LIVE IT RICH

Analysis Report

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Summary

Introduction

This document constitutes the end of the Live it Rich project analysis stage. So as to succeed in doing this part, we have first started with the drawing up of the requirements at the same time as the data dictionary. Then, we have listed the events and all the ensuing functions. So, the structure of this document will follow the series of this analysis phase steps.

I.   Functional requirements

- **TIME**   Time and synchronisation
- **HR**   Use and safety of human resources
- **NET**   Network and space
- **STORE**   Storage
- **LINKS**   Links between objects

1. System

Time and synchronisation
TIME-01   At the end of every day, the system has to check the restocking thresholds.

TIME-02   The withdrawal period when a customer didn't present for his stay is of one day.

Network and space
NET-01   The system can manage its database over several hard drives.

2. Hotel

Time and synchronisation
TIME-03   The hotel doesn't accept overbookings.

TIME-04   Every year, the company main board allocates a global budget for each hotel.

TIME-05   Each hotel board then splits the budget amongst its departments.

TIME-06   The bank card number of the customer is kept seven days after the date of the beginning of his stay.

TIME-07   The system will have to manage the prices of the hotel according to the market evolution.

TIME-08   Each hotel will constantly update (sometimes on a daily basis):

- Room daily rate;
- Packages (prices and/or composition);
- Services (spa, restaurants);
- Conference rooms: base price per half-day and per room, and ad-hoc services on top (food, drinks);
- Conference packages.

TIME-09 The system manages the fact that a staff card reader can refuse a pointing.

Notes: Overbooking for example. Staff will consult the hotel manager to deal with the problem.

TIME-10 The prolongation of a stay is possible if the hotel isn't complete.

TIME-11 If there is an extension of stay, a new room is assigned to the customer if their room is booked.

TIME-12 In the event of cancellation of the stay, the hotel will make pay one night at the customer.

Use and safety of human resources
HR-01 Each hotel provides two ESpa certified beauticians with regular training.

Links between objects
LINKS-01 Each hotel is divided into for departments: Concierge, Maintenance, Catering and Entertainment.

LINKS-02 A hotel is never bigger than 50 guest rooms.

LINKS-03 They are usually four room types: standard, standard with balcony, junior suite and suite. They are charged at according rates.

LINKS-04 If a room is booked as single, the hotel manager can apply a small discount but never more than 15% of their original rate.

LINKS-05 A few additional single beds can be requested, according to the room size, and charged on top of the standard rate, for a flat fee per bed.

LINKS-06 Each hotel spa is franchised with ESpa.

LINKS-07 Each hotel provides at least two treatment rooms.

LINKS-08 The system must allow a bill to be composed of one or several lines of invoice.

LINKS-09 Each hotel provides at least one conference room.

3. Department

Time and synchronisation

TIME-13   Any procurement requests go through the "Procurement" department in London.

Links between objects

LINKS-10   The department is divided into N services according to their responsibilities.

LINKS-11   One procurement request is attached to one hotel department.

4. Service

Time and synchronisation

TIME-14   If a customer doesn't present himself to any hotel service reservation the system doesn't invoice anything.

Use and safety of human resources

HR-02   The restaurant, the spa and the golf have an employee charged to deal with the bookings.

Network and space

NET-02   Each service has its own stock room.

5. Golf

Time and synchronisation

TIME-15   All greens need to be booked in advance as they can hold only a certain number of guests at the same time.

Storage

STORE-01   The system will keep the scores of guest.

Links between objects

LINKS-12   All greens have nine holes.

LINKS-13   Golf isn't a paid service.

6. Spa

Links between objects
LINKS-14   The spa sells N products and proposes N treatments.

LINKS-15   The price of cosmetics must be 25% more than the purchase price.

7. Restaurant

Time and synchronisation
TIME-16   The "Haute cuisine" restaurant only takes 36 guests per service and a table is booked for 2h30 minimum.

TIME-17   The "Grill" will take 50 to 80 guests per service and a table is booked for minimum 1h30.

TIME-18   Each hotel sets its own times, but the chain policy fixes a minimum between 8am to 10am for breakfast.

TIME-19   The restaurant opens at:

– 12am to 3pm for lunch,
– 6:30pm to 11pm for diner.

TIME-20   The "Grill" opens at:

– 7:30am to 11am for breakfast,
– 12am to 3pm for lunch,
– 6:30pm to 11pm for diner.

TIME-21   The withdrawal period when a customer didn't present himself for his reservation to the restaurant is 20 minutes.

TIME-22   If the customer doesn't come (no show), the system releases the reserved table.

TIME-23   The system will have to assign the customer to his table.

TIME-24   The room service is available for customers 24/7.

Network and space
NET-03   The system will have to manage all bookings.

NET-04   The system will have to manage the communication of PDAs with the room of kitchen.

NET-05   The system will have to manage the orders of the room but also the orders of the room service.

NET-06   Breakfast is only served in the "Grill".

Storage
STORE-02   The system will have to keep trace of every order for every table.

Links between objects
LINKS-16   Each table has a unique number.

LINKS-17   The restaurant doesn't accept guests outside the hotel.

LINKS-18   The system should allow a command to be composed of one or more products.

LINKS-19   A menu of room service built on some elements of the Grill.

LINKS-20   Breakfast is based on a luxury buffet, although a small menu holds specific items which have to be ordered to the waiters.

LINKS-21   The guest can also choose to order a room service breakfast from a breakfast menu.

LINKS-22   The system will have to manage the fact the breakfast can be invoiced for a flat-rate amount per person or included in a booking form option.

LINKS-23   The price of a menu must be lower than the cost of the elements in the menu which compose it.

LINKS-24   The price of a menu must be 20% higher than the cost of the sum of the products which compose it.

LINKS-25   The price of the wine must be 30% superior to its purchase price.

8. Bar

Network and space
NET-07   The three bars of any hotel are always located respectively in the lobby, the golf house and the spa.

Storage
STORE-03   There is only one storage room for bars.

Links between objects
LINKS-26   A hotel always runs three bars.

LINKS-27   The price of beverages of bar must be 35% more than the purchase price.

9. Reception

Time and synchronisation

TIME-25   When a conference is held over many days, discounts may apply.

TIME-26   If the customer doesn't come (no show), we release the booking room.

TIME-27   A receipt is sent to the service concerned at the time of a reservation for a service.

TIME-28   A conference room can be booked by the half day.

TIME-29   The customer will pay his invoice at the end of his stay.

TIME-30   If a guest cancels a room service order although the waiter has already left the kitchen, the guest has to pay.

Network and space

NET-08   A valid credit/debit card number is mandatory to make a booking.

NET-09   When a guest calls the reception, his room number is displayed.

Links between objects

LINKS-28   Reception takes all customers' requests, from room booking to ordering taxis or newspapers for guests.

LINKS-29   The system will send the invoice to the account of the customer if this one has one of them.

LINKS-30   The conference rooms and services are payable in advance, unless particular agreement approved by the Concierge.

LINKS-31   Complaints:

- When a guest has a complaint, he fills in a form and gives it to the Reception.
- The reception input data of the form of complaint into system.
- The system sends an e-mail to the hotel manager.
- He hotel manager decides to give compensation to the guest or not.
- The compensation is given to the guest as a discount on the bill.

10. Room

Time and synchronisation

TIME-31   The room is available from 1pm.

TIME-32   Customers must check out of room by 11:30am.

TIME-33   All items of the mini-bar taken are automatically charged on the guest's bill.

Network and space

NET-10   The system will have to manage the connection between mini-PC and hotel media centre.

NET-11   Safes are network-connectable.

NET-12   The system will have to manage that a guest can consult and check their itemised and their bookings.

Storage

STORE-04   Files are replicated from a central server in London.

Links between objects

LINKS-32   Each room has its own RFID card reader door-lock with its own code.

LINKS-33   Canal Sat/Canal+ and Sky TV are available in every room.

LINKS-34   A room is composed by:

- A mini-bar;
- A programmable safe;
- A mini-PC;
- A flat screen LCD TV;
- A bathroom kit;
- A linen kit;
- A laundry service kit;
- A welcome pack.

LINKS-35   All equipment (electronic or not: laundry service kit for example) in a room are coded and identified by the room number.

11.   Conference

Links between objects

LINKS-36   Concerning the booking of conference room, the payment is addressed to organiser. The payment includes:

- The conference room
- Buffets, drinks, etc.

LINKS-37 The rooms are fitted with standard conference material: video projectors, speakers, a microphone, whiteboards, etc.

LINKS-38 The hotel will also provide various services various services along the room booking for the conference members:

- Buffets, drinks;
- Discounts on bedrooms and/or activities;
- Diner and/or breakfast.

12. Laundry

Links between objects
LINKS-39 The customer will have to complete a form for the laundry (laundry service kit).

LINKS-40 The form will be made up:

- Type of clothing;
- Type of washing: cold/hot;
- Ironing: yes/no.

LINKS-41 The bill is made according to the type of clothing, the type of washing and if the customer had selected ironing.

13. Staff management

Use and security of human resources
HR-03 The system will count and record the working hours of every employee thanks to a system of checking (clocking in).

HR-04 The system will have to manage the schedules of the staff according to "*conventions collectives*".

HR-05 The system will have to organize the rotation of the teams of every service: management timetable.

Storage
STORE-05 The system will have to register the "*conventions collectives*" applicable to all employees.

STORE-06 There are two storage systems for employees: current/old.

14.   Staff general organization

Links between objects

LINKS-42   A department is directed by a manager.

LINKS-43   The services of every department are managed by managers.

LINKS-44   Each hotel has its own board which is composed by all the department managers.

LINKS-45   The requests of supply of every department can:

- – Be altogether accepted and validated by the department manager;
- – Or be delegated to the department manager but with a maximal monetary value to respect.

15.   Entertainment staff (Spa – Golf)

Time and synchronisation

TIME-34   Spa staff has to open the service at 9am and has to close the service at 8pm.

TIME-35   Swimming pool staff has to open the service at 8am and has to close the service at 10pm.

TIME-36   Golf staff has to open the service at 10am and has to close the service at 8pm.

TIME-37   The swimming pool will be controlled by one service provider every week.

Use and security of human resources

HR-06   The maintenance of the golf and the free services is done by service providers.

HR-07   The complaints will be managed by the *Concierge*.

16.   Catering staff (Restaurants – Bars)

Time and synchronisation

TIME-38   When an order is placed for room service, a Grill waiter will deliver the order to the guest if it happens during Grill hours. Otherwise, it will be brought by a reception member.

Use and security of human resources

HR-08 The system will have to respect the French hierarchy of the traditional kitchens:

- Head chef;
- The second, called to replace the head chef when he's absent;
- The station chefs;
- The clerks;
- The dishwashers.

HR-09 The restaurant has a butler to handle reservations.

HR-10 The restaurant has a sommelier who manages inventory control for wine.

Links between objects

LINKS-46 When a customer calls the reception to place an order:

- The reception inputs the order into the system to invoice it;
- The system manages the sending or the order to the service concerned.

LINKS-47 The station chefs are responsible for the supply concerning their domain of kitchen.

LINKS-48 The head chef can command whatever he wants for any domain.

LINKS-49 The department manager fixes the maximal monetary value that a head chef or a station chef can command without his authorisation.

LINKS-50 In the high kitchen, a table has only one waiter, but a waiter can have several tables.

LINKS-51 The system will have to supply to the waiters PDAs to be able to take orders.

LINKS-52 There is always a team in the Grill.

17. Maintenance staff (Maid – Laundry)

Time and synchronisation

TIME-39 The maids start at 8am and finish at 1pm.

Use and security of human resources

HR-11 The "*conventions collectives*" of the laundry staff and the maids are different.

HR-12 Each employee is responsible for maintaining their rooms they are assigned. The condition of each room must be perfect.

HR-13   Each employee has to replace any missing articles in a room: shampoo, mini-bar, etc.

Network and space

NET-13   The distribution of maids on a unique sector is made by the service manager.

NET-14   Every attendant is assigned to a unique sector of bedrooms.

Links between objects

LINKS-53   The system will provide each maid with a PDA RFID reader to automate inventory management.

LINKS-54   The maids are in charge of the linen and the laundry requests of the customers by bringing them to the laundry service.

LINKS-55   Each laundry request will be associated to a bill.

LINKS-56   The maids bring the welcome packs in the rooms.

18.   Concierge staff (Room service – Conference – Reception)

Use and security of human resources

HR-14   The system will have to manage the hierarchy of the reception staff:

– Head of reception;
– The second;
– The team leaders;
– The booking agents;
– The desk clerks (day and night);
– Porter;
– Doorman;
– The dishwashers.

HR-15   The reception manager manages the service and reception staff. He is responsible for:

– Attribution of rooms;
– Relationships with customers;
– Billing customer and its payment;
– Various type of cases;
– Vault made available to customers;
– The material and the furniture of the reception;
– Files of guests.

HR-16   The reception manager is in contract with all other services of the hotel.

HR-17   The reception members conceive the welcome pack.

Network and space
NET-15   The staff of the room service isn't distributed in sectors.

