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# Measurement strategy phase

## PURPOSE

The purpose of this measurement is to measure a functional size of the **ALBERGATE** application that can be used as a basis to estimate the required effort to build the software.

## SCOPE

The scope of the measurement is all of the FUR that are related to the **ALBERGATE** application, i.e. which are derived from the requirements in ALBERGATE-UC document.

## LEVEL OF DECOMPOSITION

The level of decomposition of this scope is that of a whole application. All the functionality described in the FUR that is in scope for this measurement resides in the application layer.

## LEVEL OF GRANULARITY

The requirements are at the standard level of granularity, meaning that the functional users are individual humans (Operator, Hotel manager, Etc.) or System timers and not groups of these. The functional users that provide input data detect single occurrences of events that the ALBERGATE application must respond to.

By measuring at the standard level of granularity it is possible to use this measurement not only for the purpose of this measurement but also for benchmarking purposes, since most benchmark data is available at the standard level of granularity.

## FUNCTIONAL USERS

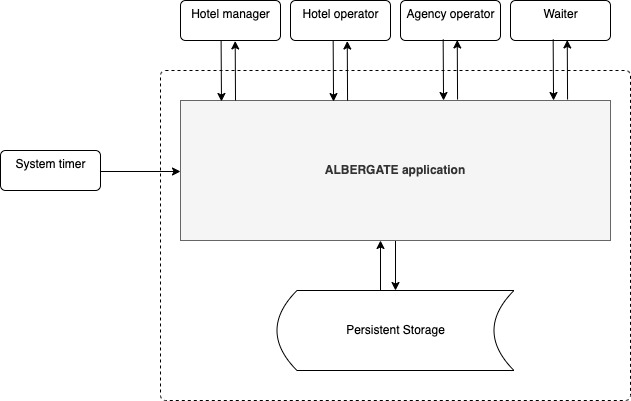
The functional users are the senders and/or intended recipients of data in the FUR of the ALBERGATE application.

Therefore, the functional users are:

* The hotel manager.
* The operators (hotel operators and agency operators).
* The waiters
* The system timer.

There is no exchange of data between the ALBERGATE application and other services, components or external applications.

The boundary of the ALBERGATE application is a conceptual interface between this piece of software and its functional users. It is indicated by the dashed line in the following picture:



The arrows represent the exchange of data between functional users and the ALBERGATE application.

# Mapping Phase

## Identity FUNCTIONAL PROCESSES

The following functional processes are identified in the FUR:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| N. | Triggering event | Functional user | The data moved by the Triggering Entry | Functional process | UCs |
| 1 | Enquire on rooms | Hotel Manager | Room code | Search for rooms | UC-GES-01.1 |
| 2 | Enquire on room details | Hotel Manager | Room code | View room details | UC-GES-01.2 |
| 3 | Modify room details | Hotel Manager | Room code | Edit room details | UC-GES-01.3 |
| 4 | Add a room | Hotel Manager | Room details | Insert a new room | UC-GES-01.4 |
| 5 | Enquire on services | Hotel Manager | Service code | Search for services | UC-GES-02.1 |
| 6 | Enquire on service details | Hotel Manager | Service code | View service details | UC-GES-02.2 |
| 7 | Modify service details | Hotel Manager | Service details | Edit service details | UC-GES-02.3 |
| 8 | Add a service | Hotel Manager | Service details | Insert a new service | UC-GES-02.4 |
| 9 | Enquire on customers | Hotel Manager, Operator | Customer filters | Search for customers | UC-GES-03.1 |
| 10 | Enquire on customer’s details | Hotel Manager, Operator | Customer fiscal code | View customer’s details | UC-GES-03.2 |
| 11 | Modify a customer’s details | Hotel Manager, Operator | Customer details | Edit customer details | UC-GES-03.3 |
| 12 | Add a customer | Hotel Manager, Operator | Customer details | Add a customer | UC-GES-03.4  UC-GES-03.4.1 |
| 13 | Enquire on seasons configurations | Hotel Manager | Configured Seasons request | Search for seasons configuration | UC-GES-04.1 |
| 14 | Enquire on season configuration details | Hotel Manager | Season configuration ID | View season configuration details | UC-GES-04.2 |
| 15 | Modify season configuration details | Hotel Manager | Configured season details | Edit season configuration | UC-GES-04.3 |
| 16 | Delete a season configuration | Hotel Manager | Season configuration ID | Remove season configuration | UC-GES-04.4 |
| 17 | Add a season configuration | Hotel Manager | Configured season details | Add a season configuration | UC-GES-04.5 |
| 18 | Enquire on Rooms and services configuration | Hotel Manager | Rooms and services Configurations request | View rooms and services configuration | UC-GES-04.4 |
| 19 | Modify rooms and services configuration | Hotel Manager | Rooms and services configuration details | Edit rooms and services configuration | UC-GES-04.5 |
| 20 | Enquire on room services | Hotel Manager | Room code | View room services | UC-GES-05.1 |
| 21 | Add a new service for room | Hotel Manager | Service code | Add service for room | UC-GES-05.2 |
| 22 | Delete a room service | Hotel Manager | Assigned service details | Delete room service | UC-GES-05.3 |
| 23 | Book a room | Operator | Room filter | Book a room | UC-PRE-01  UC-PRE-02  UC-PRE-02.1 |
| 24 | Blocked rooms management | System timer | Clock tick | Blocked rooms management | UC-PRE-03.0 |
| 25 | Enquire on blocked rooms | Hotel Manager | Blocked rooms warnings request | Search for blocked rooms | UC-PRE-03.1 |
| 26 | Modify reservation status for a blocked room | Hotel Manager,  Operator | New status | Change reservation status for a blocked room | UC-PRE-03.2 |
| 27 | Enquire on reservation details | Hotel Manager,  Operator | Reservation ID | View reservation details | UC-PRE-07 |
| 28 | Cancel reservation | Hotel Manager,  Operator | Reservation ID | Cancel reservation | UC-PRE-05 |
| 29 | Edit reservation details | Operator | Reservation filter | Edit reservation details | UC-PRE-06.1 |
| 30 | Modify reservation services | Operator | Reservation ID | Change reservation details | UC-PRE-06.2 |
| 31 | Enquire on customer’s reservations | Hotel Manager,  Operator | Reservation filters | List customer’s reservations | UC-PRE-08 |
| 32 | Enquire on agencies | Hotel Manager | Search criteria | Search for agencies | UC-PRE-04.1 |
| 33 | Enquire on Agency details | Hotel manager | Agency ID | View Agency details | UC-PRE-04.2 |
| 34 | Modify Agency details | Hotel manager | Agency details | Edit Agency details | UC-PRE-04.3 |
| 35 | Add a new agency | Hotel manager | Agency details | Insert agency | UC-PRE-04.4 |
| 36 | Add a commissioned room | Hotel manager | Date interval | Add commissioned room | UC-PRE-04.5 |
| 37 | Remove a commissioned room | Hotel manager | Room code | Remove a commissioned room | UC-PRE-04.6 |
| 38 | Enquire on orders | Hotel manager,  Waiter | Search criteria | Search for orders | UC-RIS-01.1 |
| 39 | Enquire on order details | Hotel manager,  Waiter | Order ID | View order details | UC-RIS-01.2 |
| 40 | Place order | Waiter | Tables status | Place order | UC-RIS-01.3 |
| 41 | Add food to meal | Waiter | Search fields | Add food to meal | UC-RIS-01.4 |
| 42 | Remove food from meal | Waiter | Food Id | Remove food from meal | UC-RIS-01.5 |
| 43 | Cancel an order | Hotel manager,  Waiter | Order ID | Cancel order | UC-RIS-01.6 |
| 44 | Prepare bill | Hotel manager, Waiter | Discount details | Prepare bill | UC-RIS-01.7 |
| 45 | Print bill | Hotel manager,  Waiter | Order ID | Print bill | UC-RIS-01.8 |
| 46 | Pay bill | Hotel manager,  Waiter | Order details | Pay bill | UC-RIS-01.9 |
| 47 | Enquire on menu categories | Hotel manager | Menu Category description | Search for menu category | UC-RIS-02.1 |
| 48 | Enquire on menu category details | Hotel manager | Menu Category ID | View menu category details | UC-RIS-02.2 |
| 49 | Modify a menu category | Hotel manager | Menu Category details | Edit menu category details | UC-RIS-02.3 |
| 50 | Add a menu category | Hotel manager | Menu Category details | Insert menu category | UC-RIS-02.4 |
| 51 | Remove a menu category | Hotel manager | Menu Category ID | Remove menu category | UC-RIS-03.5 |
| 52 | Modify food details | Hotel manager | Food details | Edit food | UC-RIS-02.6 |
| 53 | Remove food | Hotel manager | Food ID | Remove food | UC-RIS-02-7 |
| 54 | Add food | Hotel manager | Food details | Insert food | UC-RIS-02.8 |
| 55 | Check-in | Hotel manager | Room details | Check-in | UC-SOG-01.1  UC-SOG-01.2 |
| 56 | Enquire on current room services | Hotel manager | Filter fields | View current room services | UC-SOG-02.1 |
| 57 | Add services to current room | Hotel manager | Room code | Add services to current room | UC-SOG-02.2 |
| 58 | Telephone bill | Hotel manager | Room code | Telephone bill | UC-SOG-03 |
| 59 | Calculate total bill | Hotel manager | Reservation ID | Calculate total bill | UC-SOG-04 |
| 60 | Change room | Hotel manager, Hotel operator | Customer details | Room change | UC-SOG-06 |
| 61 | Checkout | Hotel manager | Reservation details | Checkout | UC-SOG-07 |
| 62 | Print Total bill | Hotel manager | Reservation details | Print total bill | UC-SOG-05 |

