        /*userDatabase["user1"] = "password1";
        userDatabase["user2"] = "password2";*/
bool loggedIn = false;
        int attempts = 3;
 while (!loggedIn && attempts > 0)
        {
            Console.Write("Enter username: ");
            string username = Console.ReadLine();
            Console.Write("Enter password: ");
            string password = Console.ReadLine();
            if (ValidateUser(username, password))
            {
                Console.WriteLine("Login successful!");
                loggedIn = true;
            }
            else
            {
                attempts--;
                Console.WriteLine($"Login failed. {attempts} attempts left.");
            }
        }
if (!loggedIn)
        {
            Console.WriteLine("Too many failed login attempts. Exiting...");
        }
```

```
        }
        static bool ValidateUser(string username, string password)
        {
            if (userDatabase.ContainsKey(username))
            {
                string storedPassword = userDatabase[username];
                // In a real application, you'd compare hashed passwords.
                // For simplicity, we're comparing plain text passwords here.
                return storedPassword == password;
            }
            return false;
        }
    }
}
}
}
```

Team Members

PS/2019/279 - S.Arshana (Leader)

PS/2019/024 - P.D.Lakmini

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