II.   Data dictionary

Attribute	Type	Size	Category	Comments
HotelId	Integer	5	Technical	Identify an hotel
HotelName	Text	20	Business logic	
HotelBudget	Integer	10	Business logic	
HotelNbOfEmployees	Integer	3	Business logic	
HotelWayNumber	Integer	3	Business logic	
HotelWayType	Text	20	Business logic	
HotelWayName	Text	30	Business logic	
HotelPostcode	Integer	5	Business logic	
HotelTown	Text	30	Business logic	
HotelCountry	Text	30	Business logic	
HotelManager	Integer	5	Technical	This is a StaffId
HotelNbOfRooms	Integer	2	Business logic	
HotelNbOfConferenceRooms	Integer	2	Business logic	
HotelNbOfLifts	Integer	2	Business logic	
HotelNbOfStars	Integer	1	Business logic	
HotelPhoneNumber	Integer	13	Business logic	
HotelE-mail	Text	50	Business logic	
HotelTimeOfArrival	Time	5	Business logic	
HotelTimeOfDeparture	Time	5	Business logic	
HotelCashBoxAmount	Integer	10	Business logic	
DeptId	Integer	5	Technical	Identify a department
DeptLabel	Text	20	Business logic	
DeptHeadId	Integer	5	Technical	This is a StaffId
DeptNbOfEmployees	Integer	3	Business logic	
DeptBudget	Integer	10	Business logic	
ServiceId	Integer	5	Technical	Identify a service
ServiceLabel	Text	20	Business logic	
ServiceManager	Integer	5	Technical	This is a StaffId
ServiceTimeOfBeginning	Time	5	Business logic	
ServiceTimeOfEnd	Time	5	Business logic	
ServiceNbOfEmployees	Integer	3	Business logic	
StaffId	Integer	5	Technical	Identify a staff member
StaffFirstName	Text	20	Business logic	
StaffSurname	Text	20	Business logic	
StaffSex	Text	1	Business logic	
StaffBirthDate	Date	10	Business logic	

Attribute	Type	Size	Category	Comments
StaffBirthTown	Text	30	Business logic	
StaffBirthCountry	Text	30	Business logic	
StaffNationality	Text	30	Business logic	
StaffAdditionalAddress	Text	50	Business logic	
StaffWayNumber	Integer	3	Business logic	
StaffWayName	Text	30	Business logic	
StaffWayType	Text	20	Business logic	
StaffPostcode	Text	5	Business logic	
StaffFloor	Integer	2	Business logic	
StaffBuilding	Text	5	Business logic	
StaffTown	Text	30	Business logic	
StaffCountry	Text	30	Business logic	
StaffHomeNumber	Integer	13	Business logic	
StaffMobileNumber	Integer	13	Business logic	
StaffE-mail	Text	50	Business logic	
StaffMaritalStatus	Text	15	Business logic	For *conventions collectives*
StaffNumberOfChildren	Integer	2	Business logic	For *conventions collectives*
StaffMotherTongue	Text	20	Business logic	
StaffForeignLanguage1	Text	20	Business logic	
StaffForeignLanguage2	Text	20	Business logic	
StaffForeignLanguage3	Text	20	Business logic	
StaffStudiesLevel	Text	50	Business logic	
StaffProfessionalQualification	Text	50	Business logic	
StaffContractType	Text	50	Business logic	For *conventions collectives*
StaffSeniority	Integer	2	Business logic	
StaffActualWorkingHoursPerDay	Float	5	Business logic	
StaffActualWorkingHoursPerWeek	Float	5	Business logic	
StaffActualWorkingHoursPerMonth	Float	6	Business logic	
StaffOvertime	Integer	2	Business logic	
StaffFunction	Text	20	Business logic	
StaffActive	Text	1	Business logic	Flag : the staff member works at the moment or not
ContractId	Integer	5	Technical	
ContractType	Text	20	Business logic	
ContractNbOfHoursMinPerDay	Float	5	Business logic	
ContractNbOfHoursMinPerWeek	Float	5	Business logic	
ContractNbOfHoursMinPerMonth	Float	6	Business logic	
ContractDateOfBeginning	Date	10	Business logic	
ContractDateOfEnd	Date	10	Business logic	
CCId	Integer	5	Technical	Identify a *convention collective*
CCLabel	Text	20	Business logic	
CCNbOfHoursMaxPerDay	Float	5	Business logic	
CCNbOfHoursMaxPerWeek	Float	5	Business logic	
CCNbOfHoursMaxPerMonth	Float	6	Business logic	

Attribute	Type	Size	Category	Comments
AreaId	Integer	5	Technical	Identify an area
GuestId	Integer	5	Technical	Identify a guest
GuestName	Text	20	Business logic	
GuestSurname	Text	20	Business logic	
GuestBirthdate	Date	10	Business logic	
GuestAdditionalAddress	Text	50	Business logic	
GuestWayNumber	Text	3	Business logic	
GuestWayType	Text	20	Business logic	
GuestWayName	Text	30	Business logic	
GuestPostcode	Integer	5	Business logic	
GuestTown	Text	30	Business logic	
GuestCountry	Text	30	Business logic	
GuestFloor	Integer	2	Business logic	
GuestBuilding	Text	5	Business logic	
GuestHomeNumber	Integer	13	Business logic	
GuestMobileNumber	Integer	13	Business logic	
GuestE-mail	Text	50	Business logic	
GuestMontherTongue	Text	20	Business logic	
CreditCardNumber	Integer	16	Business logic	Identifies a credit card
CreditCardDate	Date	7	Business logic	
CreditCardCryptogram	Integer	3	Business logic	
CreditCardPreauthorisationNumber	Integer	10	Business logic	
BookingId	Integer	5	Technical	Identify a booking
BookingNumberOfGuests	Integer	2	Business logic	
BookingDateOfBeginning	Date	10	Business logic	
BookingDateOfEnd	Date	10	Business logic	
BookingNumberOfDays	Integer	2	Business logic	
BookingDate	Date	10	Business logic	
BillId	Integer	5	Business logic	
BillTotalPrice	Float	7	Business logic	
BillPaidOrNot	Text	1	Business logic	Flag
BillEditionDate	Date	10	Business logic	
BillLineId	Integer	5	Business logic	
BillLineDate	Date	5	Business logic	
BillLineQuantity	Integer	2	Business logic	
BillLinePrice	Float	7	Business logic	
ComplaintId	Integer	5	Technical	Identify a complaint
ComplaintDate	Date	10	Business logic	
ComplaintDescription	Text	200	Business logic	
CompensationId	Integer	5	Technical	Identify a compensation
CompensationDate	Date	10	Business logic	
CompensationSubject	Text	50	Business logic	
CompensationAmount	Float	6	Business logic	In €
RoomId	Integer	5	Technical	Identifies a room
RoomNumber	Integer	4	Business logic	
RoomFloorNumber	Integer	2	Business logic	
RoomDailyPriceHT	Float	6	Business logic	In €

Attribute	Type	Size	Category	Comments
RoomDailyPriceTTC	Float	6	Business logic	In €
RoomTVARate	Float	5	Business logic	In %
RoomFlatFeePerBed	Float	5	Business logic	In €
RoomLegalCapacity	Integer	1	Business logic	
RoomRFIDCardReaderCode	Integer	10	Business logic	
RoomSafeCode	Integer	4	Business logic	
RoomAvailability	Text	1	Business logic	Flag available or not
RoomTypeId	Integer	5	Technical	Identify a room type
RoomTypeLabel	Text	20	Business logic	
WelcomePackId	Integer	5	Technical	Identify a welcome pack
WelcomePackLabel	Text	20	Business logic	
WelcomePackNbOfProducts	Integer	2	Business logic	
NewspaperId	Integer	5	Technical	Identify a newspaper
NewspaperName	Text	20	Business logic	
NewspaperType	Text	20	Business logic	Sport, economy…
NewspaperFrequency	Text	20	Business logic	Daily, monthly…
ProductId	Integer	10	Technical	Identify a product
ProductLabel	Text	20	Business logic	
ProductUnitPriceHT	Float	8	Business logic	
ProductUnitPriceTTC	Float	8	Business logic	
ProductTVARate	Float	5	Business logic	
ProductGettingDate	Date	10	Business logic	
ProductNumberInStock	Integer	3	Business logic	
ProductPurchasePrice	Float	8	Business logic	
ProductProcurementThreshold	Integer	4	Business logic	
ProductAmountProcurement	Integer	4	Business logic	
ProcurementRequestId	Integer	5	Technical	Identify a procurement request
ProcurementRequestDate	Date	10	Business logic	
PRLineId	Integer	5	Technical	Identifies a procurement request line
PRLineQuantity	Integer	3	Business logic	
PRLineTotalCostTTC	Float	8	Business logic	In €
HTPrice	Float	7	Business logic	
TTCPrice	Float	7	Business logic	
TVARate	Float	5	Business logic	
DiscountId	Integer	5	Technical	Identify a discount
DiscountLabel	Text	20	Business logic	
DiscountAmountInPercent	Float	5	Business logic	
DiscountDateOfBeginning	Date	10	Business logic	
DiscountDateOfEnd	Date	10	Business logic	
StockId	Integer	5	Technical	Identify a stock
StockCapacity	Integer	3	Business logic	

Attribute	Type	Size	Category	Comments
StockService	Integer	10	Business logic	This is a ServiceId
ProviderId	Integer	5	Technical	Identify a provider
ProviderName	Text	20	Business logic	
ProviderWayNumber	Integer	3	Business logic	
ProviderWayType	Text	20	Business logic	
ProviderWayName	Text	30	Business logic	
ProviderPostcode	Integer	5	Business logic	
ProviderTown	Text	30	Business logic	
ProviderCountry	Text	30	Business logic	
ProviderPhoneNumber	Integer	13	Business logic	
ProviderE-mail	Text	50	Business logic	
ProviderDeliveryTime	Integer	2	Business logic	Number of days
RestaurantId	Integer	5	Technical	Identify a restaurant
RestaurantLegalCapacity	Integer	3	Business logic	
RestaurantNumberOfTables	Integer	2	Business logic	
RestaurantNumberOfEmployees	Integer	3	Business logic	
RestaurantSittingMediumLast	Text	4	Business logic	
MenuId	Integer	5	Technical	Identify a menu
MenuLabel	Text	20	Business logic	
MenuType	Text	20	Business logic	
MenuPriceHT	Float	6	Business logic	In €
MenuPriceTTC	Float	6	Business logic	In €
MenuTVARate	Float	5	Business logic	In %
DishId	Integer	5	Technical	Identify a dish
DishPriceHT	Float	5	Business logic	In €
DishPriceTTC	Float	5	Business logic	In €
DishTVARate	Float	5	Business logic	In %
DishLabel	Text	20	Business logic	
TableId	Integer	3	Technical	Identify a table
TableLegalCapacity	Integer	2	Business logic	
TableAvailability	Text	1	Technical	Flag
OrderId	Integer	5	Technical	Identify an order
OrderTotalCost	Float	6	Business logic	In €
OrderType	Text	1	Business logic	Flag: creation, modification or cancellation
OrderLineId	Integer	5	Technical	Identify an order line
OrderLineCost	Float	6	Business logic	In €
OrderLineQuantity	Integer	2	Business logic	
OrderLineDishAvailable	Text	1	Technical	Flag which indicates that a dish can be brought
BarId	Integer	5	Technical	
BarLabel	Text	20	Business logic	
BarPlaceDescription	Text	20	Business logic	
BarNbOfEmployees	Integer	3	Business logic	

Attribute	Type	Size	Category	Comments
WineId	Integer	3	Technical	Identify a wine
WineLabel	Text	20	Business logic	
WineColor	Text	10	Business logic	
WineYear	Date	4	Business logic	
WineCountry	Text	30	Business logic	
WineRegion	Text	30	Business logic	
WineTemperature	Integer	2	Business logic	In degrees Celsius
WineAlcoholContent	Float	4	Business logic	In degrees
WineSparkingOrFlat	Text	1	Business logic	Flag
WineBottleType	Integer	20	Business logic	
WineBottleVolume	Float	4	Business logic	In litres
WineGettingDate	Date	10	Business logic	
WinePriceHT	Float	6	Business logic	In €
WinePriceTTC	Float	6	Business logic	In €
WineTVARate	Float	5	Business logic	In %
WineProcurementAmount	Integer	3	Business logic	
WineProcurementThreshold	Integer	2	Business logic	
WineNbInStock	Integer	3	Business logic	
TreatmentRoomId	Integer	5	Technical	Identifies a treatment room
TreatmentRoomCapacity	Integer	2	Business logic	
CareId	Integer	5	Technical	Identify a care
CarePriceHT	Float	6	Business logic	In €
CarePriceTTC	Float	6	Business logic	In €
CareTVARate	Float	5	Business logic	In %
CareLast	Text	5	Business logic	In hour and minutes
CareDescription	Text	100	Business logic	
CareNbOfPossibleParticipants	Integer	1	Business logic	Belongs to the treatment room
CarePriceHTInMenu	Float	6	Business logic	In €
CareMenuId	Integer	5	Technical	Identify a care menu
CareMenuLabel	Text	20	Business logic	
CareMenuPriceHT	Float	6	Business logic	In €
CareMenuPriceTTC	Float	6	Business logic	In €
CareMenuTVARate	Float	5	Business logic	In %
CareMenuLast	Text	5	Business logic	In hour and minutes
CareMenuNbOfCares	Integer	2	Business logic	
TrainingCourseId	Integer	5	Technical	Identifies a training course
TrainingCourseDate	Date	10	Business logic	
TrainingCourseCostPerBeauticianHT	Float	6	Business logic	In €
TrainingCourseNbOfBeauticians	Integer	2	Business logic	
TrainingCourseTotalCostHT	Float	7	Business logic	In €
TrainingCourseTotalCostTTC	Float	7	Business logic	In €
TrainingCourseTVARate	Float	5	Business logic	In %
PoolId	Integer	5	Technical	Identifies a pool
PoolPhLevel	Float	4	Business logic	