## Identify OBJECTS OF INTEREST and DATA GROUPS

The following objects of interest and data groups are identified:

|  |  |  |  |
| --- | --- | --- | --- |
| N. | Functional process | Object of interest | Data group(s) |
| 1 | Search for rooms | Room  Message | Room code  Room details  Messages |
| 2 | View room details | Room  Booked Room  Message | Room code  Room details  Messages |
| 3 | Edit room details | Room  Booked Room  Message | Room code  Room details  Messages |
| 4 | Insert a new room | Room  Message | Room details  Messages |
| 5 | Search for services | Service  Message | Service code  Service details  Messages |
| 6 | View service details | Service  Message | Service code  Service details  Messages |
| 7 | Edit service details | Service  Message | Service details  Messages |
| 8 | Insert a new service | Service  Message | Service details  Messages |
| 9 | Search for customers | Customer  Message | Customer filters  Customer details  Messages |
| 10 | View customer’s details | Customer  Message | Customer fiscal code  Customer details  Messages |
| 11 | Edit customer details | Customer  Message | Customer details  Messages |
| 12 | Add a customer | Customer  Message | Customer details  Messages |
| 13 | Search for seasons configuration | Configured season  Message | Configured Seasons request  Configured Season details  Configured Season data  Messages |
| 14 | View season configuration details | Configured season  Message | Season configuration ID  Configured season details  Messages |
| 15 | Edit season configuration | Configured season  Message | Configured season details  Messages |
| 16 | Remove season configuration | Configured season  Message | Season configuration ID  Configured season details  Messages |
| 17 | Add a season configuration | Configured season  Message | Configured season details  Messages |
| 18 | View rooms and services configuration | Rooms and services configuration  Message | Rooms and services Configurations request  Rooms and services configuration details  Messages |
| 19 | Edit rooms and services configuration | Rooms and services configuration  Message | Rooms and services configuration details  Messages |
| 20 | View room services | Assigned service  Message | Room code  Assigned service details  Messages |
| 21 | Add service for room | Service  Assigned service  Message | Service code  Service details  Assigned services details  Messages |
| 22 | Delete room service | Assigned service  Message | Assigned service details  Messages |
| 23 | Book a room | Room  Commissioned room  Booked room  Reservation  Assigned service  Configured Season  Customer  Requested Service  Children age  Message | Room filters  Room details  Commissioned room details  Booked rooms details  Room details data  Room codes  Assigned services details  Room details  Requestable services details  Reservation details  Customer fiscal code  Customer details  Configured season details  Requested services details  Children’s age details  Messages |
| 24 | Blocked rooms management | Rooms and services configuration  Reservation  Blocked room | Clock tick  Rooms and services configuration details  Reservation details  Blocked rooms details  Reservations IDs |
| 25 | Search for blocked rooms | Blocked rooms warnings  Message | Blocked rooms warnings request  Blocked room warnings details  Reservation Ids  Messages |
| 26 | Change reservation status for a blocked room | Reservation  Message | New status  Reservation details  Messages |
| 27 | View reservation details | Reservation  Booked room  Requested Service  Children ages  Message | Reservation ID  Reservation details  Booked room details  Requested Services details  Children’s age details  Messages |
| 28 | Cancel reservation | Reservation  Requested service  Booked room  Children age  Message | Reservation ID  Requested Services details  Booked rooms details  Children’s age details  Reservation details  Messages |
| 29 | Edit reservation details | Room  Commissioned room  Booked room  Assigned service  Customer  Reservation  Configured season  Requested Service  Children age  Message | Available room details  Room details  Commissioned room details  Booked rooms details  Assigned services details  Requestable services data  Customer details  Reservation details  Service details  Configured season details  Requested Services details  Children’s age details  Messages |
| 30 | Change reservation details | Reservation  Booked room  Room  Assigned service  Requested service  Message | Reservation ID  Booked room details  Room details  Booked Room details  Available services  Selected Services  Extra Services  Selected rooms  Removed services  Reservation details  Messages |
| 31 | List customer’s reservations | Reservation  Message | Filter details  Reservation details  Messages |
| 32 | Search for agencies | Agency  Message | Search criteria  Agency details  Messages |
| 33 | View Agency details | Agency  Commissioned room  Message | Agency ID  Agency details  Commissioned Room details  Messages |
| 34 | Edit Agency details | Agency  Message | Agency details  Messages |
| 35 | Insert agency | Agency  Message | Agency details  Messages |
| 36 | Add commissioned room | Commissioned Room  Booked room  Room  Message | Date interval  Uncommissioned Rooms  Unbooked rooms  Room details  Selected rooms  Commissioned Room details  Messages |
| 37 | Remove a commissioned room | Commissioned room  Message | Room code  Commissioned room details  Messages |
| 38 | Search for orders | Order  Message | Search criteria  Order details  Messages |
| 39 | View order details | Order  Ordered Food  Message | Order ID  Order details  Ordered foods details  Messages |
| 40 | Place order | Order  Table  Message | Tables status  Free tables  Order details  Table details  Table ID  Messages |
| 41 | Add food to meal | Food  Menu Category  Ordered Food  Order  Message | Search fields  Food details  Menu Category details  Food selection  Ordered Food details  Order details  Messages |
| 42 | Remove food from meal | Ordered Food  Order  Message | Food ID  Ordered Food details  Order details  Messages |
| 43 | Cancel order | Order  Ordered Food  Table  Message | Order ID  Order details  Ordered Food details  Table status  Messages |
| 44 | Prepare bill | Order  Message | Discount detail  Order details  Messages |
| 45 | Print bill | Order  Ordered Food  Message | Order ID  Order details  Ordered Food details  Messages |
| 46 | Pay bill | Order  Table  Message | Order details  Order status  Table status  Messages |
| 47 | Search for menu category | Menu Category  Message | Menu Category Description  Menu category details  Messages |
| 48 | View menu category details | Menu Category  Food  Message | Menu Category ID  Menu Category Details  Foods details  Messages |
| 49 | Edit menu category details | Menu Category  Message | Menu Category details  Messages |
| 50 | Insert menu category | Menu Category  Message | Menu Category details  Messages |
| 51 | Remove menu category | Menu Category  Food  Message | Menu Category ID  Menu Category Details  Food details  Messages |
| 52 | Edit food | Food  Message | Food details  Messages |
| 53 | Remove food | Food  Message | Food ID  Food details  Messages |
| 54 | Insert food | Food  Message | Food details  Messages |
| 55 | Check-in | Booked Room  Room Guest  Room  Customer  Reservation  Message | Room details  Guests details  Customer details  Booked room details  Room Guest details  Reservation status  Messages |
| 56 | View current room services | Requested Service  Service  Message | Filter fields  Requested service details  Service details  Messages |
| 57 | Add services to current room | Booked Room  Assigned service  Service  Requested Service  Reservation  Message | Room code  Assigned services details  Services details  Assigned Services data  Requested services details  Reservation details  Messages |
| 58 | Telephone bill | Booked room  Telephone bill  Rooms and services configuration  Reservation  Message | Room code  Telephone Bill Details  Number of phone call  Phone call cost  Reservation total amount  Messages |
| 59 | Calculate total bill | Reservation  Requested Service  Telephone bill  Message | Reservation ID  Reservation details  Requested Service details  Telephone bill details  Total amount  Messages |
| 60 | Room change | Customer  Room  Commissioned Room  Booked Room  Assigned Service  Requested Service  Telephone bill  Reservation  Room Guest  Message | Customer details  Room details  Commissioned room details  Booked room details  Room code  Assigned service details  Old Assigned service details  Requestable services detail  Service details  Telephone Bill details  Total amount  Messages |
| 61 | Checkout | Reservation  Customer  Message | Reservation details  Reservation status  Customer details  Messages |
| 62 | Print total bill | Reservation  Bill  Message | Reservation details  Bill details  Messages |

