**Hotel Management System**

1. Manager login
2. Current Clients
3. Current Employee
4. Due of the Clients
   1. Payment list
5. Records
6. Messages
7. Client login/ sign up
8. Book room
   1. Package list
      1. Single/double
      2. AC/Non-AC
   2. Food system
9. Current Status
   1. Package details
      1. Room number
      2. Type: Single/double - AC/Non-AC
      3. Food System
      4. Staying details
   2. Payment details
10. Change package
11. Change Password
12. Check out
    1. Paid status
    2. Payment
    3. Review
13. Complain and Suggestions

**Manager object:**

Login system, he can see the current clients, working employee, the dues which are unpaid, their list, the records of previous Clients, also the Current rating of his hotel and if there is any complain or suggestions these can also be seen .

**Client object:**

An object profile would be created with name, phone number, ID and password encrypted inside.

After log in he/she can book any room as their choice depending on availability, there will be shown some packages with the rates, the food system while enrolling. The client can check his current status of the package, systems and also the payment status. They can also change the package and their password through this menu. While checking out, the client can see the payment amount and status and give a review and rating. Even while staying, he/she can place any complain or suggestion.

The whole thing will be in a menu bar. The user has to sign in or sign up. The data will be preserved in several files. The clients’ data will be handled carefully with data encryption. The whole system will be a compact one. All the programme files will be written in C++.

**Implemented topics:**

1. File read, write and append.
2. Object creation and manipulation.
3. Vector and list
4. Structure based work
5. Sorting algorithm
6. Encryption-decryption
7. Data preservation
8. Menu bar management
9. Mathematical function usage
10. Header file inclusion