Attribute	Type	Size	Category	Comments
PoolChlorineLevel	Float	4	Business logic	
PoolTAFactor	Float	4	Business logic	
PoolTHFactor	Float	4	Business logic	
PoolSaltLevel	Float	4	Business logic	
PoolBacterial/ViralSampleResults	Text	50	Business logic	
GolfId	Integer	5	Technical	Identify a green
GolfLegalCapacity	Integer	2	Business logic	
GolfPlayMediumLast	Text	5	Business logic	In hours and minutes
PlayerId	Integer	7	Technical	GuestId+Number
PlayerName	Text	20	Business logic	
PlayerSurname	Text	20	Business logic	
PlayerTotalOfPoints	Integer	3	Business logic	
ConferenceId	Integer	5	Technical	Identifies a conference
ConferenceTitle	Text	50	Business logic	
ConferenceDate	Date	10	Business logic	
ConferenceTimeOfBeginning	Text	5	Business logic	In hours and minutes
ConferenceTimeOfEnd	Text	5	Business logic	In hours and minutes
ConferenceNumberOfPersons	Integer	3	Business logic	
ConferenceTheme	Text	20	Business logic	
LecturerId	Integer	5	Technical	Identifies a lecturer
LecturerName	Text	20	Business logic	
LecturerSurname	Text	20	Business logic	
ConferenceRoomId	Integer	5	Technical	Identify a conference room
ConferenceRoomLabel	Text	20	Business logic	
CRCostPerHalfDayHT	Float	6	Business logic	In €
CRCostPerHalfDayTTC	Float	6	Business logic	In €
CRTVARate	Float	5	Business logic	In %
CRLegalCapacityForConferences	Integer	3	Business logic	
CRLegalCapacityForMeals	Integer	3	Business logic	
CRLegalCapacityForCocktails	Integer	3	Business logic	
CRLegalCapacityForMeetings	Integer	3	Business logic	
ConferenceRoomArea	Integer	4	Business logic	In m²
LaundryKitId	Integer	5	Technical	Identifies a laundry kit
LaundryKitDateOfArrival	Date	10	Business logic	
LaundryKitNbTotalOfItems	Integer	2	Business logic	
LaundryKitTreaty	Text	1	Business logic	Flag
LaundryKitTotalCostHT	Float	6	Business logic	In €
LaundryKitTotalCostTTC	Float	6	Business logic	In €
LaundryKitTVARate	Float	5	Business logic	In %
LaundryKitNbOfItemsPerService	Integer	2	Business logic	
LaundryServiceId				Identifies a type of service at the laundry service
LaundryServiceLabel	Text	20	Business logic	

Attribute	Type	Size	Category	Comments
LaundryServicePriceHT	Float	5	Business logic	In €
LaundryServicePriceTTC	Float	5	Business logic	In €
LaundryServiceTVARate	Float	5	Business logic	In %

III.   Events and functions

Formalism used:

Event

Decision, check

Document

End of the processing linked to an event

Other
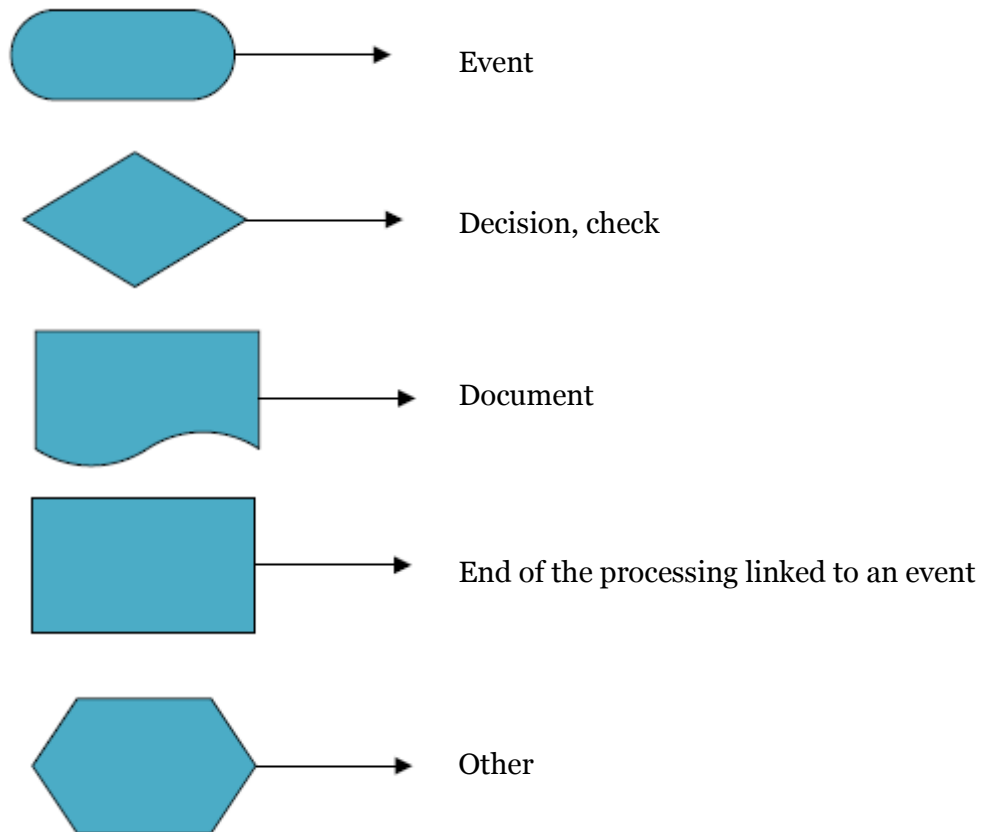
1. Concierge

- New booking for a room
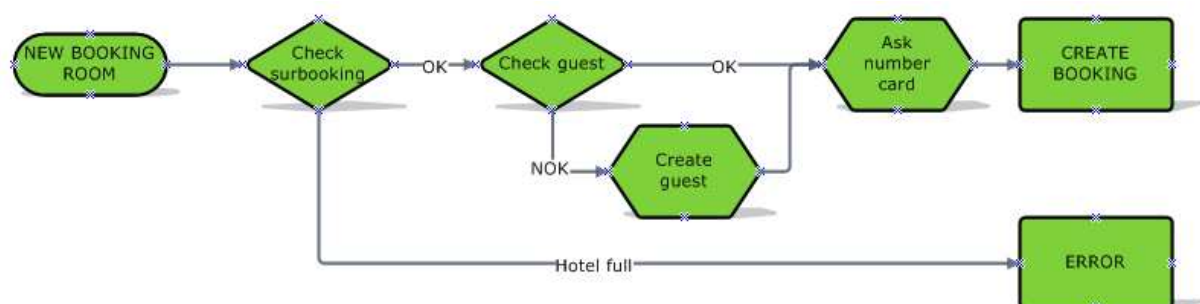
- Modification of a booking for a room
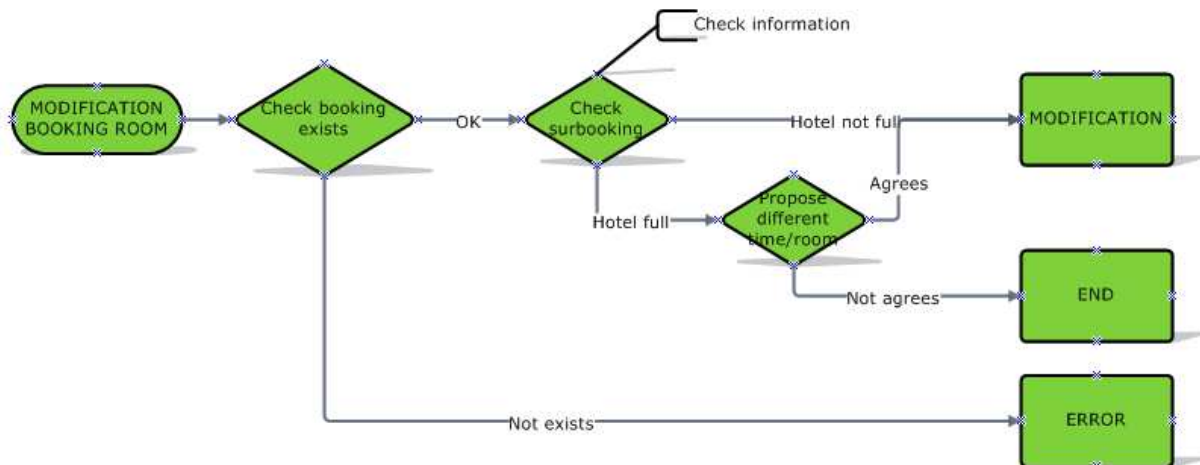
- Delete a booking for a room
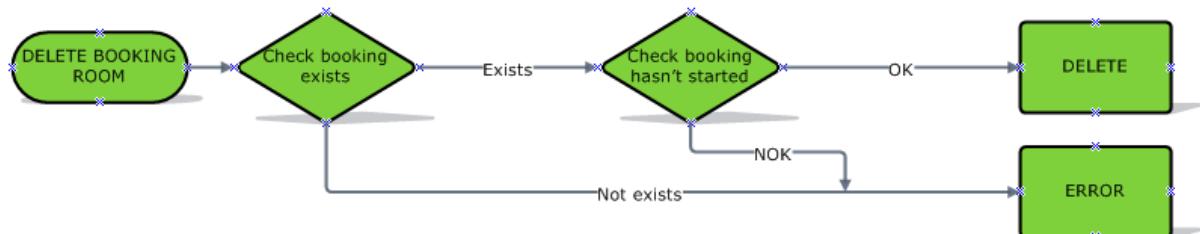
- A guest arrives
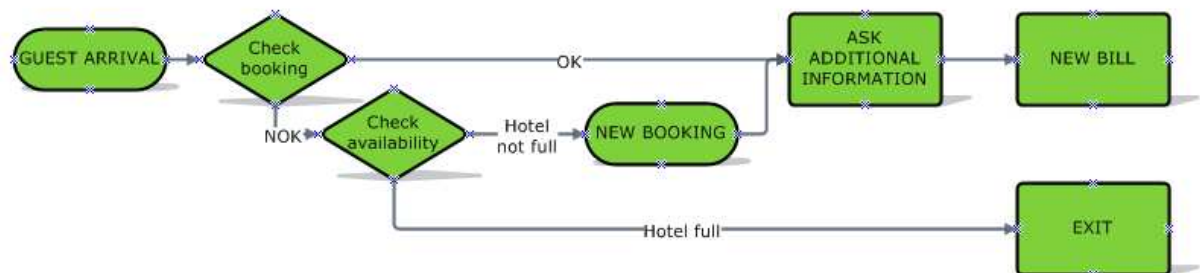
- New guest

- Modification of a guest

```
MODIF GUEST → Check guest
    Check guest ──Guest exists── MODIF GUEST
    Check guest ──Guest not exists── ERROR
```

- Every morning

```
EVERY MORNING → Check « no show » bookings
    Check « no show » bookings ──Some── EDIT BILL ONE NIGHT
    Check « no show » bookings ──None── NOTHING
```

- End of a journey

```
END DATE OF A JOURNEY → Check customer's account
    Check customer's account ──Has an account── ADD BILL TO ACCOUNT
    Check customer's account ──Doesn't have account── Print bill → REQUEST PAIEMENT
```

- New room service order

```
NEW ORDER ROOM SERVICE → Check guest
    Check guest ──Guest exists── SEND RECEIPT
    Check guest ──Guest not exists── ERROR
```

- Modification of an order

```
MODIF ORDER → Check order
    Check order ──Order exists── SEND RECEIPT
    Check order ──Order not exists── Ask guest new order
        Ask guest new order ──Guest wants a new order── NEW ORDER
        Ask guest new order ──Doesn't want a new order── EXIT
```

- Cancellation of an order

- New complaint

- Extension of a stay
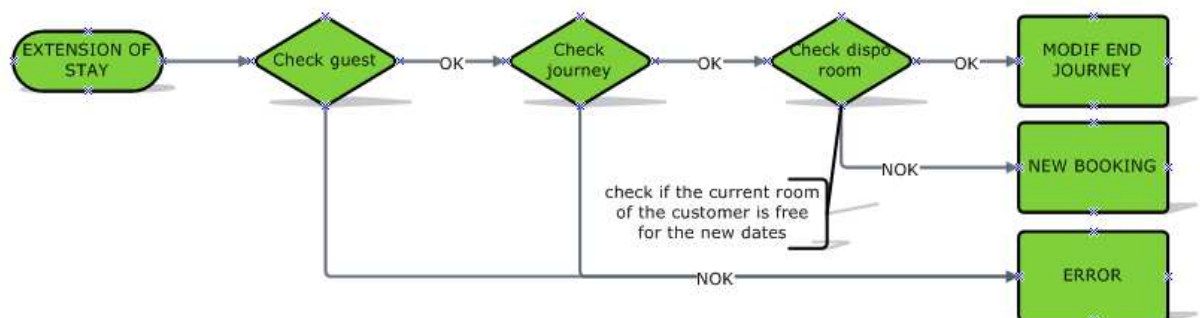
- Shortening of a stay
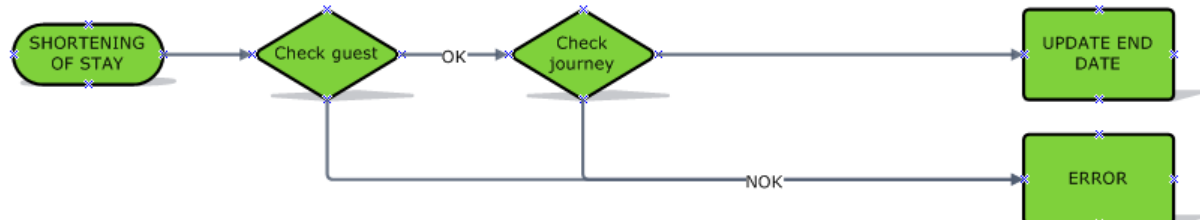
- A guest uses a product from the mini-bar

