# IST359 Project Template

**Project Name:** Marriot Reward System   
**Author:** Ashley Lopez

# Idea

Explain what your database idea is about. You should try to cover what it is, what is does, etc.

Why do you want to keep track of this data?

My suggestion for a database is a Marriott Club Member reservation system for West Palm Beach resorts. Members can use the system to look up and make bookings at several Marriott resorts in West Palm Beach, Florida. Members can search for resorts based on their preferences, such as location, amenities, price, and availability. The system stores information about each resort, including its name, location, number of rooms, amenities, room rates, and availability.

Keeping track of the data ensures that the Marriott system and resorts manage their resources and capacity as well gaining insights on what members are attacted to. With the data the company can dictate their next business moves and marketing strategies to attain more booking within the existing member and attracting new ones.

# Business Rules – 10 pts + 10 pts for Complexity

## Entities

In this section, include a bulleted list of conceptual entities for your database idea. Please describe each entity briefly. Example:

* **User**– Marriot club member using the reservation system
* **Points**- Member points from past history that can be used for payments
* **Resort –** Properties available for booking
* **Reservation-** Booking made by member for the existing resort
* **Room –** Rooms in the resort
* **Payment –** payment details associated with reservation

## Attributes

In this section, include a complete list of attributes for each entity. Be sure to indicate the attribute types. Example:

* **User –** name [rc], email [ru], phone [rU], UserID[r,u]
* **Points-** PointsEarned[r], DateEarned[date], Reservation[ID]
* **Resort-**  ResortID[RU], Name[rc], address[ru], ZipCode[R}
* **Reservation-** ReservationID[RU}, CheckIndate[R], Checkoutdate[R]
* Room- RoomNumber[ru], RoomType[rR], RoomDescription[R], Price[R]
* Payment-PaymentID,[r] Amout[r], PaymentDate[r]

In this section list the relationships among the entities as required of the conceptual model.   
Example:

* A User can make multiple reservations
* A reservation made by only one user; a reservation can be made for only one room
* A room can be reserved in multiple reservation; A room belongs to one resort; A resort can have multiple room
* A payment is associated with one reservation; a reservation can have one payment
* A user can earn multiple points; points are earned by only one user; A reservation can earn multiple points; Points can be earned by only one reservation .

# Conceptual Model / ERD Diagram 15 pts

Paste your Visio diagram below. The best way to get a good diagram is use file -> save as -> browse -> portable network graphics format in Visio. Then insert the file you saved here. If it’s blurry and hard to read, expect a deduction.



# Logical Model

Diagram

Description automatically generated