



# Hotel System

## Team X

# Team members

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Main program

# Main program

- Create a linked list rooms
- Generate the list
- Print the list
- Start the program
  - Make user choose:
    - Reservation
      - Get available room
      - Registration
    - Facilities
      - Spa & Laundry
      - Gym & Restaurant





Room data

# Room data


- Create linked list
- Generate the list and initialize all rooms
  - Set all rooms ID
  - Set all rooms type (single/ double/ triple/ family)
  - Set all rooms view (garden/ pool/ beach)
  - Set all rooms half and full price depending on the view
  - Set all rooms availability to available
  - Set all rooms days to 0 and final price to 0
- Print room list
  - Print all rooms with all their variables





# Reservation

# Reservation

- Ask user to enter room type and view he wants
  - Check availability of any room with the type and view user chose
    - Returns the room ID if available
    - Returns 0 if not available
  - Search the list with room ID to get the room node
  - Ask user to enter number of days he is going the rent the room for
  - Ask user to enter if he is going to rent it full or half board
  - Calculate the final price for the room depending on number of days and half or full board
  - Give the user the room ID and final price for it
  - Registration
- 

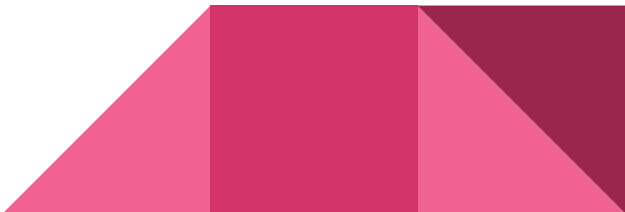




# Registration

# Registration

- Ask user to enter his data and save it in user's struct
  - User's first name
  - User's last name
  - User's age
  - User's gender
  - User's city
  - User's country
  - The room ID user's going to rent
  - The bill he got





# Facilities



Spa & Laundry

# Spa

## Services it provides :

1. massages.
2. facials.
3. nail services.
4. haircuts and styling.
5. steam rooms.
6. saunas.
7. aesthetician\_services.

# Laundry

## Services it provides:

1. Washing clothes.
2. ironing clothes.



# Functions:

**void Show\_services\_and\_price();**

This function is used to show the time and price for each service in spa.

**void confirmation\_spa();**

This function confirmation is used to confirm the reserve of spa.

**void Show\_services\_and\_price();**

This function is used to show the price for each service in laundry.

**void confirmation\_Laundry(struct Services\_prices\_laundry\* ptr);**

This function is used to confirm the reserve of laundry.



### **char Check;()**

This function Check is used to know if the guest is half or full board

### **char Reserve\_or\_cancel;()**

This function is used to know that if the guest want to reserve or not

### **void Laundry;()**

This function is used to show data about laundry and reserve this service.

### **void Spa;()**

This function is used to show data about spa and reserve this service.

### **void Services\_select;()**

This function is used to show data about laundry and spa and reserve these services.





Gym & Restaurant



# Gym & Restaurant

## 1. Restaurant

- Services provided:
  - Check vacancies
  - Display Menu
  - Ask all guests to choose their own meals from our menu
  - Display the fee based on customer statue whether it's halfboard of fullBoard
  - Ask the customer for the confirmation



## code

```
void restaurant(struct user_data* node)
{
    int guests=0;
    int meals[CHAIRS]={0};
    printf("WELCOME SIR, YOU WANT A TABLE FOR HOW MANY GUESTS?\n");
    scanf("%d",&guests);
    if(checkVacancy(guests))
    {
        printf("HERE'S OUR MENU\n");
        showMenu();
        printf("PLEASE CHOOSE YOUR MEALS\n");
        int fee=0;
        for(int i=0;i<guests;i++)
        {
            scanf("%d",&meals[i]);
            if((meals[i]>0)&&(meals[i]<6))
            {
                if(!checkStatus(node))
                { //if it's half board
                    fee+=prices[meals[i]-1];
                }
            }
            else
            {
                printf("PLEASE CHOOSE YOUR MEAL FROM THE MENU\n");
                i--;
            }
        }
        printf("YOUR MEAL WILL COST YOU %dLE\nWOULD YOU LIKE TO CONFIRM?\n1.YES\t2.NO\n",fee);
        int check;
        scanf("%d",&check);
        if(check==1)
        {
            addToBill(node,fee);
            printf("%dLE HAS BEEN ADDED TO YOUR ROOM BILL\nYOUR CURRENT BILL HAS REACHED %d\n",fee,node->Bill);
        }
        else
        {
            printf("OKAY SIR, HAVE A NICE DAY\n");
        }
    }
    else
    {
        printf("SORRY, SIR BUT THERE'S NO VACANCY\n");
    }
}
```

# GYM

- Services provided:
  - Display classes available
  - Display available hours and classes schedule
  - Display the fees and ask the user for confirmation



# Code flow

```
void gym(void)
{
    printf("HELLO SIR, ALLOW ME TO DIPLAY OUR AVAILABLE CLASSES\n");
    displayClasses();
    printf("IF YOU'RE INTERESTED IN OUR CLASSES LET ME KNOW THAT I CAN GIVE YOU OUR SCHEDULE\n");
    displaySchedule();
    printf("our fee is 40LE per hour\n WOULD YOU LIKE TO BOOK NOW\n1.YES\t2.NO\n");
    char check;
    scanf("%d",&check);
    if(check)
    {
        int hours;
        printf("for how many hours?\n");
        scanf("%d",&hours);
        printf("your reservation has been booked \nit costs %dLE\nthe expenses has been added to your room bill",hours*40);
    }
}
```