- A guest wants to look at the planning
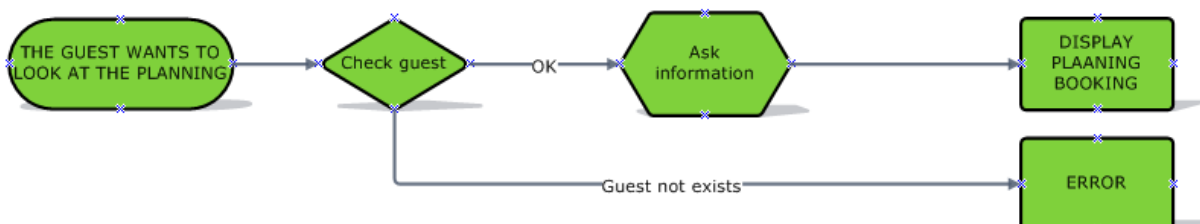
- A guest wants to look at his bill
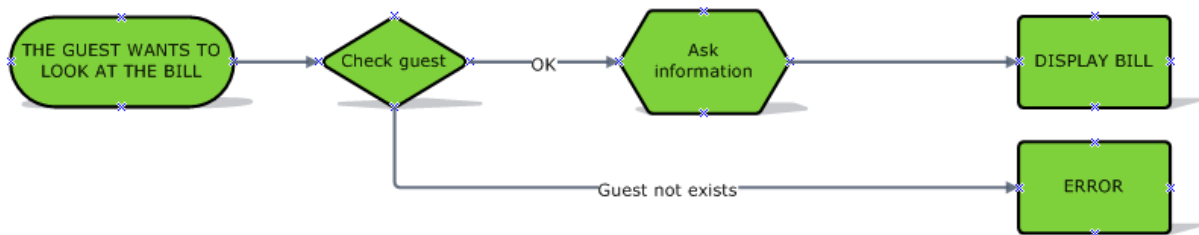
- A guest forgot the code of his safe
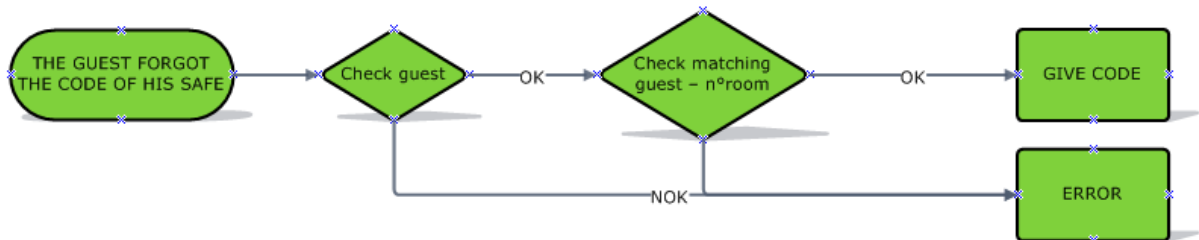
- Add a new compensation

- End of day
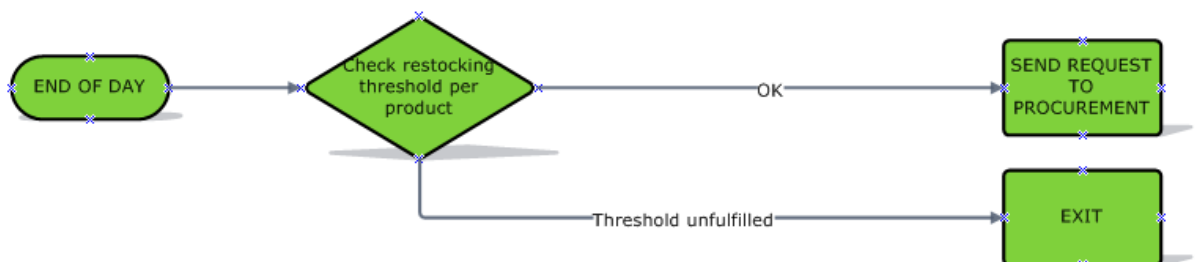
- Products delivered

- New provider

NEW PROVIDER → Check existence → Exists → Enter information → UPDATE PRODUCTS

Check existence → Not exists → ERROR

- New product

NEW PRODUCT → Check existence → Exists → Enter information → UPDATE PACKAGES

Package ; Welcome-pack ...

Check existence → Not exists → ERROR

- Modification of a product

PRODUCT MODIFICATION → Check existence → Exists → MODIFICATION

Check existence → Not exists → ERROR

- Delete a product

DELETE PRODUCT → Check existence → Exists → Delete product → UPDATE PACKAGE

Check existence → Not exists → ERROR

- New booking for a service
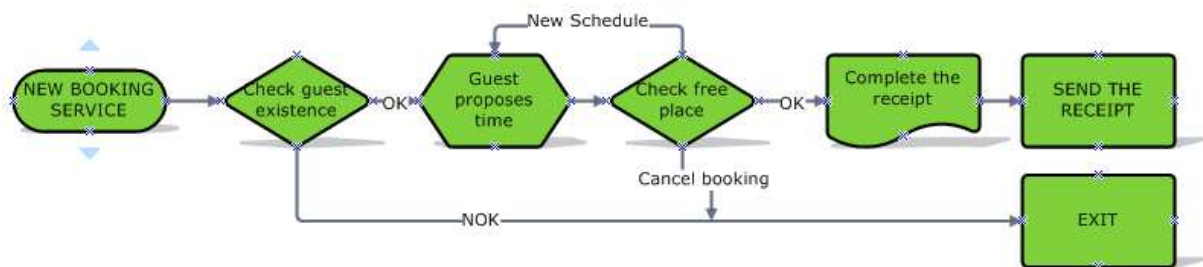
- Modification of a booking for a service
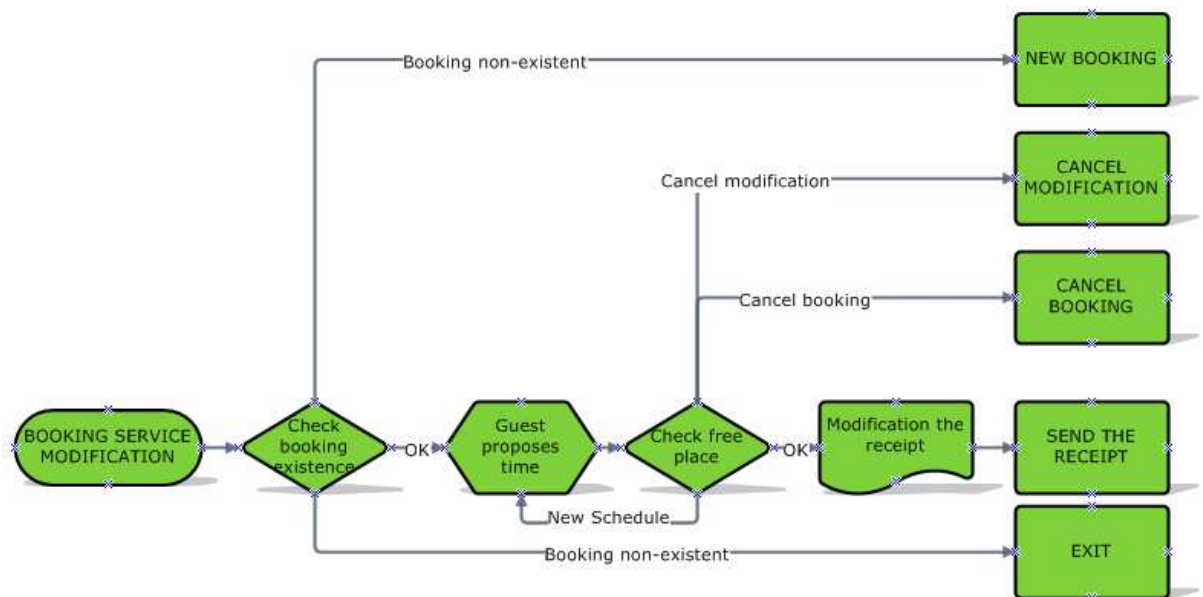
- Cancel a booking for a service
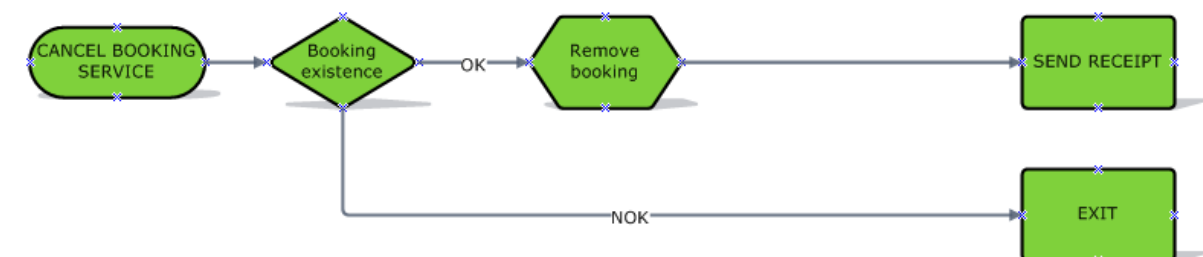
- New request
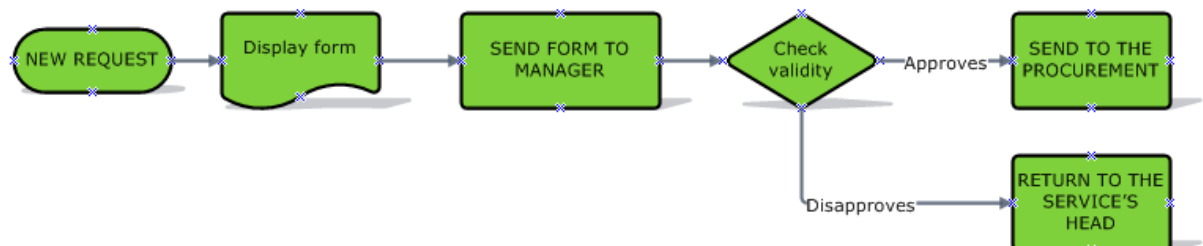
2. Staff