## Identity DATA ATTRIBUTES

The following data characteristics are found in the object of interests specified in the preceding section:

|  |  |
| --- | --- |
| Object of interest | Data attributes |
| Room | code, description, type, notes, status, view, additional beds, last valid price. |
| Service | code, description, notes, last valid price |
| Customer | surname, name, date of birth, fiscal code, address, city, email address, notes, currently occupied room, last occupied room |
| Configured season | ID, description, start date, end date, supplement |
| Rooms and services configuration | maximum duration for blocked rooms, infants discount, children discount, cost of a phone call |
| Assigned service | Service ID, Room code |
| Agency | ID, business name, email, contact name, address, city, VAT number. |
| Commissioned room | Agency ID, Room code, start date, end date |
| Reservation | ID, start date, end date, reservation date, status, number of adults, number of children, fiscal code, total amount, special requests |
| Booked room | ID, reservation ID, Room code, start date, end date, price |
| Requested service | Booked Room ID, Service ID, price, date |
| Children age | Reservation ID, age |
| Blocked room | Reservation ID |
| Order | ID, date, number of guests, table |
| Ordered food | Order ID, food, quantity, price, date |
| Table | Table, status |
| Menu category | ID, description, note |
| Food | ID, Category ID, food, description, price, available |
| Room Guest | Booked Room ID, Fiscal code |
| Telephone bill | ID, Booked Room code, reservation ID, number of phone calls, total cost, date |
| Bill details | Reservation, Telephone bill and Requested Service details |
| Message | Text |

# Measurement phase

The table below shows the functional processes identified in section 2.1, including all their movements of data groups (each of which describes an object of interest identified in section 0).

## Search for rooms

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager selects the sub-option "Rooms". |  |  |  |  |  |
| 2. The system shows a form to search rooms by code. |  |  |  |  |  |
| 3. The user optionally fills in the room code to filter the results and executes the search. | Hotel manager | Room code | Room | E | 1 |
| 4. The system searches for rooms that meet the search criteria. |  | Room details | Room | R | 1 |
| 5. The system displays the list of rooms that meet the search criteria. |  | Room details | Room | X | 1 |
| 6. The Hotel Manager browses the results. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 7. The system shows an error message stating that no results match the search criteria. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **4** |

## View room details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the "View room details" button relating to the room of his (or her) interest. | Hotel Manager | Room code | Room | E | 1 |
| 2. The system searches for the room with the given code. |  | Room details | Room | R | 1 |
| 3. The system shows a page with the room details: code, description, type, notes, status, view, additional beds and last valid price. |  | Room details | Room | X | 1 |
| Exceptions: |  |  |  |  |  |
| 3.a1. The system shows an error message stating that no room with the given code is available in persistent storage. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **4** |

## Edit room details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the "Edit room details" button relating to the room of his (or her) interest. | Hotel Manager | Room code | Room | E | 1 |
| 2. The system checks if the room is already occupied, looking up the Booked Room File. |  | Room details | Booked Room | R | 1 |
| 3. The system displays a page with the Room's description and other details. |  | Room details | Booked Room | X | 1 |
| 4. The hotel manager modifies the room details fields and presses “Save”. | Hotel Manager | Room details | Room | E | 1 |
| 5. The system checks that the room description contains at least three characters. |  |  |  |  |  |
| 6. The system checks that the room price and additional beds are greater or equal to 0. |  |  |  |  |  |
| 7. The system records the new room details. |  | Room details | Room | W | 1 |
| 8. The system displays a message indicating that the operation was successful. |  | Messages | Message | X | 1 |
| Alternative flow no. 1: |  |  |  |  |  |
| 3.a1. The system shows a warning message stating that the given room is already occupied and asks the user whether to continue. |  | Messages | Message | X | 0 |
| 4.a1. The hotel manager clicks the “Cancel” button. |  |  |  |  |  |
| 4.a2. The flow of events ends. |  |  |  |  |  |
| Alternative flow no. 2: |  |  |  |  |  |
| 3.b1. The system shows a warning message stating that the given room is already occupied and asks the user whether to continue. |  | Messages | Message | X | 0 |
| 4.b1. The hotel manager clicks the “Continue” button. |  |  |  |  |  |
| 4.b2. The flow of events resumes at step no. 3 of the MAIN SCENARIO. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 5.a1. The system shows an error message stating that the provided data are not valid. |  | Messages | Message | X | 0 |
| 6.a1. The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **6** |

## Insert a new room

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the "New room" button. |  |  |  |  |  |
| 2. The system shows a form with the following editable fields: code, description, view, notes, type, additional beds and active price. |  |  |  |  |  |
| 3. The hotel manager fills in the code, description, type, view, additional beds, and notes fields. | Hotel Maager | Room details | Room | E | 1 |
| 4. The hotel manager submits the form. |  |  |  |  |  |
| 5. The system checks that the room code contains at least one character. |  |  |  |  |  |
| 6. The system checks that the room description contains at least three characters. |  |  |  |  |  |
| 7. The system checks that the room price and additional beds are greater or equal to 0. |  |  |  |  |  |
| 8. The system records the new room details. |  | Room details | Room | W | 1 |
| 9. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 10. The system shows an error message stating that the provided data are not valid. |  | Messages | Message | X | 0 |
| 11. The system shows an error message stating that the provided code already exists in persistent storage. |  | Messages | Message | X | 0 |
| 12. The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## Search for services

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Step** | **FU** | **DG** | **OOI** | **DM** | **CFP** |
| 1. The hotel manager clicks the sub-option "Services". |  |  |  |  |  |
| 2. The system shows a form to search services by code. |  |  |  |  |  |
| 3. The user optionally fills in the service code to filter the results and executes the search. | Hotel Manager | Service code | Service | E | 1 |
| 4. The system searches for services that meet the search criteria. |  | Service details | Service | R | 1 |
| 5. The system displays the list of available services. |  | Service details | Service | X | 1 |
| 6. The Hotel Manager browses the results. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 7. The system shows an error message stating that no results match the search criteria. |  | Messages | Message | X | 1 |
| **TOTAL** | | | | | **4** |

## View service details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager presses ‘View service details’ relating to the service of his (or her) interest. | Hotel Manager | Service code | Service | E | 1 |
| 2. The system searches for the service with the given code. |  | Service details | Service | R | 1 |
| 3. The system shows a page with the service details: code, description, notes, and last valid price. |  | Service details | Service | X | 1 |
| Exceptions: |  |  |  |  |  |
| 4. The system shows an error message stating that no service with the given code is available in persistent storage. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **4** |

## Edit service details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the sub-option "Edit service details". |  |  |  |  |  |
| 2. The system shows a form with the following editable fields: description, notes and active price. |  |  |  |  |  |
| 3. The hotel manager modifies the fields of his interest. | Hotel Manager | Service details | Service | E | 1 |
| 4. The hotel manager presses the Save button. |  |  |  |  |  |
| 5. The system checks that the service description contains at least three characters. |  |  |  |  |  |
| 6. The system checks that the service price is greater or equal to 0. |  |  |  |  |  |
| 7. The system records the new service details. |  | Service details | Service | W | 1 |
| 8. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 9. The system shows an error message stating that the provided data are not valid. |  | Messages | Message | X | 0 |
| 10. The system shows a system error message. |  | Messages | Message | X | 0 |
| **TOTAL** | | | | | **3** |

## Insert a new service

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the "New service" button. |  |  |  |  |  |
| 2. The system shows a form with the following editable fields: code, description, notes and active price. |  |  |  |  |  |
| 3. The hotel manager fills in the code, description, and price fields. He (or She) optionally fills in the notes field. | Hotel manager | Service details | Service | E | 1 |
| 4. The hotel manager submits the form. |  |  |  |  |  |
| 5. The system checks that the service code contains at least one character. |  |  |  |  |  |
| 6. The system checks that the service description contains at least three characters. |  |  |  |  |  |
| 7. The system checks that the service price is greater or equal to 0. |  |  |  |  |  |
| 8. The system records the new service details. |  | Service details | Service | W | 1 |
| 9. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions |  |  |  |  |  |
| 10. The system shows an error message stating that the provided data are not valid. |  | Messages | Message | X | 0 |
| 11. The system shows an error message stating that the provided code already exists in persistent storage. |  | Messages | Message | X | 0 |
| 12. The system shows a system error message. |  | Messages | Message | X | 0 |
| **TOTAL** | | | | | **3** |

## Search for customers

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The user clicks the sub-option " Customers" |  |  |  |  |  |
| 2. The system shows a form to search customers. |  |  |  |  |  |
| 3. The form contains the following filters: surname, name, fiscal code. |  |  |  |  |  |
| 4. The user optionally fills in the filters. | Hotel manager, Operator | Customer filters | Customer | E | 1 |
| 5. The user executes the search. |  |  |  |  |  |
| 6. The system searches for customers that meet the search criteria. |  | Customer details | Customer | R | 1 |
| 7. The system displays the list of available customers. |  | Customer details | Customer | X | 1 |
| 8. The Hotel Manager browses the results. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 9. The system shows an error message stating that no results match the search criteria. |  | Messages | Message | X | 1 |
| **TOTAL** | | | | | **4** |

