Functions

## calculate\_total\_price:

This function returns the total price of the reservation. It takes two IN arguments as an input:

* id\_services as an table of reservation services ids to calculate their total price.
* Id\_room as an integer to calculate total price using the formula price\_per\_day \* days

## is\_room\_available

This function returns a boolean true or false depending on the availability of the room in a certain date. It takes two IN arguments as an input.

* Stay\_date as the date of stay
* Room\_id as the id of the room that is going to be checked.

## calculate\_tax\_or\_no\_tax\_income

This function returns an income from a certain date. It takes two arguments:

* Is\_taxed as a Boolean describing wheather the calculated income should be taxed
* Income\_date as a date of the day which income is going to be calculated.

Procedures

## add\_reservation\_with\_services

Thisthis procedure adds a reservation to a database. It takes five in arguments:

* Id\_guest - id of a guest making a reservation
* Id\_room – id of a room that is being booked
* Start\_date – date of the beginning of the stay
* End\_date – date of the end of the stay
* id\_services as an table of reservation services.

This procedure also handles possible exceptions (e.g - the room is unavailable) and sets total\_price attribute using calculate\_total\_price function.

## cancel\_reservation

This procedure cancels the reservation and reservation services related to it. It takes one in argument:

* id\_reservation – the id of the reservation that is going to be canceled.

update\_room\_price  
This procedure updates the room price. It uses two in arguments:

* id\_room – the id of the room that is going to have its price changed
* new\_price \_per\_night – the new value of the attribute ‘price\_per\_night’

Triggers

## Prevent\_double\_booking

It throws an exception when the administrator is trying to book already booked room.

## free\_room\_on\_cancellation

It sets room status to ‘free’ when the book is CURRENTLY occupied and the reservation is cancelled.

## validate\_reservation\_dates

It prevents from inserting a reservation with date earlier than todays date.

**DATABASE WILL HAVE DBMS\_SCHEDULER WHICH WILL SET THE ROOM AVAILABILITY ACCORDING TO CURRENT DATE.**