

# **DOUBLE TREE HOTEL BILLING APPLICATION**

# **Software Requirement Specification (SRS) Document**

**Sprint 1 Implementation** 

Project Timeline: 20.10.2022 to 27.10.2022

## **INDEX**

1. Introduction	
1.1 Purpose	4
1.2 Intended audience	4
1.3 Intended use	4
1.4 Scope	5
2. Overall description	5
2.1 Assumptions and dependency	6
3. System feature and requirements	6
3.1 Functionality	
3.1.1 F01-> Application process	6
3.1.2 F02-> Customer ID	(
3.1.3 F03-> Booking ID	6
3.1.4 F04-> Check-ins and check-outs	6
3.1.5 F05-> Information about rooms	7
3.1.6 F06-> Bills should be displayed at the time	
of check-out of customer	
3.1.7 F07-> Total Bills	
3.1.8 F08-> Room Type	8
3.1.9 F09-> Validations	8
3.1.10 F10-> Proper Validations	8

3.2	Technical Requirements	8
	3.2.1 TR01-> C Programming language	8
	3.2.2 TR02-> Files input/output operation	8
	3.2.3 TR03-> Use Data Structure and	
	dynamic memory allocation	8
	3.3 Non Functional Requirements	
	3.3.1 NFR01-> Make file	8
	3.3.2 NFR02-> Val grind tool	8
	3.3.3 NFR03-> C tags	8
4.Sys	stem Features	9
5. Da	ata Flow Diagram	
	5.1 DFD level 0	10
	5.2 DFD level 1	11

#### 1. Introduction: -

The introduction of the software requirement specification provides an overview of the entire software. The entire SRS with overview description purpose, scope, tools used and basic description.

The hotel industry is also looking for reliable hotel billing software to make their financial accounting easier and simpler by all means. The billing software will help the hotel owners to bill their consumers in a convenient way for services provided along with the generation of billing reports. Management utilizes the billing report to keep a track of the income generated. It includes the feature of capturing the invoice record of customers to present a total amount to be paid by them. In addition, all the details of the bill are saved to a database to allow users or management to recover saved records of billing. The hotel industry needs to document the accurate billing of the customer properly. It simply helps you to maintain seamless business transactions which are very important. In short, managing billing records can now become very easy when it comes to choosing the best hotel invoicing software.

### 1.1 Purpose:

The purpose of Hotel billing record system is used to capture the bill record of customers to come up with total amount to be paid by the customer. The information is saved to a database to enable management or users to retrieve saved billing records. The service rendered by hotel industry is associated with charges.

1.2 Intended Audience:-The document is intended to be read by, Client.

#### 1.3 Intended Use: -

- Development Team
- Maintenance Team
- Clients

Since this a general-Purpose Software any one can access it.

#### 1.4 Scope: -

This billing system focus on the development of an information system that will automate manual transaction in Hotel

- 1.It will generate receipt on every transaction inputted to the system.
- 2. The software will display view of calculations of every transaction.
- 3.For security and privacy of the management, the Billing System comply two log-in users with different access level.
- 4. The system will store and recognize customer reservations.

#### 2. Overall Description: -

A hotel system manages information about rooms, reservations, customers, and customer billing. A customer can make reservations, change, or cancel reservations through the hotel website. When a customer makes reservations, he/she needs to check if a room the customer wants to reserve is available. If a room is available, the customer enters his/her information to the system and receives a confirmation number from the web site. A desk clerk checks in a customer with only a prior reservation, change the checkout date, and check out the customer. A room is assigned to the customer at check-in time and a customer billing record is created at that time. The customer billing record is updated every night at 12. When a customer checks out, the desk clerk prints the bill. A customer can pay by cash, check, or credit card when he/she checks out.

The manual billing system is time consuming: It takes time to compute the bill of customers in Human error due to miscalculations: Miscalculations can occur as a result of human error such as.

It is difficult to easily manage and update billing information: If there is need to correct a billing record or make changes, it will be difficult to instantly find and update the bill record of the particular customer.

Billing the activity of charging a client for goods and services rendered. Accounting the activity, practice, or profession of maintaining the business records of a person or organization. System a combination of components working together to achieve a particular goal. Software programs and applications that can be run on a computer system Management the organizing and controlling of the affairs of a business or sector of a business. Hotel An establishment that provide accommodation and other services for paying guest

#### 2.1 Assumptions and Dependency: -

- System should have any flavor of Linux installed.
- System should have either 4GB or more RAM.
- The service is used preferably on a desktop or laptop.

#### 3. System Features and Requirements: -

#### 3.1 Functionality:

- 3.1.1 F01-> Application process: Insert the data to identify and manage the customer booking-ins, check-ins, check-outs and bill book for double tree
- 3.1.2 F02-> Customer ID: under the Customer Id, Admin can add/update/delete customer using customer Id. They follow the below information that customer should follow
  - Customer Id(auto generated)
  - First Name
  - Last Name
  - Permanent Address
- 3.1.3 F03-> Booking ID : under the booking Id, once Admin can add/update/delete booking using booking Id. Booking conformation should be sent to the specified details
  - Booking Id(auto generated)
  - Customer ID
  - Booking date(in "dd/mm/yy" format)
  - Stay start date(in "dd/mm/yy" format)
  - Stay end date (in "dd/mm/yy" format)
  - No Of Persons (in "dd/mm/yy" format)
- 3.1.4 F04-> Check-ins and check-outs: Application should maintain check-ins and check-outs database in text files and admin can add/update /delete entries of the check-ins and check-outs using booking ID