## View customer details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The user clicks the "View customer details" button relating to the customer of his (or her) interest. | Hotel manager, Operator | Customer fiscal code | Customer | E | 1 |
| 2. The system searches for the customer with the given fiscal code. |  | Customer details | Customer | R | 1 |
| 3. The system displays the customer details: surname, name, date of birth, fiscal code, address, city, email address, notes, currently occupied room, and last occupied room. |  | Customer details | Customer | X | 1 |
| Exceptions: |  |  |  |  |  |
| 3.a1. The system shows an error message stating that no customer with the given fiscal code is available in persistent storage. |  | Messages | Message | X | 1 |
| 3.b1. The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **4** |

## Edit customer details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The user clicks the sub-option "Edit customer details" |  |  |  |  |  |
| 2. The system shows a form with the following editable fields: surname, name, date of birth, fiscal code, address, city, and notes. |  |  |  |  |  |
| 3. The user modifies the fields of his interest. | Hotel manager, Operator | Customer details | Customer | E | 1 |
| 4. The user presses the Save button. |  |  |  |  |  |
| 5. The system checks that the surname and name fields contain at least two characters. |  |  |  |  |  |
| 6. The system checks that the fiscal code field is valid. |  |  |  |  |  |
| 7. The system checks that the date of birth is correct. |  |  |  |  |  |
| 8. The system records the new customer details. |  | Customer details | Customer | W | 1 |
| 9. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions |  |  |  |  |  |
| 10. The system shows an error message stating that the provided data are not valid. |  | Messages | Message | X | 0 |
| 11. The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## Add a customer

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The user clicks the "New customer" button |  |  |  |  |  |
| 2. The system shows a form with the following editable fields: surname, name, date of birth, fiscal code, address, city, and notes. |  |  |  |  |  |
| 3. The user fills in the surname, name, date of birth, address, city, email address, fiscal code fields, and optionally the notes field. | Hotel manager, Operator | Customer details | Customer | E | 1 |
| 4. The user submits the form. |  |  |  |  |  |
| 5. The system checks that: the surname and name fields contain at least two characters. |  |  |  |  |  |
| 6. The system checks that the fiscal code field is valid. |  |  |  |  |  |
| 7. The system checks that the date of birth is correct. |  |  |  |  |  |
| 8. The system checks that the email address is valid. |  |  |  |  |  |
| 9. The system records the new customer in persistent storage. |  | Customer details | Customer | W | 1 |
| 10. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions |  |  |  |  |  |
| 5.a1. The system shows an error message stating that the provided data are not valid. |  | Messages | Message | X | 0 |
| 5.b1. The system shows an error message stating that the provided fiscal code already exists in persistent storage |  | Messages | Message | X | 0 |
| 5.c1. The system shows a system error message. |  | Messages | Message | X | 0 |
| **TOTAL** | | | | | **3** |

## Search for seasons configuration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The actor clicks “Seasons Configuration” to view all configured seasons. | Hotel manager | Configured Seasons request | Configured season | E | 1 |
| 2. The system searches for the configured seasons in persistent storage. |  | Configured Seasons details | Configured season | R | 1 |
| 3. The system displays the list of configured seasons. |  | Configured Seasons details | Configured season | X | 1 |
| 4. The user browses the result. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 5.a1. The system shows an error message stating that no results were found. |  | Messages | Message | X | 1 |
| **TOTAL** | | | | | **4** |

## View season configuration details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks ‘View season configuration details’ relating to the configuration of his (or her) interest | Hotel Manager | Season configuration ID | Configured season | E | 1 |
| 2. The system searches for the season configuration with the given ID |  | Configured season details | Configured season | R | 1 |
| 3. The system shows a page with the season configuration details: ID, description, start date, end date, supplement. |  | Configured season details | Configured season | X | 1 |
| Exceptions: |  |  |  |  |  |
| 4. The system shows an error message stating that no configuration with the given ID is available in persistent storage |  | Messages | Message | X | 1 |
| 5. The system shows a system error message. |  | Messages | Message | X | 0 |
| **TOTAL** | | | | | **4** |

## Edit season configuration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the sub-option "Edit configuration" |  |  |  |  |  |
| 2. The system shows a form with the following editable fields: description, start date, end date and supplement. |  |  |  |  |  |
| 3. The hotel manager modifies the fields of his interest. | Hotel manager | Configured season details | Configured season | E | 1 |
| 4. The hotel manager presses the Save button. |  |  |  |  |  |
| 5. The system checks that the season description contains at least three characters. |  |  |  |  |  |
| 6. The system checks that the supplement is greater or equal to 0. |  |  |  |  |  |
| 7. The system checks that the date interval is valid. |  |  |  |  |  |
| 8. The system records the new season configuration details. |  | Configured season details | Configured season | W | 1 |
| 9. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions |  |  |  |  |  |
| 10.a1. The system shows an error message stating that the provided data are not valid. |  | Messages | Message | X | 0 |
| 11.b1. The system shows a system error message. |  | Messages | Message | X | 0 |
| **TOTAL** | | | | | **3** |

## Remove season configuration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the "Delete configuration" button relating to the configuration of his (or her) interest. | Hotel manager | Season configuration ID | Configured season | E | 1 |
| 2. The system asks the user to confirm the operation. |  |  |  |  |  |
| 3. The hotel manager clicks the “Confirm” button. |  |  |  |  |  |
| 4. The system removes the given season configuration from the persistent storage. |  | Configured season details | Configured season | W | 1 |
| 5. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1: |  |  |  |  |  |
| 3.a1. The hotel manager clicks the “Undo” button. |  |  |  |  |  |
| 3.a2. The flow of events ends. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 5.a1. The system shows a system error message. |  | Messages | Message | X | 0 |
| **TOTAL** | | | | | **3** |

## Add a season configuration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the sub-option "New configuration" |  |  |  |  |  |
| 2. The system shows a form with the following editable fields: ID, description, start date, end date and supplement. |  |  |  |  |  |
| 3. The hotel manager fills in the ID, description, start date, end date, and supplement fields. | Hotel manager | Configued season details | Configued season | E | 1 |
| 4. The hotel manager submits the form. |  |  |  |  |  |
| 5. The system checks that the configuration ID contains at least one character. |  |  |  |  |  |
| 6. The system checks that the configuration description contains at least three characters. |  |  |  |  |  |
| 7. The system checks that the date interval is valid. |  |  |  |  |  |
| 8. The system checks that the supplement is greater or equal to 0. |  |  |  |  |  |
| 9. The system records the new season configuration. |  | Configued season details | Configued season | W | 1 |
| 10. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions |  |  |  |  |  |
| 11. The system shows an error message stating that the provided data are not valid. |  | Messages | Message | X | 0 |
| 12. The system shows an error message stating that the provided ID already exists in persistent storage |  | Messages | Message | X | 0 |
| 13. The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## View rooms and services configuration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. Hotel manager The actor clicks “Rooms and Services Configuration” to list “rooms and services” configuration. | Hotel manager | Rooms and services Configurations request | Rooms and Services Configuration | E | 1 |
| 2. System The system searches for the Rooms and Services configuration in persistent storage. |  | Rooms and Services Configuration details | Rooms and Services Configuration | R | 1 |
| 3. System The system displays the configuration details. |  | Rooms and Services Configuration details | Rooms and Services Configuration | X | 1 |
| 4. Hotel manager The user reviews the result. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 5. System The system shows an error message stating that no results were found. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **4** |

## Edit rooms and services configuration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the sub-option "Edit configuration" |  |  |  |  |  |
| 2. The system shows a form with the following editable fields: maximum duration for blocked rooms, infants discount, children discount, and cost of a phone call. |  |  |  |  |  |
| 3. The hotel manager modifies the fields of his interest. | Hotel manager | Rooms and services configuration details | Rooms and services configuration | E | 1 |
| 4. The hotel manager presses the Save button. |  |  |  |  |  |
| 5. The system checks that the infants discount, children discounts, and phone call cost are greater or equal to 0. |  |  |  |  |  |
| 6. The system checks that the maximum duration is greater than 0. |  |  |  |  |  |
| 7. The system records the new rooms and services configuration. |  | Rooms and services configuration details | Rooms and services configuration | W | 1 |
| 8. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 9. The system shows an error message stating that the provided data are not valid. |  | Messages | Message | X | 0 |
| 10. The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## View room services

