



**UNIVERSIDAD DE LAS FUERZAS ARMADAS ESPE**

**INGENIERIA DE SOFTWARE**

**PROGRAMACION ORIENTADA A OBJETOS**

**GROUP 5**

**RRSS DEVELOPER ASSOCIATION**

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## Workshop

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Group 5

### Problem

For the creation of our **program** we need to see several factors that meet the requirements and requirements for the **customer**, for that we need to create a system that can facilitate the online **reservation** of one or more **rooms** that requires the customer, to perform these actions the **program** must understand how you can make the payment, transactions and registration of the **person** who made it through data that are accessible to use it as the **name** (customer), **ID** (registration for verification to get the keys of the room), number of rooms you want to **book** (number of people), **phone number** (communicate if there is any change) and credit **card** (payment and billing) in order to facilitate the delivery of the **room** purchased and do not have the need to be paying in cash.

Facilitating the client to be able to reserve with only a few simple steps, entering only to the **page** and see the available quotas, and to place the data of the client and ready.

### Overview

The process that is carried out for the **reservation** of **a hotel** room, commonly begins with the verification of the availability of rooms with the characteristics provided by the **client**, if no availability is found, the client is placed on a waiting list, if this is not the case simply a part of the **payment** or a guarantee of payment is requested, then the **keys** to the **room** are delivered. Finally, the client is asked to hand over the keys and is charged for the consumption he made during his visit.

### Background

The hotels in the city of **Quito, Ecuador**, are not yet automated or linked to the cloud to see what the current situation (capacity of accommodation), the hotel.

The big disadvantage of a normal standard hotel is that it does not have an automation system. When the user (guest) arrives at the **hotel**, the **receptionist** will only check the availability of rooms manually. There are several cases.

#### 1 Recently vacated room

The receptionist mentions to the potential guest that it was a recently vacated **room** and that they are going to clean the room so that he can use it, in an estimated time of one hour the **room** will be available. The cleaning staff will have to notify the **receptionist** that the **room** is now available for use and that the room will be available.

#### 2 The user needs to see the room.

The receptionist takes the user to the **room**, and leaves his **work** station, generating several factors.

- An additional guest may arrive, but no one opens the **door** because the **receptionist** is not at her workplace.



- She leaves the **door** open and the hotel's security is compromised.
- A guest decides to give up the **room** as he is leaving, but there is no one to receive the room keys and verify that the account is cancelled.

### 3 Room cleaning

Once the room has been vacated, the receptionist must call the cleaning staff to proceed with their work and at the end of their **work** the **cleaning staff** must go to the reception and indicate that the room is ready for use, but the **receptionist** may forget to call the cleaning staff causing a terrible mistake.

### 4 Guest Request

Most **hotels** have a closed circuit **telephone**, but some no longer work because of damage to the closed circuit telephone, creating a big problem. Since several guests usually request **food, drink** or communicate some need to **reception**.

The automation of the hotel service would be fundamental to carry out it through the development of an application that allows to solve the exposed cases.

### How the program works

Our **program** is based on customer registration and hotel room reservation with extra features such as a section to order the room directly from the reservation application

1.- The **user** must register his personal data to create a **record** and a temporary user for the duration of his stay. (The program will verify that the fields are filled in a satisfactory way and not with non corresponding data, that is: that the **ID** is true, in the name space that numbers cannot be entered and in the number space that letters cannot be entered, that the e-mail is valid, etc)

2.- The user must register the form of **payment** to be used and will be informed of the type of card used before proceeding, if the customer accepts the program proceeds to the following action

3.-The user will tell us how many **people** want to stay in the hotel and the system will give them 2 different ways to choose their rooms always verifying that a room shown is not occupied, from which they will have to select only one option and the registration process will be finished

4.-During your stay at the hotel, the user will have access to the system through his **ID number**, which will allow him to order **food, drinks** or **snacks** from the **room** through a menu that shows the available options with their respective price

4.1.-If the customer makes a **food** purchase within the application will be charged instantly and stored billing data in the section of expenses within the application which the **customer** can save as a form of file or just view.