**CSC4350 Problem Statement:**

**The B.F.L.O.P Hotel.**

1. **INTRODUCTION**

The B.F.L.O.P Hotel consists of 35 guest rooms, 3 function rooms, a restaurant, a bar, and a recreational center including spa, swimming-pool, and gym. Types of services offered by the hotel fall under:

* Laundry services
* Concierge Services
* Spa Services
* Pool and Gym services
* Bar and Restaurant Services

The hotel requires a software system named Hotel Management System (HMS) that will help to improve management and organization. Many administrative tasks that have previously been completed manually will now be automated by the system in the hope of increasing overall efficiency.

1. **Hotel Management System (HMS)**

The HMS shall automate the scheduling and recording of all reservations for guest rooms and function rooms. The purchase of any additional services shall also be tracked for each customer account.

**2.1 HMS - Scheduling**

The HMS shall maintain daily schedules of guest rooms and function rooms. The HMS shall also maintain a daily schedule for the concierge, restaurant, spa, pool/gym, and laundry service respectively.

**2.2 HMS – Pricing**

The HMS shall maintain a database of base prices associated with all room types and packages. Pricing of reservations shall be calculated dynamically based on time of booking and special-offers. Pricing for all additional services associated with a customer account shall be tracked between check-in and check-out. All pricing shall be tallied during the check-out procedure and an itemized bill shall be generated for the customer.

**3.0 User Access**

There shall be two basic user account types: customers and hotel staff members. Various levels of access shall be granted for different staff members. Staff members shall be restricted to performing operations related to their department. The system shall require users to log in under their personal user account by providing a distinct username and password.

**3.1 HMS – Customer Use**

New customers shall have the opportunity to create a user account. Customers shall be able to use the HMS to make reservations for guest rooms and function rooms. The customer shall also be able to use the HMS to reserve additional services from the hotel.

* 1. **HMS – Staff Use**

Management Staff shall have the ability to create new accounts for staff members. Staff members shall be able to use the HMS to Manage customer reservations and perform customer check-in and check-out. Staff shall also be able to add additional services to customer accounts. Staff shall have access to all schedules maintained by the HMS. Housekeeping staff shall be able to use HMS to manage room status.

1. **HMS – Inventory Management**

The HMS shall maintain records of current inventory for each hotel department. Any consumption or use of inventory for sales or services shall be automatically tracked. Hotel staff shall be able to manually record any destruction to or loss of inventory into the HMS. Regular orders for replacement inventory shall be automated by the HMS.