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the "View services" link for the given room. | Hotel manager | Room code | Assigned Service | E | 1 |
| 2. The system searches for the assigned services of the given room. |  | Assigned Service details | Assigned Service | R | 1 |
| 3. The system displays the list of assigned services of the given room. |  | Assigned Service details | Assigned Service | X | 1 |
| 4. The Hotel Manager browses the results. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 5. The system shows an error message stating that no results match the search criteria. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **4** |

## Add service for room

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the sub-option "Services" |  |  |  |  |  |
| 2. The system shows a form to search services by code |  |  |  |  |  |
| 3. The user optionally fills in the service code to filter the results. | Hotel manager | Service code | Service | E | 1 |
| 4. The user executes the search. |  |  |  |  |  |
| 5. The system searches for services that meet the search criteria |  | Service details | Service | R | 1 |
| 6. The system displays the list of available services |  | Service details | Service | X | 1 |
| 7. The hotel manager fills in the service of his (or her) interest to send to the system. | Hotel manager | Assigned Services details | Assigned Service | E | 1 |
| 8. The system refreshes the list. |  |  |  |  |  |
| 9. The hotel manager clicks the “Save” button |  |  |  |  |  |
| 10. The system saves the changes to the Room Services file. |  | Assigned Services details | Assigned Service | W | 1 |
| 11. The system displays a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1: |  |  |  |  |  |
| 8.a1. The user clicks the “Undo” button |  |  |  |  |  |
| 9.a1. The system refreshes the list. |  |  |  |  |  |
| 10.a1. The flow of events ends. |  |  |  |  |  |
| Alternative Flow no. 2: |  |  |  |  |  |
| 5.a1. There are no available services, therefore the Hotel manager clicks the close button. |  |  |  |  |  |
| 6.a1. The flow of events ends. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 12. The system shows an error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **6** |

## Delete room service

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the “Delete” button regarding the service of his(or her) interest | Hotel manager | Assigned service details | Assigned Service | Entry | 1 |
| 2. The system asks the user to confirm or not the operation |  |  |  |  |  |
| 3. The hotel manager confirms the operation |  |  |  |  |  |
| 4. The system removes the selected service from the list of assigned services to the given room |  | Assigned service details | Assigned Service | W | 1 |
| 5. The system displays a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1 |  |  |  |  |  |
| 3.a1. The user does not confirm the operation. |  |  |  |  |  |
| 3.a2. The flow of events ends. |  |  |  |  |  |
| Exceptions |  |  |  |  |  |
| 5.a1. The system shows an error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## Book a room

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The user selects the “Book a room” Link. |  |  |  |  |  |
| 2. The system displays a form containing the room filters. |  |  |  |  |  |
| 3. The user fills in the filters. | Operator | Room filters | Room | E | 1 |
| 4. The user clicks the “Search Availability” button. |  |  |  |  |  |
| 5. The system validates the given filters. |  |  |  |  |  |
| 6. The system searches for all rooms of the given type to accommodate the guests. |  | Room details | Room | R | 1 |
| 7. For each room, the system checks if it is commissioned in the Commission file in the given date interval. |  | Commissioned Room details | Commissioned room | R | 1 |
| 8. For each room, the system searches for unbooked dates in the Booked rooms file. |  | Booked rooms details | Booked rooms | R | 1 |
| 9. The system lists the available rooms. |  | Room details | Room | X | 1 |
| 10. The user browses the results. |  |  |  |  |  |
| 11. The actor presses “Reserve rooms” relating to the rooms of his interest. | Operator | Room codes | Room | E | 1 |
| 12. The system reads from persistent storage the room details. |  | Room details | Room | R | 1 |
| 13. The system searches for the requestable room services for the selected rooms. |  | Assigned services details | Assigned service | R | 1 |
| 14. The system lists the selected rooms. |  | Room details | Room | X | 1 |
| 15. The system lists the requestable services for each room. |  | Requestable service details | Assigned service | X | 1 |
| 16. The user presses "Reservation" relating to the reservation details of his interest. | Operator | Reservation details | Reservation | E | 1 |
| 17. The system searches for supplements in Configured season file. |  | Supplement details | Configured season | R | 1 |
| 18. The system lists the reservation details. |  | Reservation details | Reservation | X | 1 |
| 19. The system shows a blank formatted screen to insert the customer's details. |  |  |  |  |  |
| 20. The user fills in the fiscal code field. | Operator | Customer fiscal code | Customer | E | 1 |
| 21. The system searches for the customer with the given fiscal code. |  | Customer details | Customer | R | 1 |
| 22. The system shows a page with the customer details. |  | Customer details | Customer | X | 1 |
| 23. The user clicks the "Select" sub-option. |  |  |  |  |  |
| 24. The system displays a formatted screen for the customer’s details. |  |  |  |  |  |
| 25. The user optionally enters the customer’s details. | Operator | Customer details | Customer | E | 1 |
| 26. The user fills in the selection for the reservation details. | Operator | Reservation details | Reservation | E | 1 |
| 27. The system updates the customer’s details if needed. |  | Customer details | Customer | W | 1 |
| 28. The system searches for the season configuration in the given interval. |  | Configured season details | Configured season | R | 1 |
| 29. The system stores the reservation header. |  | Reservation details | Reservation | W | 1 |
| 30. The system stores the booked rooms for the given date interval. |  | Booked room details | Booked room | W | 1 |
| 31. The system then saves the requested services for the selected rooms. |  | Requested services details | Requested Service | W | 1 |
| 32. The system saves the children's ages. |  | Children's ages details | Children age | W | 1 |
| 33. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1: no customers found with the given fiscal code |  |  |  |  |  |
| 1. The user fills in the surname, name, date of birth, address, city, email address, fiscal code fields, and optionally the notes field. | Operator | Customer details | Customer | E | 1 |
| 2. The user submits the form. |  |  |  |  |  |
| 3. The system checks that: the surname and name fields contain at least two characters, the fiscal code field is valid, the date of birth is correct, the email address is valid. |  |  |  |  |  |
| 4. The system records the new customer in persistent storage. |  | Customer details | Customer | W | 1 |
| 5. The flow of events resumes at step no. 19 of the main scenario. |  |  |  |  |  |
| Alternative flow no. 2: |  |  |  |  |  |
| 1. The user presses the Close button. The flow of events ends. |  |  |  |  |  |
| Alternative flow no. 1: |  |  |  |  |  |
| 3. The system presents static drop-down lists to specify every child’s age. The flow of events resumes at step no. 5 of the main scenario. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 1. The system shows an error message stating that no results have been found. |  | Messages | Message | X | 0 |
| 2. The system shows a system error message. |  | Messages | Message | X | 0 |
| 3. The system shows an error message stating that no customer with the given fiscal code is available in persistent storage. |  | Messages | Message | X | 0 |
| 4. The system shows a system error message. |  | Messages | Message | X | 0 |
| 5. The system shows an error message stating that the selected room(s) is (are) already occupied. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **27** |

## Blocked rooms management

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. System timer The system timer ticks and requests the system to check if there are blocked rooms to process. | System timer | Clock tick | Clock | E | 1 |
| 2. System The system searches for the maximum amount of time rooms may be blocked in Rooms and Services configuration file. |  | Rooms and Services configuration details | Rooms and Services configuration | R | 1 |
| 3. System The system looks for reservations with the status "Reserved" or "In progress" booked for more than the maximum length of time. |  | Reservations details | Reservation | R | 1 |
| 4. System The system empties the Blocked Rooms Warnings file. |  | Blocked Rooms Warnings details | Blocked Rooms Warnings | W | 1 |
| 5. System The system saves the reservations' IDs in the Blocked Rooms Warnings file. |  | Reservations IDs | Blocked Rooms Warnings | W | 1 |
| Alternative flow no. 1: |  |  |  |  |  |
| 1. System No reservations have been found for the search criteria. |  |  |  |  |  |
| 2. System The flow of events ends. |  |  |  |  |  |
| TOTAL | | | | | **5** |

## Search for blocked rooms

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks "Blocked rooms warnings" to list all the “blocked rooms” | Hotel manager | Blocked rooms warnings request | Blocked rooms warnings | E | 1 |
| 2. The system searches for the reservations whose IDs are in the Blocked Rooms Warnings file. |  | Reservation Ids | Blocked rooms warnings | R | 1 |
| 3. The system shows a list of reservations to be processed. |  | Blocked rooms warnings details | Blocked rooms warnings | X | 1 |
| 4. The user browses the results. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 5. The system shows an error message stating that no results match the search criteria. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **4** |