- New employee
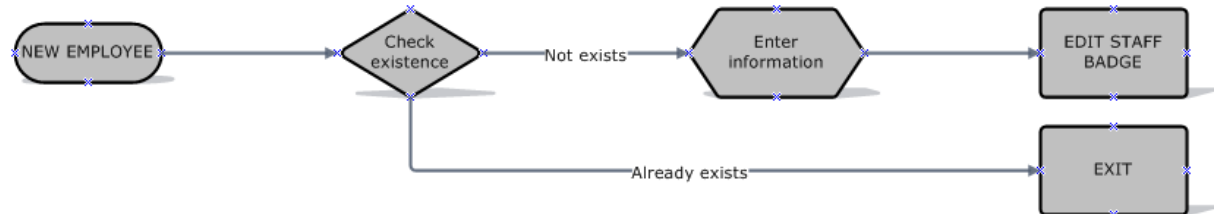
- Modification of an employee
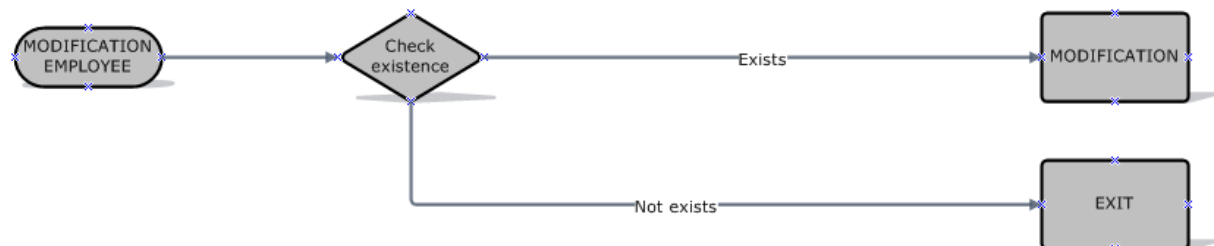
- Clocking in
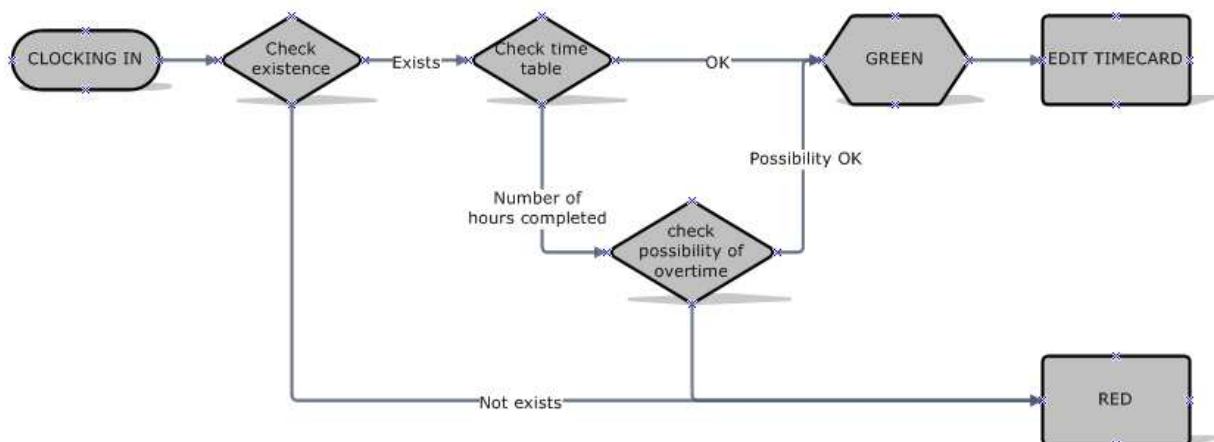
- New *convention collective*
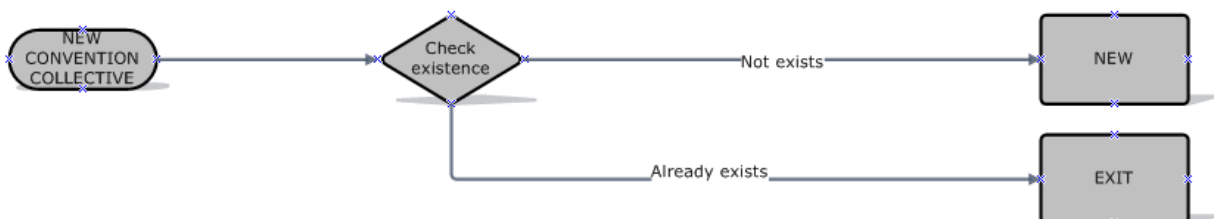
- Modification of a *convention collective*
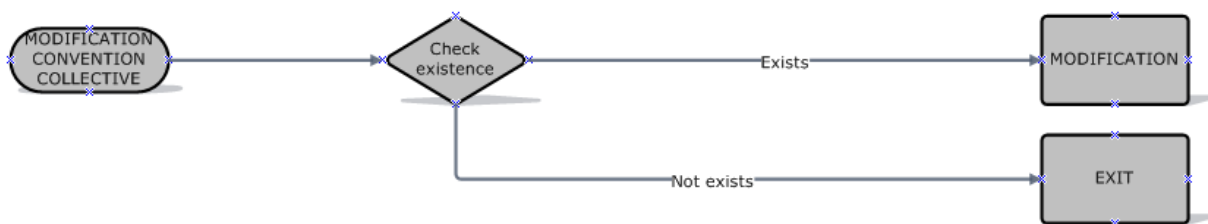
- New contract
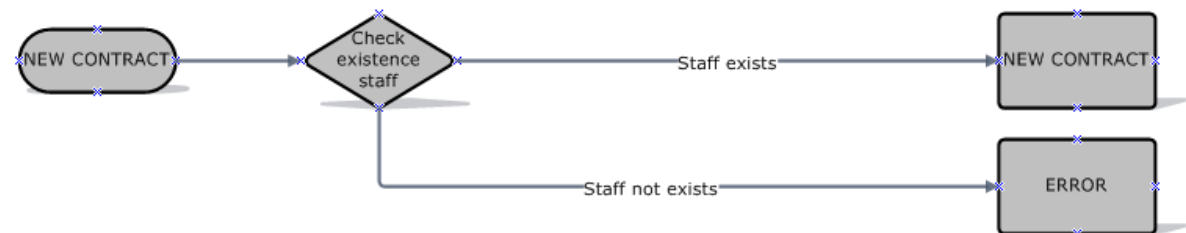
- Modification of a contract
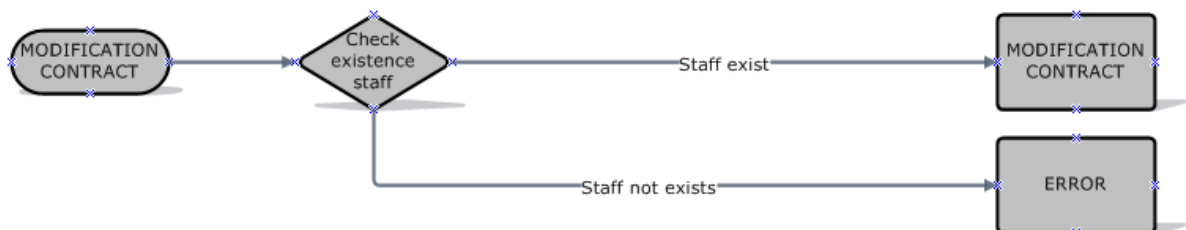
- Ten years
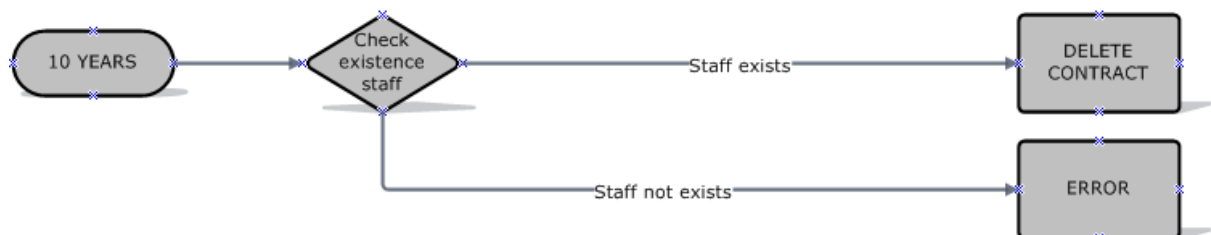
- A staff member leaves
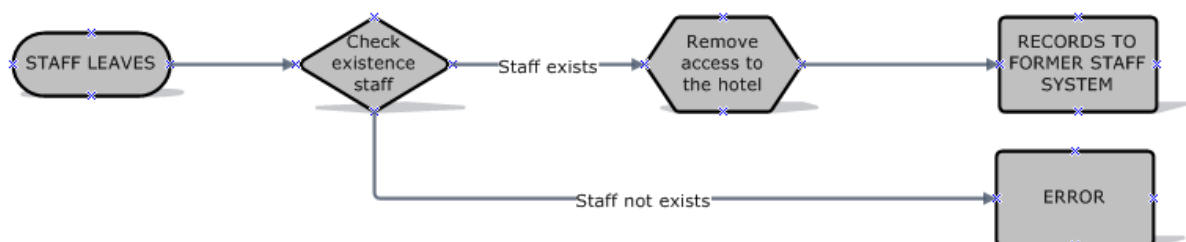
3. Golf

- A player arrives
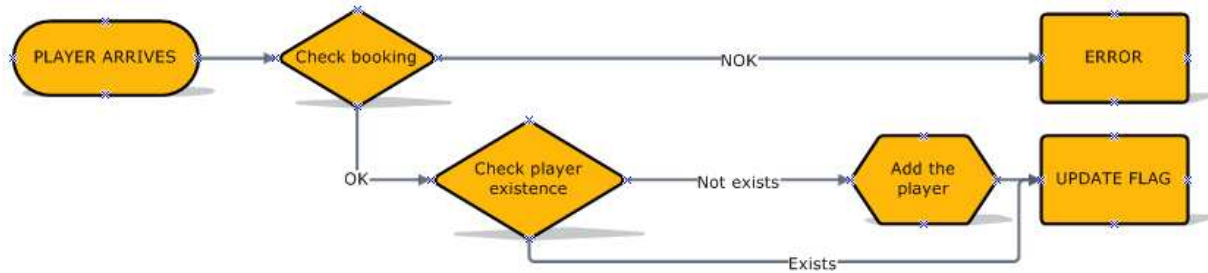
- Modification of an information about a player

- A player wants to see his score history

- The game is finished

- A receipt arrives
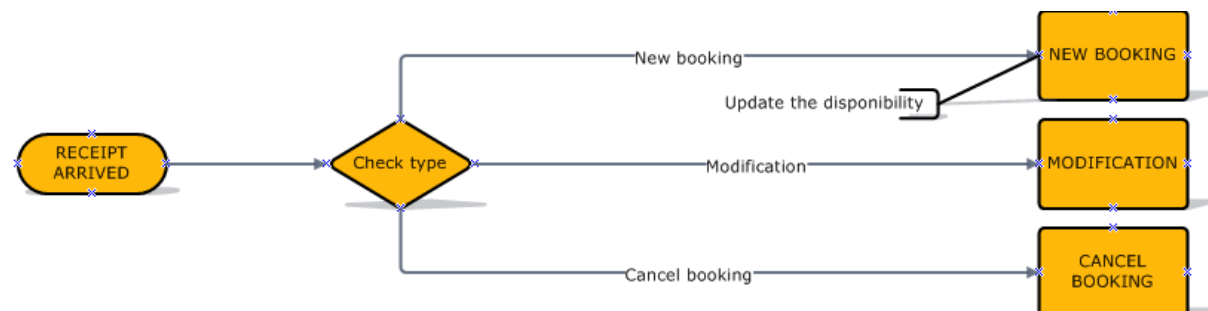
- A provider delivers an equipment

- A contractor comes to maintain the green

- An equipment is broken

4. Spa

- A guest arrives
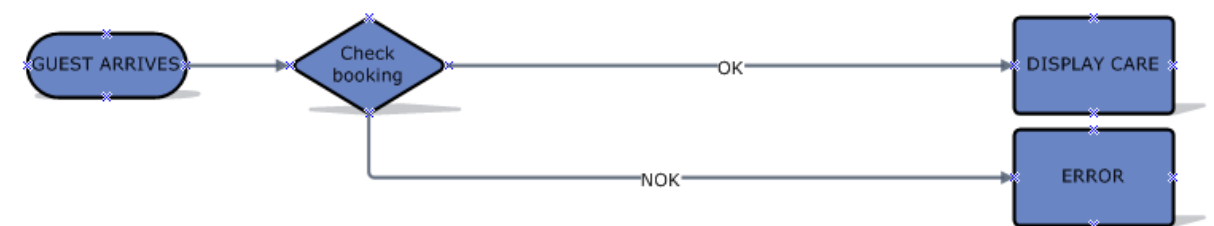
- A guest leaves

- New ESpa care, care menu or product

- Modification of an ESpa care, care menu or product
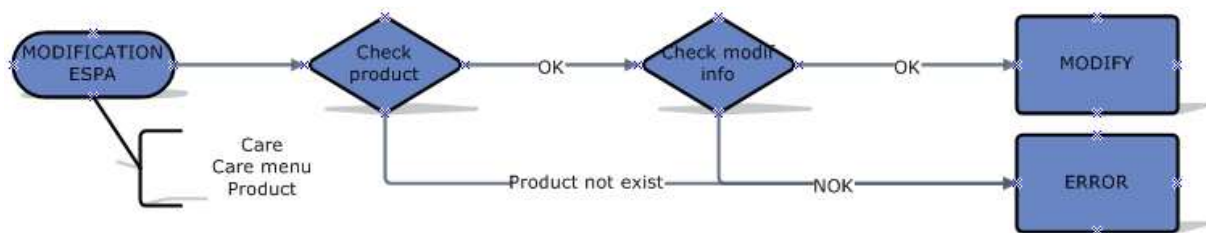
- A receipt arrives
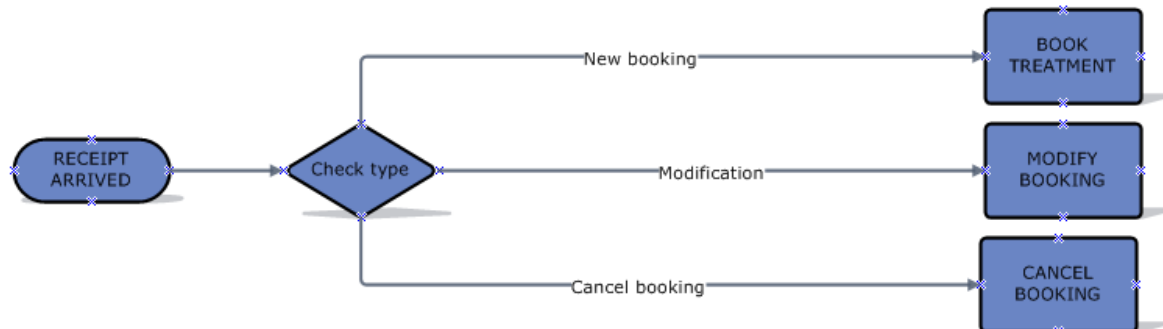
- A contractor analyzes the pool

- A provider delivers a product or an equipment
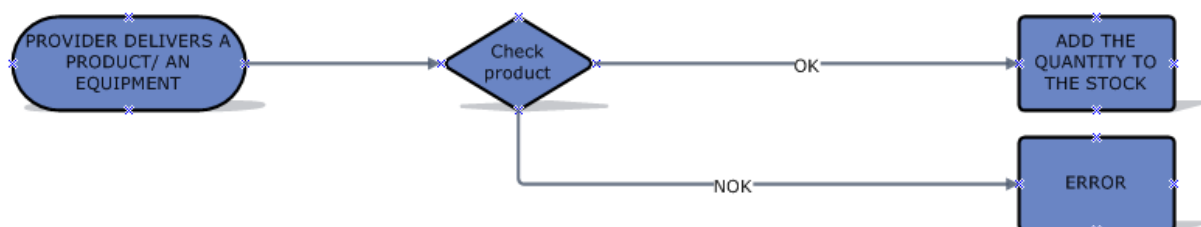
- A guest wants to buy a product
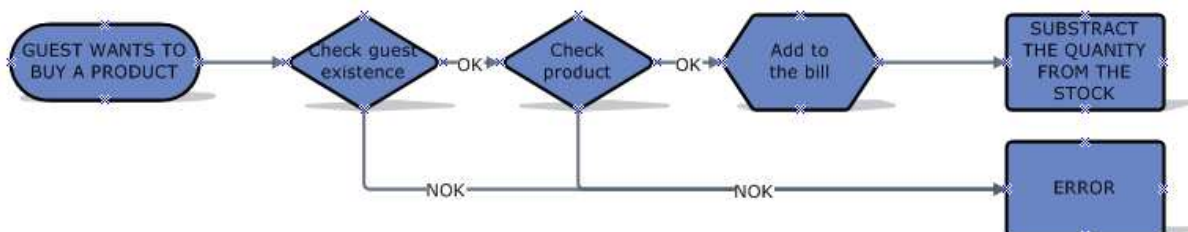
5. Bar