3.1.5 F05-> Information about rooms: Information about the rooms in a resort is available in rooms.txt .They follow the below information		
• Room No		
• Floor No		
<ul> <li>Room Type(standard/deluxe/cottage)</li> </ul>		
<ul> <li>Description</li> </ul>		
• AC/non-AC		
<ul> <li>No Of Extra Beds</li> </ul>		
3.1.6 F06-> Bills should be displayed at the time of check-out of customer :		
once bill is paid it can be updated or delete. Bill should be displayed at the time of check-out of customer Bill details can be displayed as follows		
• Bill Id:		
Customer Name:		
<ul><li>No.of days of stay:</li></ul>		
• Total Bill:		
3.1.7 F07-> Total Bills: Calculate and display accommodation charges and other utilities calculations of the bill is:		
total Bill=(no Of Days Of Stay*base room fare) + No Of Days Of Stay *( FOOD_CHARGE) + (EXTRA_PERSON_CHARGE* (no Of Extra Person)		

Total Bill = total Bill + TAX \* total Bill

- 3.1.8 F08-> Room Type: Under type We can consider the different types of rooms based on prices as follows below
  - Room Type -Base Room(in Rs.)
  - Standard -2500
  - Deluxe-3500
  - Cottage-5500
- 3.1.9 F09-> Validations : under validations we must be follow the instructions such as
- 1) 0 2 persons are allowed extra per room. If the extra person is more than 2, display an appropriate message on the console.
- 2) Valid room types are specified in NV03. If the user entered room is not of these types, display an error message in the console.
- 3) Validate for number of valid days and display appropriate message in the console.
- 4) All date validations."
- 3.1.10 F10-> Proper Validations: Ensure proper validation across all entries.
- 3.2 Technical Requirements: -
- 1. C programming language
- 2. Use file input/output operations to read and write the data from the different files.
- 3. Use data structure of your choice and dynamic memory allocation for all operations.
- 3.3 Non functional Requirements:

#### Tools to be used:

- Val grind
- Splint
- Make file
- C file handling

4. **System Features:** If we talk about the must-have features of online hotel bill generator, you can check out below as they come into use to make back-office operations more effective, enhance the guest experience, and create lasting relationships with guests.

### **Tablet & Mobile Optimized**

If your housekeeping team, manager, and other staff members want to quickly check the data on a booking, they do not need to rush back to the office. The hotel accounting software has been designed to use on both tablets as well as mobile phones. Therefore, the business owner can check the performance on the go anytime.

**Intuitive & Easy-to-Use Interface:** You can find a user-friendly interface on hotel management software which is the most crucial factor when it comes to making the accounting process smoother. What if your hotel software is confusing and complex, you might make errors a lot which would lead to costing you more money. As a matter of fact, you should not take much time for doing common tasks as it would limit your ability and slow down your team to grow quickly. Hence, a hotel management software system is a must.

Guest Profiles: Are you looking to build guest loyalty? Then you can make use of hotel management software in which guest profiles stores your stay history, guest's contact details, and also preferences so that you can render a more personalized experience at the time of their next stay. It becomes easier to have a guest profile with stored CC's of your guest for returning them.

Room Management:It contains a feature of a room management module that is similar to your virtual front desk. This feature allows front desk agents to look for guests in and out and extend or cancel reservations in just a few simple clicks.

**Invoicing:**Guests coming to your hotel usually want a copy of their bill when they check out and at that time, the hotel management software can easily export the folios of guests that include all charges from their stay. Besides, it offers straightforward and solid financial reporting that lets you reconcile expenses and revenue from room outlets, revenue, vendors, and so on.

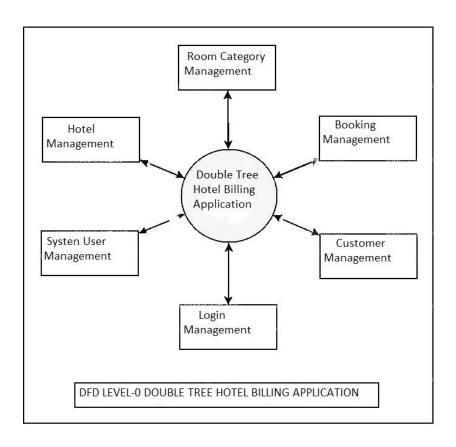
**Email Automation:**By adopting customized, personalized, and automated email, you can make easy communication with your guests by decreasing manual work for your staff. With the use of your own templates, the feature of automated email feature lets you create a communication journey right from the initial booking to targeted offers for repeated guests.

**Reservation Management:** The very important functionality of hotel billing software India is reservation management as well as front office features. It gives you the chance to house all of your reservations digitally without making use of a paper reservation book. With this feature, you can control the availability, set rates, visualize reservations, and offer promotions on a calendar.

**Housekeeping Management:** The hotel management software lets your housekeeping group mark rooms out of order, dirty, or clean. When these details come in one central place that offers the front desk visibility of room statuses, it helps you to implement early room moves and checkins without the need to radio the housekeeping supervisor.

## 5. Data Flow Diagram:

## 5.1 DFD Level 0 -



#### 5.2 DFD Level 1 -

