

Topic: Online Laundry Service

Group no: MLB\_WD\_CSNE\_13\_09

Campus: Malabe

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We declare that this is our own work and this assignment does not incorporate without acknowledgment any material previously submitted by anyone else in SLIIT or any other university/Institute. And we declare that each one of us equally contributed to the completion of this Assignment.

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# Terms of Reference

This report was prepared to fulfill the requirements of the module Object Oriented Concepts

(OOC – IT1050) at the Sri Lanka Institute of Information Technology (SLIIT).

# Acknowledgment

We would like to express our deepest appreciation to all those who provided us with the possibility

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# Introduction

Modernization has changed the lifestyle of the society by a tremendous amount, in developing countries computerized laundry management systems are well accepted due to the elimination of flaws in traditional systems such as inefficiency of time, data inaccuracies, and errors in customer details. This report proposes an online laundry system which is more time efficient and convenient to the customer.

# Requirement Analysis

* Create accounts for new customers.
* Verify login credentials of customers.
* Place orders online.
* Cancel already placed orders.
* Calculate the fee based on information provided.
* Track the order
* Assign employees for each task.
* Update status of each order.

# Description of the requirements

The online laundry service allows customers to place online orders via the website of the laundry center whenever they require laundry service.

Prior to placing an order, new Customers must register by creating a user account while existing customers must login using their credentials.

The following details are required to be provided by the customer for placing an order.

* The service type. (laundry or dry cleaning must be chosen.)
* Approximate weight of the items.
* Pickup and delivery location.

The service charge is estimated based on the weight of the clothes and service type. The total charge will be automatically calculated by the system by adding taxes. That amount must be settled using an online payment processing method when placing the order. A staff member verifies the order details with the payment and confirms the order. From here onwards, customers can track the order status (confirmed, picked, processed, packed, shipped, or delivered) through the website. Customers can cancel the orders before it had been picked up by the laundry center.

After order confirmation, the laundry sends an employee to inspect the items and bring them to the laundry center. Each order is assigned to multiple staff members who are responsible for updating the order status after completing the assigned task (pickup, cleaning, packing, delivery).

First, a staff member sanitizes the clothing items. Next, clothes are washed or dry cleaned based on the order type chosen by the customer. Then, clothes are folded and packaged prior to delivery. When the process inside the laundry is finished, the package is delivered back to the customer’s location.

# Classes

* Customer
* CustomerList
* Order
* Staff
* Status
* Util

# Class Diagram

Diagram

Description automatically generated

# CRC cards

|  |  |
| --- | --- |
| **Customer** | |
| **Responsibility** | **Collaborators** |
| Store customer contact details and location.  Store customer login credentials |  |

|  |  |
| --- | --- |
| **CustomerList** | |
| **Responsibility** | **Collaborators** |
| Search user credentials for login purposes | Customer |

|  |  |
| --- | --- |
| **Order** | |
| **Responsibility** | **Collaborators** |
| Store Order details  Place Order  Assign staff members for each order  Calculate Total Charge per Order  Display Order summery | Customer  Staff  Util |

|  |  |
| --- | --- |
| **Status** | |
| **Responsibility** | **Collaborators** |
| Update order status. | Order  Staff  Util |

|  |  |
| --- | --- |
| **Staff** | |
| **Responsibility** | **Collaborators** |
| Input employee details  Process the refund |  |

|  |  |
| --- | --- |
| **Util** | |
| **Responsibility** | **Collaborators** |
| Generate universally unique identifiers |  |

# Project Structure

Table

Description automatically generated with low confidence

# Individual Contributions

|  |  |  |
| --- | --- | --- |
| **Registration No** | **Name** | **Contribution** |
| All members | | main.cpp |
| IT21258176 | Sanuja Methmal | Customer.hpp  Customer.cpp  CustomerList.hpp  CustomerList.cpp |
| IT21337512 | Thisun Senaratna | Order.hpp  Order.cpp |
| IT21266232 | Induwara Ashinshana | Staff.hpp  Staff.cpp |
| IT21283376 | Avishka Pramod | Util.hpp  Util.cpp |
| IT21245756 | Pivithuru Milan | Status.hpp  Status.cpp |

# Source Code

## main.cpp

by all members 



## Customer.hpp

by Sanuja Methmal | IT21258176



## Customer.cpp

by Sanuja Methmal | IT21258176





## CustomerList.hpp

by Sanuja Methmal | IT21258176



## CustomerList.cpp

by Sanuja Methmal | IT21258176



## Order.hpp

by Thisun Senaratna | IT21337512



## Order.cpp

by Thisun Senaratna | IT21337512





## Staff.hpp

by Induwara Ashinshna | IT21266232



## Staff.cpp

by Induwara Ashinshna | IT21266232



## Status.hpp

by Pivithuru Milan | IT21245756



## Status.cpp

by Pivithuru Milan | IT21245756



## Util.hpp

by Avishka Pramod | IT21283376



## Util.cpp

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