- New order
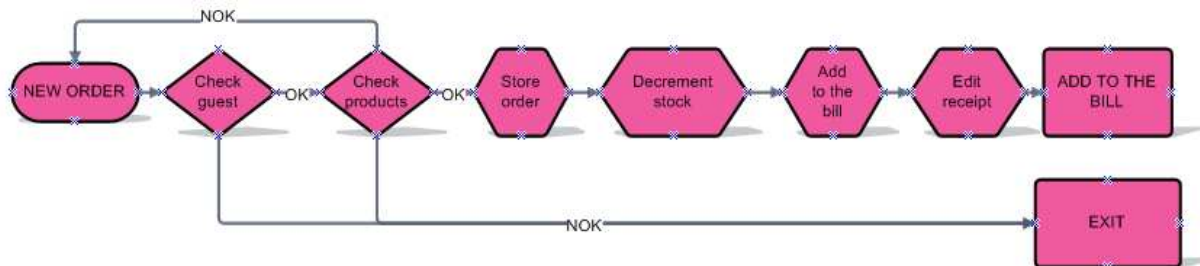
- New beverage
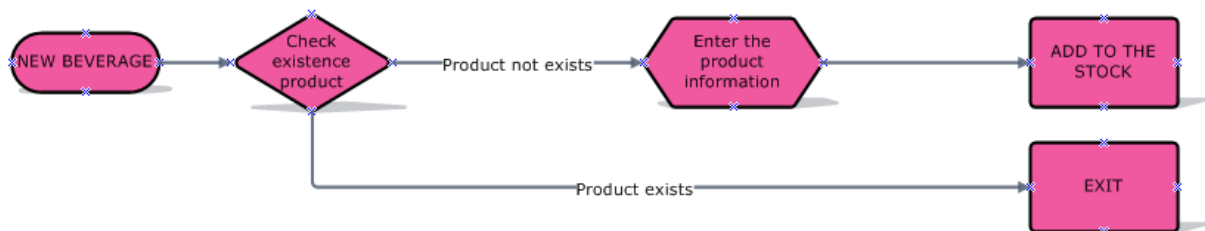
- Modification of a beverage
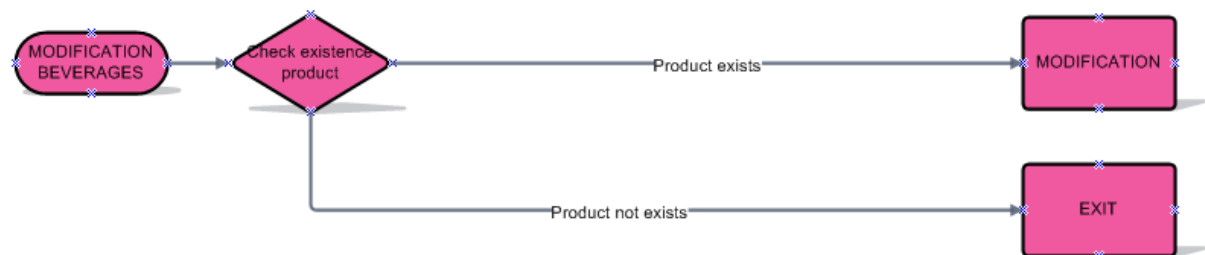
- Delete a beverage
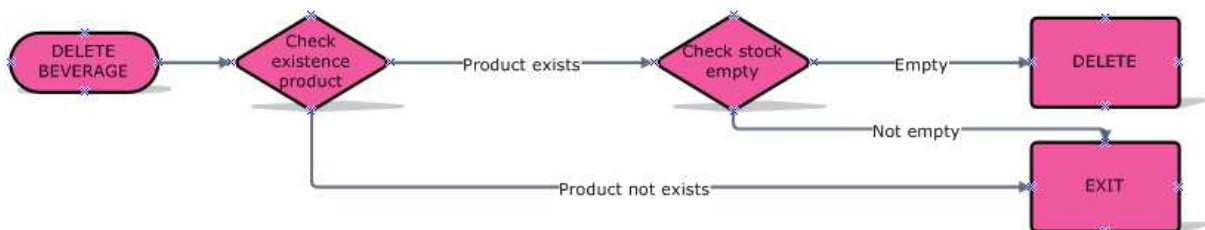
6. Restaurant

- Receipt arrival
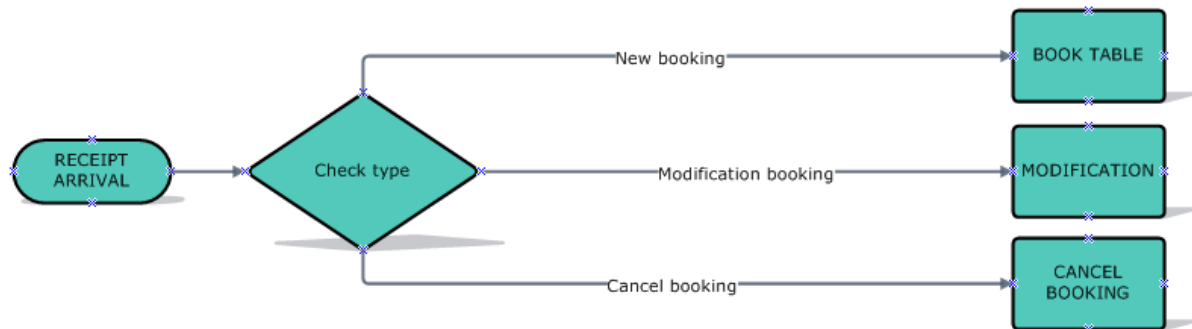
- A guest arrives
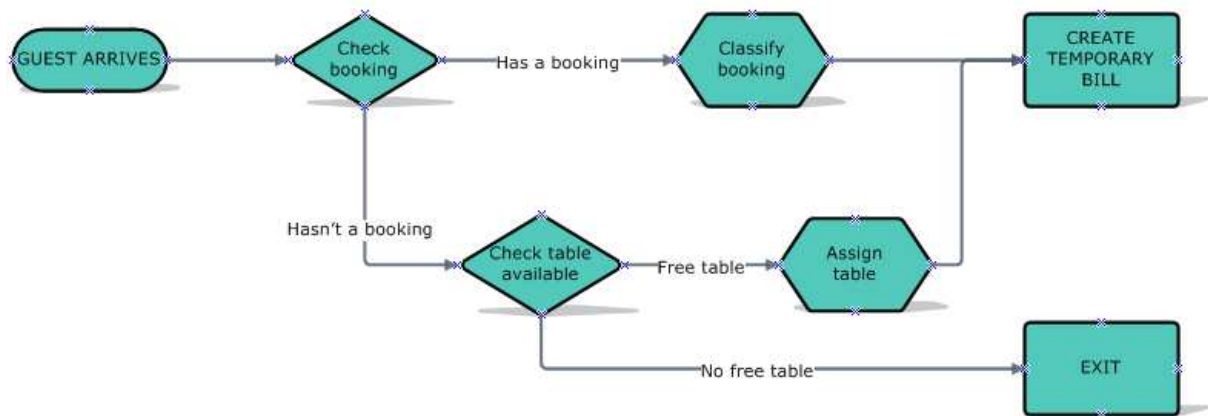
- New order

- Modification of an order
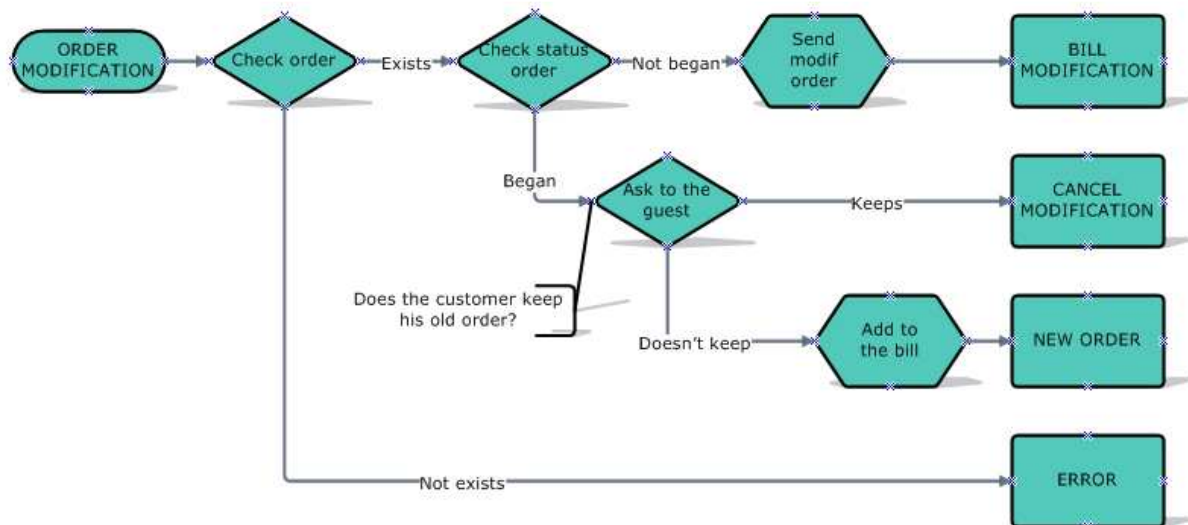
- Delete an order
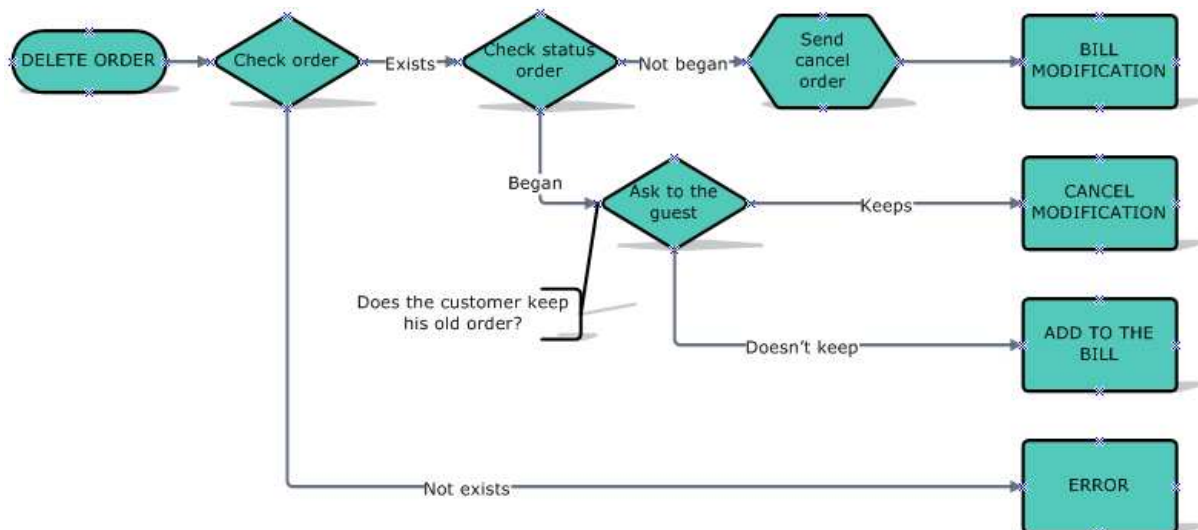
- An order is prepared