## Change reservation status for a blocked room

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The user clicks the "Change status" button for the given reservation ID |  |  |  |  |  |
| 2. The system shows a form containing the new status field having the following items: “Assigned,” “Extended.” |  |  |  |  |  |
| 3. The user selects the new status. | Hotel manager, Operator | New status | Reservation | E | 1 |
| 4. The user submits the form. |  |  |  |  |  |
| 5. The system updates the given reservation header with the new status. |  | Reservation details | Reservation | W | 1 |
| 6. The system displays a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 7.a1. The system shows an error message stating that no reservation with the given ID is available in persistent storage. |  | Messages | Message | X | 0 |
| 7.a2. The system shows an error message stating that the status of the given reservation is inconsistent. |  | Messages | Message | X | 0 |
| 7.b1. The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## View reservation details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The user clicks the "Details" button regarding the reservation of his (or her) interest. | Hotel manager, Operator | Reservation ID | Reservation | E | 1 |
| 2. The system searches for the reservation header with the given ID. |  | Reservation details | Reservation | R | 1 |
| 3. The system searches for the booked rooms. |  | Booked rooms details | Booked room | R | 1 |
| 4. The system searches for the requested services for every booked room. |  | Requested services details | Requested services | R | 1 |
| 5. The system searches for the children’s ages. |  | Children’s ages details | Children’s ages | R | 1 |
| 6. The system shows a page with the reservation details. |  | Reservation details | Reservation | X | 1 |
| 7. The system shows the booked rooms. |  | Booked rooms details | Booked room | X | 1 |
| 8. The system shows the requested services. |  | Requested services details | Requested services | X | 1 |
| 9. The system shows the children’s ages. |  | Children’s ages details | Children’s ages | X | 1 |
| Exceptions: |  |  |  |  |  |
| 10.a1. The system shows an error message stating that no reservation with the given ID is available in persistent storage. |  | Messages | Message | X | 1 |
| 11.b1. The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **10** |

## Cancel reservation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The user clicks the "Cancel" button for the given reservation ID | Hotel manager, Operator | Reservation ID | Reservation | E | 1 |
| 2. The system asks the user to confirm |  |  |  |  |  |
| 3. The user confirms the operation |  |  |  |  |  |
| 4. The system removes the Requested Services. |  | Requested Services details | Requested Services | W | 1 |
| 5. The system removes the Children’s Ages. |  | Children's ages details | Children's ages | W | 1 |
| 6. The system removes the Booked Rooms. |  | Booked rooms details | Booked rooms | W | 1 |
| 7. The system deletes the Reservation header with the given reservation ID. |  | Reservation details | Reservation | W | 1 |
| 8. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1: |  |  |  |  |  |
| 3.a1. The user does not confirm the operation. |  |  |  |  |  |
| 3.a2. The flow of events ends. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 5.a1. The system shows an error message stating that no reservation with the given ID is available in persistent storage |  | Messages | Message | X | 0 |
| 5.b1. The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **6** |

## Edit reservation details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The user selects the “Edit reservation details”. |  |  |  |  |  |
| 2. The system displays a form containing the reservation filters. |  |  |  |  |  |
| 3. The user fills in the filters. | Operator | Reservation filters | Reservation | E | 1 |
| 4. The user clicks the “Search Availability” button. |  |  |  |  |  |
| 5. The system validates the given filters. |  |  |  |  |  |
| 6. The system searches for all rooms of the given type to accommodate the guests. |  | Room details | Room | R | 1 |
| 7. For each room, the system checks if it is in the Commission file in the given date interval. |  | Commissioned Room details | Commissioned Room | R | 1 |
| 8. For each room, the system searches for the unbooked dates in the Booked rooms file. |  | Booked room details | Booked room | R | 1 |
| 9. The system lists the available rooms. |  | Available room details | Room | X | 1 |
| 10. The actor presses “Reserve rooms” relating to the rooms of his interest. | Operator | Reservation details | Reservation | E | 1 |
| 11. The system reads from persistent storage the room details. |  | Room details | Room | R | 1 |
| 12. The system searches for the requestable room services for the selected rooms. |  | Assigned services details | Assigned Service | R | 1 |
| 13. The system lists the selected rooms. |  | Selected room details | Room | X | 1 |
| 14. The system lists the requestable services for each room. |  | Service details | Assigned Service | X | 1 |
| 15. The user presses "Reservation" relating to the reservation details of his interest and confirms. | Operator | Reservation details | Reservation | E | 1 |
|  |  | Customer details | Customer | E | 1 |
| 16. The system updates the customer’s details if needed. |  | Customer details | Customer | W | 1 |
| 17. The system removes the previously Requested Services. |  | Requested service details | Requested Service | W | 1 |
| 18. The system removes the previously Booked Rooms. |  | Booked room details | Booked room | W | 1 |
| 19. The system removes the previous Children’s Ages. |  | Children's age details | Children's age | W | 1 |
| 20. The system removes the Reservation header for the previous reservation. |  | Reservation details | Reservation | W | 1 |
| 21. The system searches for the season configuration in the given interval. |  | Configured season details | Configured season | R | 1 |
| 22. The system stores the Reservation header. |  | Reservation details | Reservation | W | 1 |
| 23. The system stores the Booked Rooms. |  | Booked room details | Booked room | W | 1 |
| 24. For each room, the system saves the Requested Services. |  | Requested service details | Requested Service | W | 1 |
| 25. The system stores the Children’s Ages for the reservation. |  | Children's age details | Children's age | W | 1 |
| 26. The system displays a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1 |  |  |  |  |  |
| 10.a1 The user specifies the number of children. |  |  |  |  |  |
| 11.a1 The system presents static drop-down lists to specify every child’s age. The flow of events resumes at step no. 5 of the main scenario. |  |  |  |  |  |
| Exceptions |  |  |  |  |  |
| 27. The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **23** |

## Change reservation details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1 Operator The user clicks the "Change reservation details" button regarding the reservation of his (or her) interest. | Operator | Reservation ID | Reservation | E | 1 |
| 2 System The system searches for the room details. |  | Booked Room details | Booked Room | R | 1 |
| 3 System The system searches for the available services for the booked rooms. |  | Available services | Assigned service | R | 1 |
| 4 System The system searches for the already selected services for the booked rooms. |  | Selected services | Requested Service | R | 1 |
| 5 System The system searches for the extra services for the booked rooms. |  | Extra services | Room | R | 1 |
| 6 System The system lists the details of the room(s). |  | Booked Room details | Booked Room | X | 1 |
| 7 System The system lists the already selected services. |  | Selected services | Requested Service | X | 1 |
| 8 System The system lists the requestable services. |  | Available services | Assigned service | X | 1 |
| 9 System The system lists the booked rooms extra services. |  | Room details | Room | X | 1 |
| 10 Operator The user chooses the services of his interest. | Operator | Selected services | Requested Service | E | 1 |
| 11 Operator The user chooses the rooms of his interest. | Operator | Selected rooms | Booked Room | E | 1 |
| 12 Operator The user sends his choices to the system and presses the Confirm button. |  |  |  |  |  |
| 13 System The system stores the newly requested services for the reservation. |  | Selected services | Requested Service | W | 1 |
| 14 System The system removes the previous room services. |  | Removed services | Requested Service | W | 1 |
| 15 System The system updates the reservation header (special requests and total amount). |  | Reservation details | Reservation | W | 1 |
| 16 System The system displays a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 17 System The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **15** |

## List customer’s reservations

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1 Hotel Manager, Operator The user clicks the "Reservations" link. |  |  |  |  |  |
| 2 System The system shows a form to filter the reservations by ID and/or date interval and/or status |  |  |  |  |  |
| 3 Hotel Manager, Operator The user optionally fills in the filter details. | Hotel Manager, Operator | Filter details | Reservation | E | 1 |
| 4 Hotel Manager, Operator The user presses the “Search” button. |  |  |  |  |  |
| 5 System The system searches for the Reservation details for the customer’s fiscal code. |  | Reservation details | Reservation | R | 1 |
| 6 System The system lists the customer’s reservation details. |  | Reservation details | Reservation | X | 1 |
| 7 Hotel Manager, Operator The user browses the results. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 8 System The system shows an error message stating that no results match the search criteria. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **4** |

## Search for agencies

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the "Agencies" link |  |  |  |  |  |
| 2. The system shows a form to search for agencies by business name or VAT number. |  |  |  |  |  |
| 3. The user optionally fills in the search fields to filter the results. | Hotel manager | Search criteria | Agency | E | 1 |
| 4. The user executes the search. |  |  |  |  |  |
| 5. The system searches for agencies that meet the search criteria |  | Agency details | Agency | R | 1 |
| 6. The system displays the list of agencies that meet the search criteria |  | Agency details | Agency | X | 1 |
| 7. The Hotel Manager browses the results. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 8. The system shows an error message stating that no results match the search criteria. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **4** |