- A guest leaves

- New menu
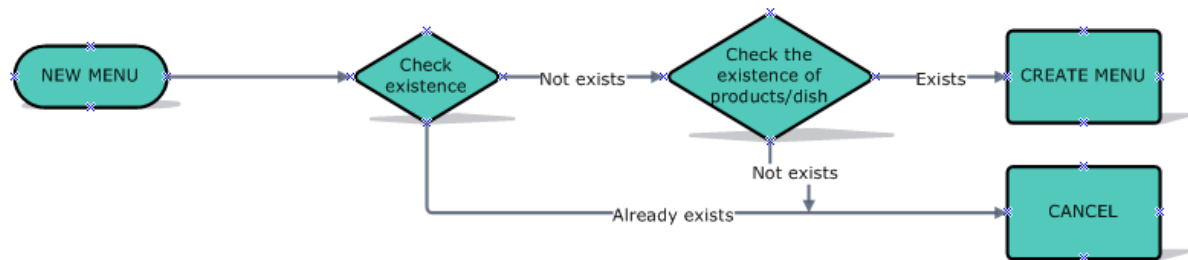
- Modification of a menu
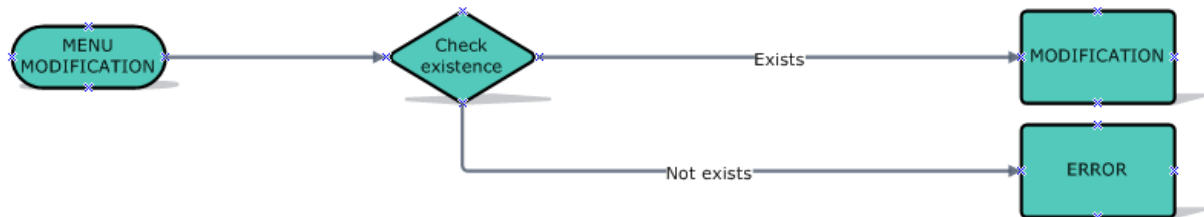
- Delete a menu
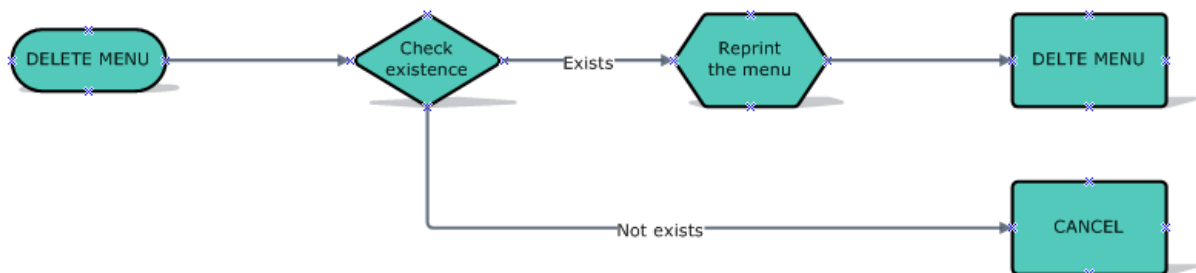
- Modification of a product
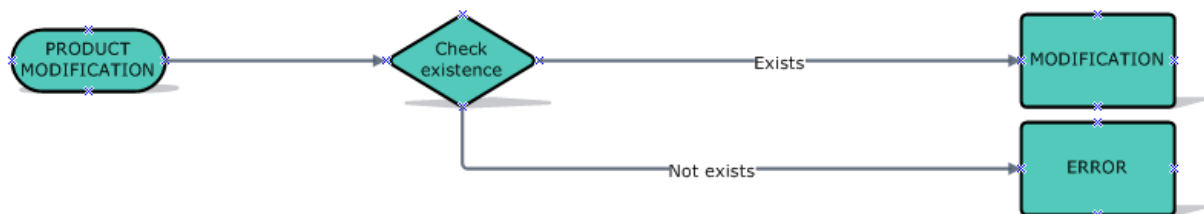
- New wine
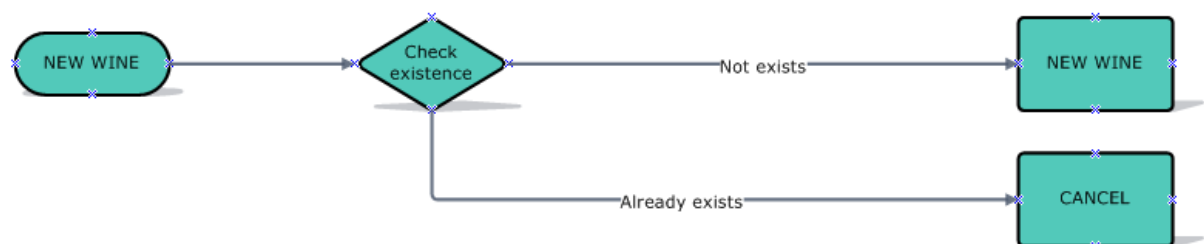
- Modification of a wine
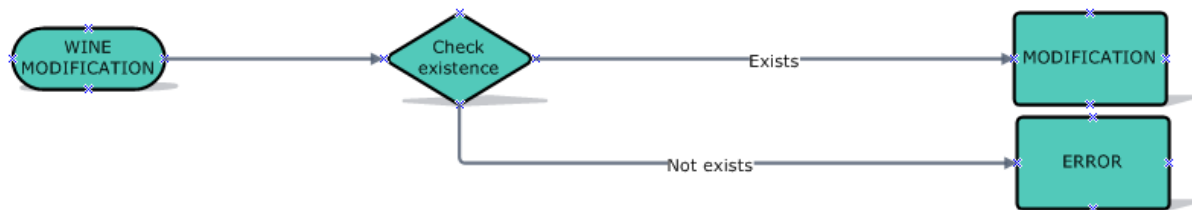
- Delete a wine
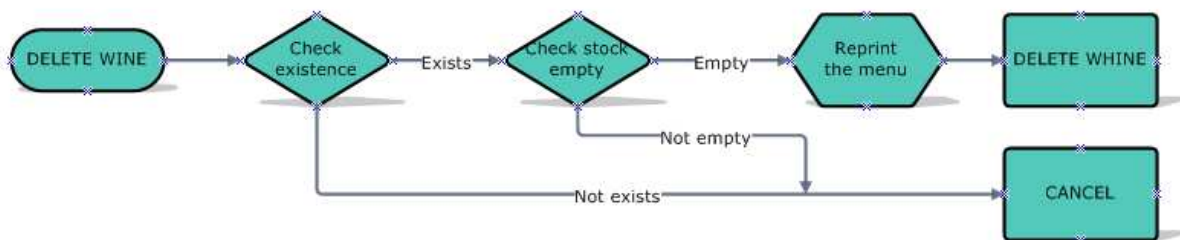
- New dish
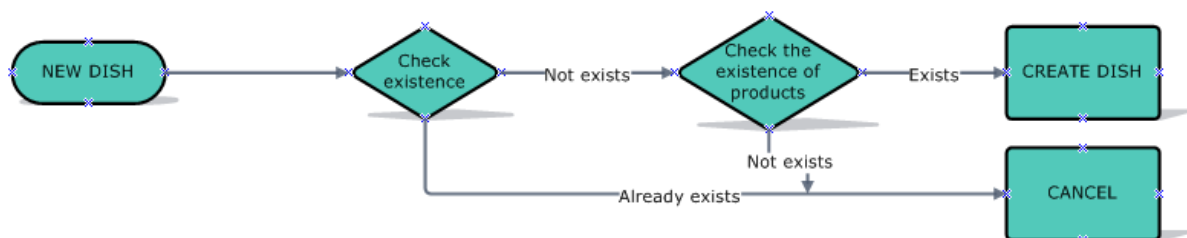
- Modification of a dish
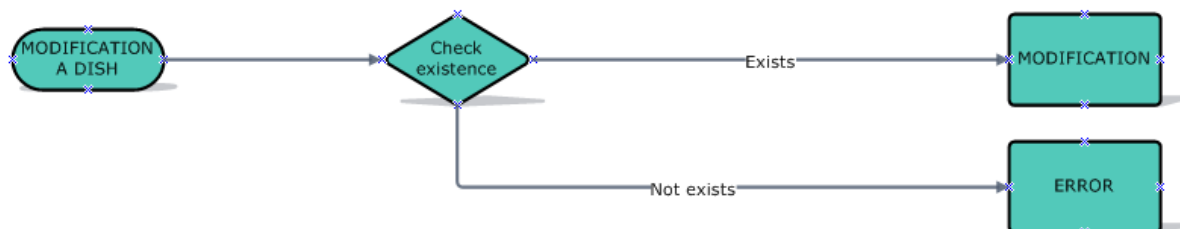
- Delete a dish
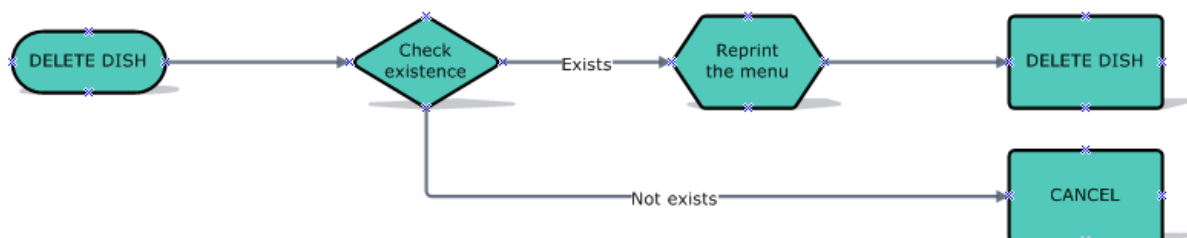
- Ask an invoice

- A guest no show
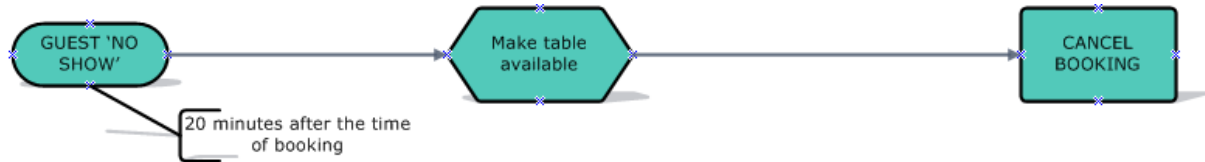
- End of a day

- The chef requests products
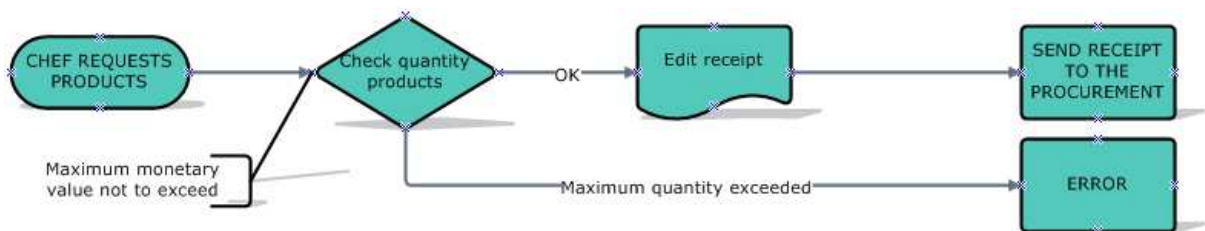
7. Laundry

- New receipt

- A laundry request is ready

8. Maids

- Start work

START WORK → CHECK IF THERE'S ANYTHING IN THE LAUNDRY

- A bag has to be deposited

BAG TO BE DEPOSITED → DELETE THROUGHT THE PDA THE BAG FROM THE LAUNDRY TABLE

- A maid arrives in a room

MAID ARRIVES IN A ROOM → Check all products → Product's missing → DECREMENT THE STOCK PRODUCT

Check all products → OK → EXIT
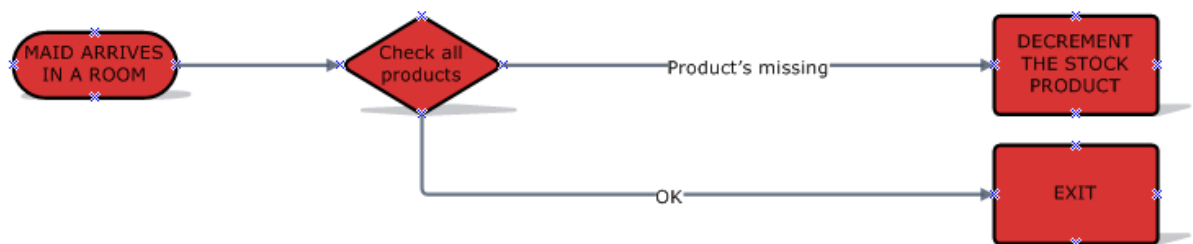
# IV.   Screens
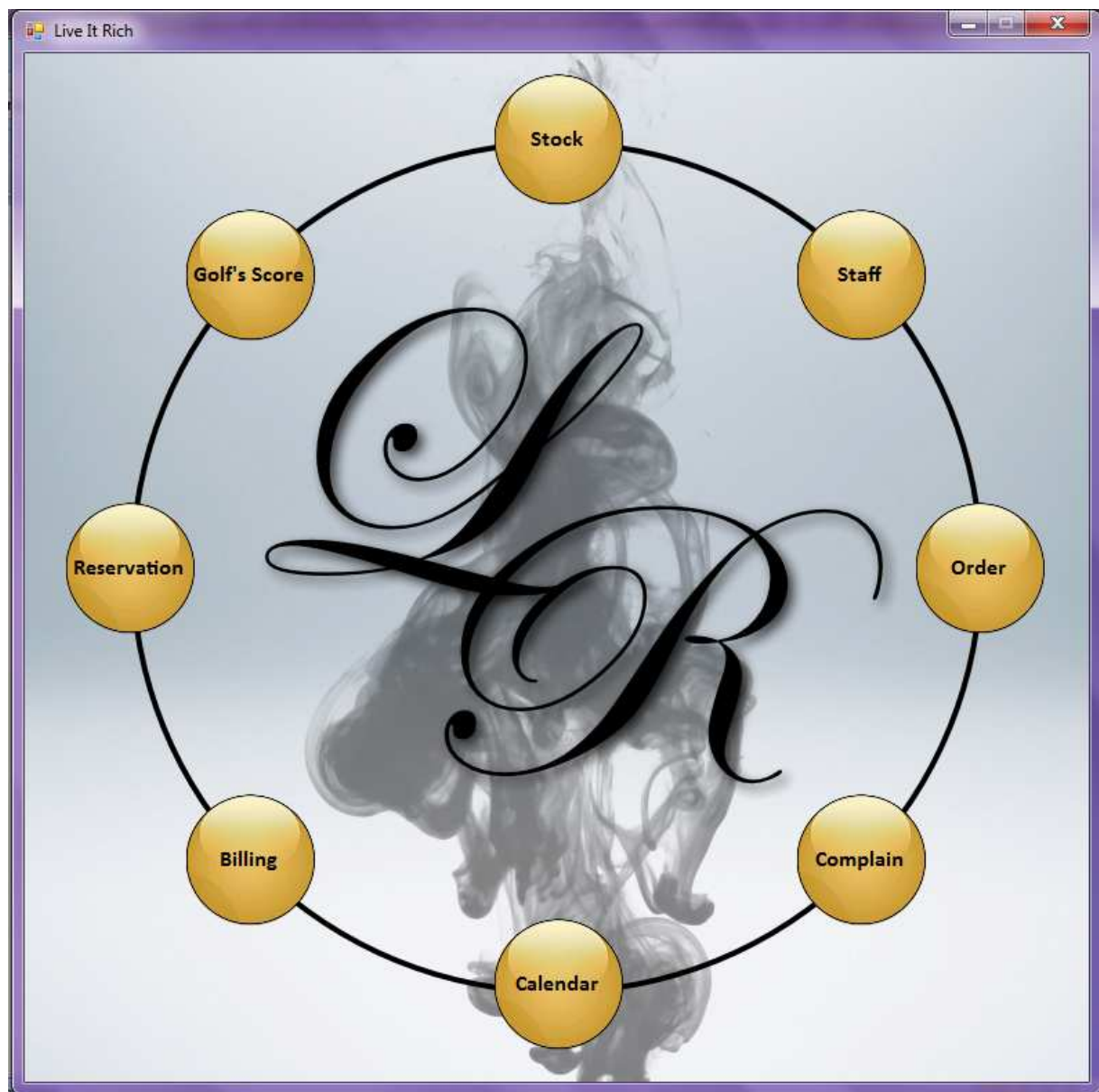
Main graphical interface