## View Agency details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the "View agency details" button regarding the agency of his (or her) interest. | Hotel manager | Agency ID | Agency | E | 1 |
| 2. The system searches for the agency with the given ID. |  | Agency details | Agency | R | 1 |
| 3. The system searches for the rooms commissioned to the agency. |  | Commissioned Room details | Commissioned Room | R | 1 |
| 4. The system shows the agency details contains uneditable items: ID, business name, email, contact name, address, city, and VAT number. |  | Agency details | Agency | X | 1 |
| 5. The system lists the rooms commissioned by the agency. It has the following column headers: room, start date, and end date. |  | Commissioned Room details | Commissioned Room | X | 1 |
| Exceptions: |  |  |  |  |  |
| 6. The system shows an error message stating that no agency with the given ID is available in persistent storage. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **6** |

## Edit Agency details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the "Edit Agency details" button |  |  |  |  |  |
| 2. The system shows a form with the following editable fields: business name, email, contact name, address, city, and VAT number. |  |  |  |  |  |
| 3. The hotel manager updates the field of his (or her) interest. | Hotel manager | Agency details | Agency | E | 1 |
| 4. The hotel manager presses the "Save" button. |  |  |  |  |  |
| 5. The system checks that all the field values are not null. |  |  |  |  |  |
| 6. The system checks that the business and contact names contain at least three characters. |  |  |  |  |  |
| 7. The system validates the VAT number. |  |  |  |  |  |
| 8. The system validates the email values. |  |  |  |  |  |
| 9. The system records the new agency details. |  | Agency details | Agency | W | 1 |
| 10. The system displays a message indicating that the operation was successful. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 11. The system shows an error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## Insert agency

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the "New agency" button. |  |  |  |  |  |
| 2. The system shows a form with editable fields: business name, email, contact name, address, city, and VAT number. |  |  |  |  |  |
| 3. The hotel manager fills in all the fields. | Hotel manager | Agency details | Agency | E | 1 |
| 4. The hotel manager submits the form. |  |  |  |  |  |
| 5. The system checks that all the field values are not null. |  |  |  |  |  |
| 6. The system checks that the business and contact names contain at least three characters. |  |  |  |  |  |
| 7. The system validates the VAT number. |  |  |  |  |  |
| 8. The system validates the email values. |  |  |  |  |  |
| 9. The system calculates the new ID. |  |  |  |  |  |
| 10. The system records the new agency details. |  | Agency details | Agency | W | 1 |
| 11. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 12.a1. The system shows an error message stating that the provided data are not valid. |  | Messages | Message | X | 0 |
| 13.b1. The system shows an error message stating that the provided data are not valid. |  | Messages | Message | X | 0 |
| 14.c1. The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## Add commissioned room

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager selects the sub-option "Search Room". |  |  |  |  |  |
| 2. The system shows a form with the following editable fields: start date and end date. |  |  |  |  |  |
| 3. The user fills in the date interval. | Hotel manager | Date interval | Room | E | 1 |
| 4. The user presses the “Search” button. |  |  |  |  |  |
| 5. The system verifies that the date interval is valid. |  |  |  |  |  |
| 6. The system searches for the “uncommissioned rooms” in the Commission file. |  | Uncommissioned rooms | Commissioned room | R | 1 |
| 7. The system searches for the “unbooked rooms” in the Booked Room file. |  | Unbooked rooms | Booked room | R | 1 |
| 8. For each available room, the system searches for its details in the Room file. |  | Room details | Room | R | 1 |
| 9. The system displays the list of uncommissioned rooms (with their details) that meet the search criteria. The rooms are selectable. |  | Room details | Room | X | 1 |
| 10. The hotel manager selects one or more rooms. | Hotel manager | Selected rooms | Commissioned room | E | 1 |
| 11. The hotel manager presses the “Confirm” button. |  |  |  |  |  |
| 12. The system adds the selected rooms to the Commission file for the given agency. |  | Commissioned room details | Commissioned room | W | 1 |
| 13. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1 |  |  |  |  |  |
| 6.a1. The user has no room to select. |  |  |  |  |  |
| 6.a2. The flow of events resumes from step no. 1 of the main scenario. |  |  |  |  |  |
| Alternative flow no. 2 |  |  |  |  |  |
| 6.b1. The user decides to leave the feature. |  |  |  |  |  |
| 6.b2. The flow of events ends. |  |  |  |  |  |
| Exceptions |  |  |  |  |  |
| 14. The system shows an error message. |  | Messages | Message | X | 0 |
| 15. The system shows an error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **8** |

## Remove a commissioned room

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The hotel manager clicks the "Delete room" button on the chosen record. | Hotel manager | Room code | Commissioned room | E | 1 |
| 2. The system asks the user to confirm the operation. |  |  |  |  |  |
| 3. The hotel manager confirms by clicking the “Confirm” button. |  |  |  |  |  |
| 4. The system removes the commissioned room from persistent storage. |  | Commissioned Room details | Commissioned room | W | 1 |
| 5. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1: |  |  |  |  |  |
| 3.a1. The hotel manager does not confirm the operation. |  |  |  |  |  |
| 3.a2. The flow of events ends. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 5.a1. The system shows an error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## Search for orders

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The user clicks the "View orders" link |  |  |  |  |  |
| 2. The system shows a form to search for orders containing the following fields: table, start date, end date, and status. |  |  |  |  |  |
| 3. The user optionally fills in the search fields to filter the results. | Hotel manager, Waiter | Search criteria | Order | E | 1 |
| 4. The user presses the search button. |  |  |  |  |  |
| 5. The system searches for orders that meet the search criteria. |  | Order details | Order | R | 1 |
| 6. The system displays the list of orders that meet the search criteria. |  | Order details | Order | X | 1 |
| 7. The list contains the following columns: order number, number of guests, date, and status. |  |  |  |  |  |
| 8. The Hotel Manager browses the results. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 9. The system shows an error message stating that no results match the search criteria. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **4** |

## View order details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The user clicks the "View order details" button for the order of his (or her) interest. | Hotel manager, Waiter | Order ID | Order | E | 1 |
| 2. The system queries the Order file to search for the order with the given ID. |  | Order details | Order | R | 1 |
| 3. The system looks up the ordered foods. |  | Ordered Food details | Ordered Food | R | 1 |
| 4. The system displays a page with the order details containing the following uneditable items: Number, date, number of guests, and status. |  | Order details | Order | X | 1 |
| 5. The system lists the ordered foods (food, quantity, and price). The list is uneditable. |  | Ordered Food details | Ordered Food | X | 1 |
| Exceptions: |  |  |  |  |  |
| 6. The system shows an error message stating that no order with the given ID is available in persistent storage. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **6** |

## Place order

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The waiter clicks the "New order" button |  |  |  |  |  |
| 2. The system shows a form with the following editable fields: number of guests and table. |  |  |  |  |  |
| 3. The system looks for the free tables in the Tables file. |  | Tables status | Table | R | 1 |
| 4. The system displays the list of the free tables. |  | Free tables | Table | X | 1 |
| 5. The waiter selects the table of his interest from the list. | Waiter | Table ID | Table | E | 1 |
| 6. The waiter fills in the order details fields. | Waiter | Order details | Order | E | 1 |
| 7. The waiter submits the form. |  |  |  |  |  |
| 8. The system checks that the number of guests is greater than 0. |  |  |  |  |  |
| 9. The system checks that the table number is not empty. |  |  |  |  |  |
| 10. The system verifies that the selected table is not occupied. |  | Tables status | Table | R | 1 |
| 11. The system updates the table status to “Occupied” in the Tables File. |  | Table details | Table | W | 1 |
| 12. The system inserts the new order with the status “In progress.” |  | Order details | Order | W | 1 |
| 13. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 14.a1. The system shows an error message stating that the provided data are not valid. |  | Messages | Message | X | 0 |
| 15.b1. The system shows an error message stating that the table number is already occupied. |  | Messages | Message | X | 0 |
| 16.c1. The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **8** |

## Add food to meal

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1. The waiter clicks the sub-option "Add food". |  |  |  |  |  |
| 2. The system shows a search form with the following fields: category and food. |  |  |  |  |  |
| 3. The waiter fills in the search fields and presses the “Search” button. | Waiter | Search fields | Food | E | 1 |
| 4. The system searches for foods. |  | Food detail | Food | R | 1 |
| 5. The system searches for the associated categories that meet the search criteria. |  | Menu category details | Menu category | R | 1 |
| 6. The system lists the categories. |  | Menu category details | Menu category | X | 1 |
| 7. The system lists the associated food for each category. |  | Food details | Food | X | 1 |
| 8. The waiter selects the food. | Waiter | Food selection | Ordered food | E | 1 |
| 9. The waiter submits the form. |  |  |  |  |  |
| 10. The system adds the ordered food. |  | Ordered food details | Ordered food | W | 1 |
| 11. The system updates the order. |  | Order details | Order | W | 1 |
| 12. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 13. The system shows an error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **9** |