Reservation management for every service
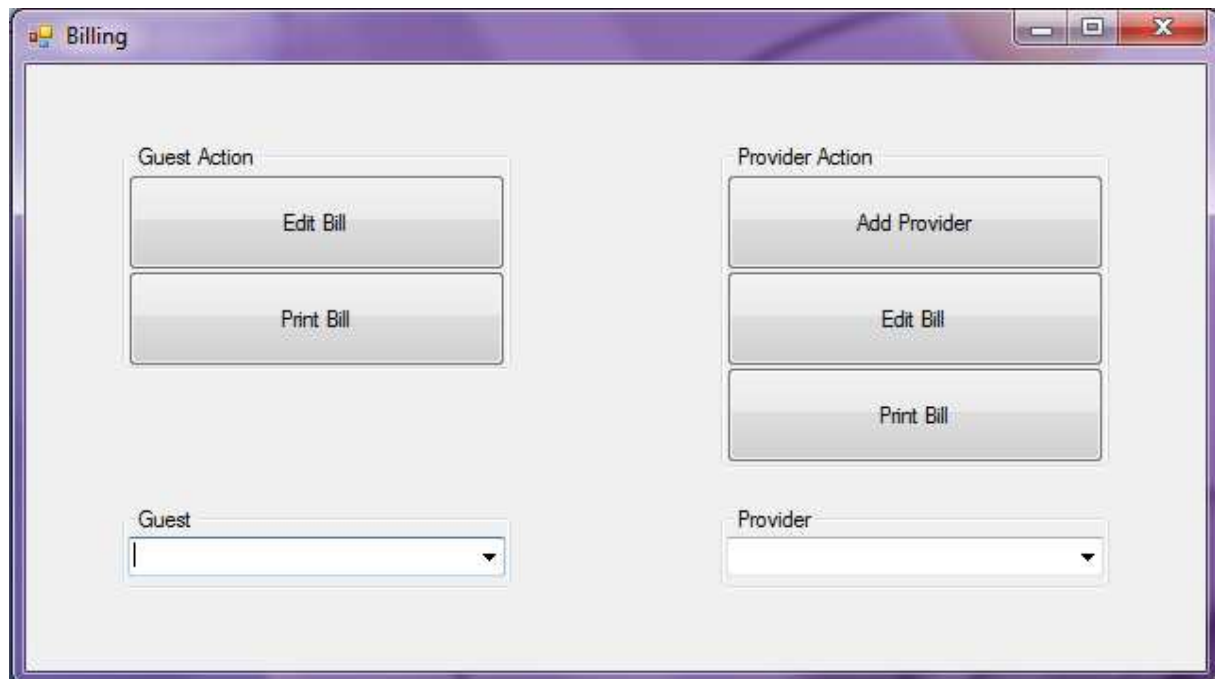

Stock management
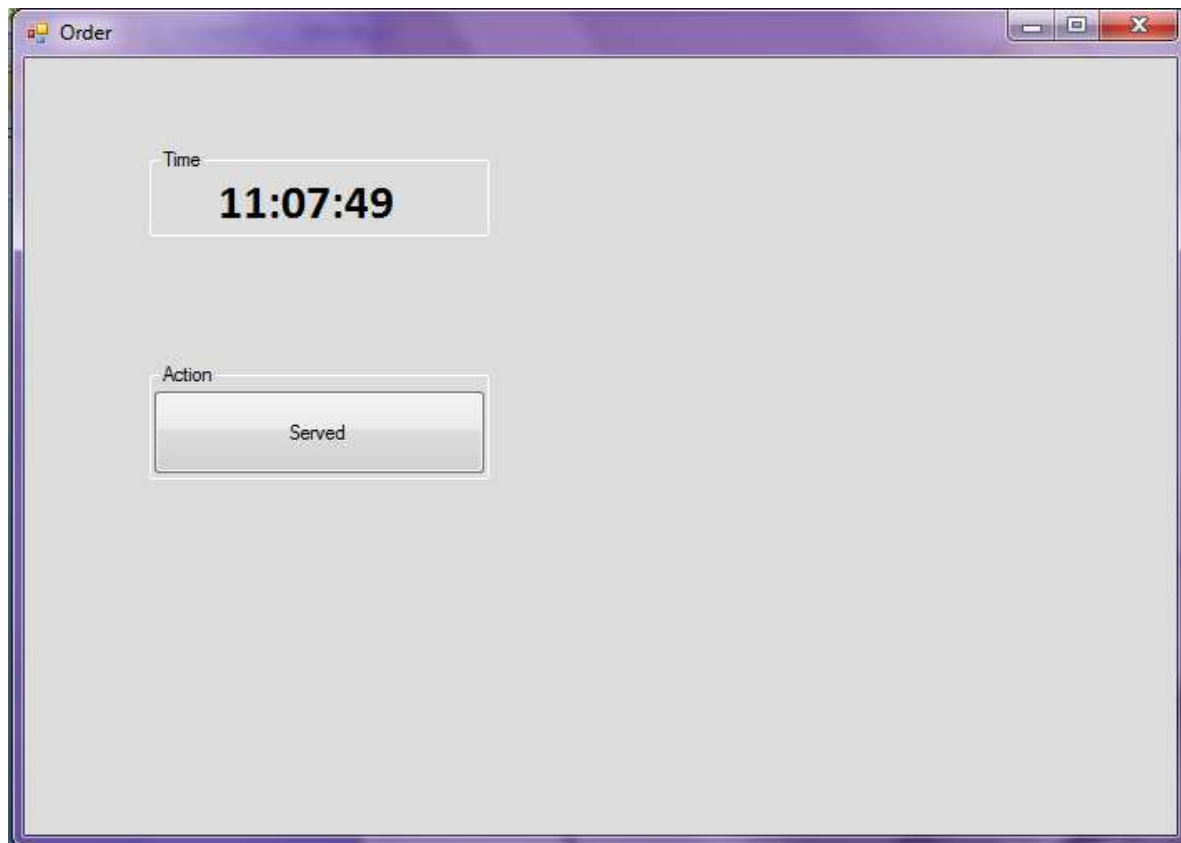
Orders management for the restaurants and the room service
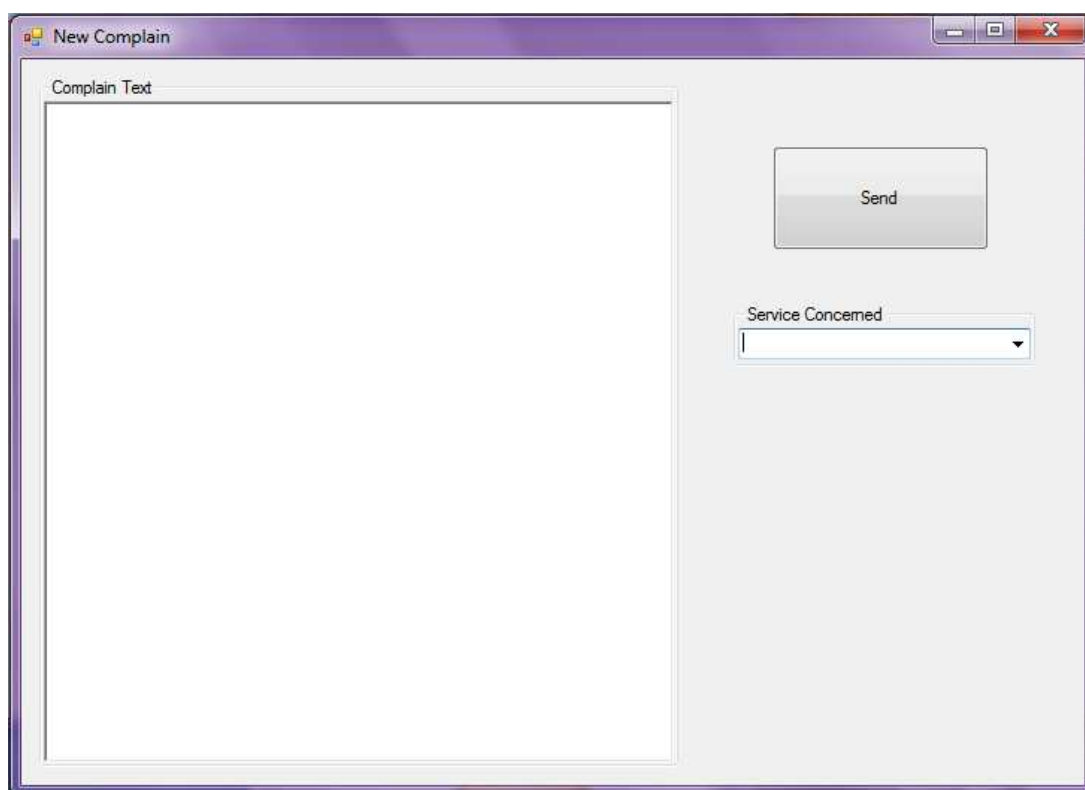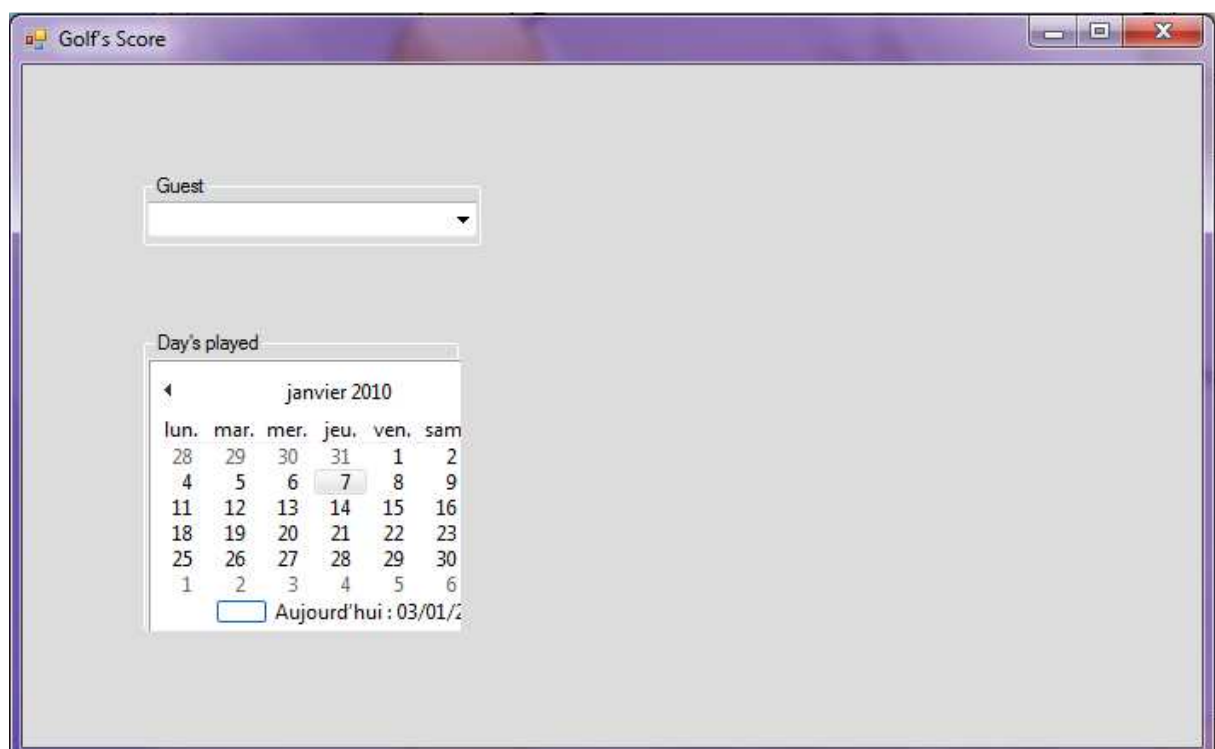
Complaints management

Billing management for guests and providers

Access to guests' score history