## Remove food from meal

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The waiter clicks the "Delete food" button for the given ordered food. | Waiter | Food ID | Ordered food | E | 1 |
| 2. The system asks the user to confirm the operation. |  |  |  |  |  |
| 3. The waiter confirms by clicking the “Confirm” button. |  |  |  |  |  |
| 4. The system removes the ordered food. |  | Ordered food details | Ordered food | W | 1 |
| 5. The system updates the given order's total price. |  | Order details | Order | W | 1 |
| 6. The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1: |  |  |  |  |  |
| 3.a1. The waiter does not confirm the operation. |  |  |  |  |  |
| 3.a2. The flow of events ends. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 5.a1. The system shows an error message stating that the provided food ID does not exist in persistent storage. |  | Messages | Message | X | 0 |
| 5.b1. The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **4** |

## Cancel order

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The actor clicks the "Cancel order" button for the current order. | Waiter | Order ID | Order | E | 1 |
| 2.The system asks the user to confirm the operation. |  |  |  |  |  |
| 3. The actor confirms by clicking the “Confirm” button. |  |  |  |  |  |
| 4.The system deletes the ordered food. |  | Ordered food details | Ordered food | W | 1 |
| 5.The system removes the given order. |  | Order details | Order | W | 1 |
| 6.The system updates the table status to “Free” in the Tables File. |  | Table status | Table | W | 1 |
| 7.The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1: |  |  |  |  |  |
| 3.a1. The user does not confirm the operation. The flow of events ends. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 8.a1.The system shows an error message stating that the provided order number does not exist in persistent storage. |  | Messages | Message | X | 0 |
| 9.b1.The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **5** |

## Prepare bill

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The waiter selects the sub-option "billing" |  |  |  |  |  |
| 2.The system shows a summary form with the following fields: total price, discount%, and discounted price. |  |  |  |  |  |
| 3.The waiter optionally fills in the discount for the order. | Waiter | Discount detail | Order | E | 1 |
| 4.The waiter presses the "Save" button. |  |  |  |  |  |
| 5.The system updates the given order. |  | Order details | Order | W | 1 |
| 6.The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 7.The system shows an error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## Print bill

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The waiter clicks the "Print bill" button for the current order. | Waiter | Order ID | Order | E | 1 |
| 2. The system searches the order details. |  | Order details | Order | R | 1 |
| 3.The system searches for the ordered food. |  | Ordered food details | Ordered food | R | 1 |
| 4.The system prints the order details. |  | Order details | Order | X | 1 |
| 5.The system prints the ordered food details. |  | Ordered food details | Ordered food | X | 1 |
| Exceptions: |  |  |  |  |  |
| 6.The system shows an error message. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **6** |

## Pay bill

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The actor clicks the "Pay bill" button for the current order. | Waiter | Order details | Order | E | 1 |
| 2.The system asks the user to confirm the operation. |  |  |  |  |  |
| 3.The actor confirms by clicking the “Confirm” button. |  |  |  |  |  |
| 4.The system updates the order status to “Paid.” |  | Order status | Order | W | 1 |
| 5.The system updates the table status to “Free” in the Tables File. |  | Table status | Table | W | 1 |
| 6.The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1 |  |  |  |  |  |
| 3.a1.The user does not confirm the operation. The Flow of events ends. |  |  |  |  |  |
| Exceptions |  |  |  |  |  |
| 7.The system shows an error message stating that the provided order number does not exist in persistent storage. |  | Messages | Message | X | 0 |
| 8.The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **4** |

## Search for menu category

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The hotel manager selects the sub-option "Menu categories" |  |  |  |  |  |
| 2.The system shows a form to search for menu categories by description |  |  |  |  |  |
| 3.The user optionally fills in the menu category description to filter the results. | Hotel manager | Menu category description | Menu category | E | 1 |
| 4.The user executes the search. |  |  |  |  |  |
| 5.The system searches for menu categories that meet the search criteria |  | Menu category details | Menu category | R | 1 |
| 6.The system displays the list of menu categories that meet the search criteria |  | Menu category details | Menu category | X | 1 |
| 7.The Hotel Manager browses the results. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 8.The system shows an error message stating that no results match the search criteria. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **4** |

## View menu category details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The hotel manager clicks the "View menu category details" button regarding the category of his (or her) interest. | Hotel manager | Menu category ID | Menu category | E | 1 |
| 2.The system searches for the menu category with the given ID. |  | Menu category details | Menu category | R | 1 |
| 3.The system searches for the menu category with the given ID. |  | Food details | Food | R | 1 |
| 4.The system shows the category details: ID, description, and note. |  | Menu category details | Menu category | X | 1 |
| 5.The system lists foods associated with the given menu category. The list is uneditable. |  | Food details | Food | X | 1 |
| Exceptions: |  |  |  |  |  |
| 6.The system shows an error message stating that no menu category with the given ID is available in persistent storage. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **6** |

## Edit menu category details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The hotel manager clicks the "Edit menu category details" option |  |  |  |  |  |
| 2.The system makes editable the following fields: description and note. |  |  |  |  |  |
| 3.The hotel manager updates the description and (or) the note fields. | Hotel manager | Menu categoy details | Menu category | E | 1 |
| 4.The hotel manager presses the "Save" button. |  |  |  |  |  |
| 5.The system checks that the menu category description contains at least three characters. |  |  |  |  |  |
| 6.The system records the new menu category details. |  | Menu categoy details | Menu category | W | 1 |
| 7.The system displays a message indicating that the operation was successful. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 8.The system shows an error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## Insert menu category

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The hotel manager clicks the "New menu category" option |  |  |  |  |  |
| 2.The system shows a form with the following editable fields: description and note. |  |  |  |  |  |
| 3.The hotel manager fills in the menu category details. | Hotel manager | Menu category details | Menu category | E | 1 |
| 4.The hotel manager submits the form. |  |  |  |  |  |
| 5.The system checks that the menu category description contains at least three characters. |  |  |  |  |  |
| 6.The system records the new menu category details. |  | Menu category details | Menu category | W | 1 |
| 7.The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 8.a1.The system shows an error message stating that the provided data are not valid. |  | Messages | Message | X | 0 |
| 9.b1.The system shows an error message stating that the provided description already exists in persistent storage |  | Messages | Message | X | 0 |
| 10.c1.The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## Remove menu category

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The hotel manager clicks the "Delete menu category" button regarding the category of his (or her) interest. | Hotel manager | Menu category ID | Menu category | E | 1 |
| 2.The system asks the user to confirm the operation. |  |  |  |  |  |
| 3.The hotel manager confirms by clicking the “Confirm” button. |  |  |  |  |  |
| 4.The system removes the given menu category. |  | Menu category details | Menu category | W | 1 |
| 5.The system removes its associated foods. |  | Food details | Food | W | 1 |
| 6.The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1: |  |  |  |  |  |
| 3.a1.The hotel manager does not confirm the operation. |  |  |  |  |  |
| 3.a2.The flow of events ends. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 5.a1.The system shows an error message stating that there is one or more associated food to the given category. |  | Messages | Message | X | 0 |
| 5.b1.The system shows an error message stating that the provided menu category ID does not exist in persistent storage. |  | Messages | Message | X | 0 |
| 5.c1.The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **4** |

## Edit food

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The hotel manager selects the option "Edit food details". |  |  |  |  |  |
| 2.The system makes editable the following fields: food, description, note, price, and available. |  |  |  |  |  |
| 3.The hotel manager changes the fields of his (or her) interest. | Hotel manager | Food details | Food | E | 1 |
| 4.The hotel manager presses the “Save” button. |  |  |  |  |  |
| 5.The system checks that the food and description contain at least three characters. |  |  |  |  |  |
| 6.The system checks that price is greater than or equal to 0. |  |  |  |  |  |
| 7.The system records the new details of the food associated with the given category in persistent storage. |  | Food details | Food | W | 1 |
| 8.The system displays a message indicating that the operation was successful. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 9.The system shows an error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## Remove food

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The hotel manager clicks the "Delete food" button regarding the record of his (or her) interest | Hotel manager | Food ID | Food | E | 1 |
| 2.The system asks the user to confirm the operation. |  |  |  |  |  |
| 3.The hotel manager confirms by clicking the “Confirm” button |  |  |  |  |  |
| 4.The system removes the food associated with the given category from persistent storage. |  | Food detail | Food | W | 1 |
| 5.The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1: |  |  |  |  |  |
| 3.a1.The hotel manager does not confirm the operation. |  |  |  |  |  |
| 3.a2.The flow of events ends. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 5.a1.The system shows an error message stating that the provided food ID does not exist in persistent storage |  | Messages | Message | X | 0 |
| 5.b1.The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## Insert food

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The hotel manager clicks the "Add food" button |  |  |  |  |  |
| 2.The system shows a form with the following editable fields: food, description, price, and available. |  |  |  |  |  |
| 3.The hotel manager fills in the food, description, price fields, and optionally the available field. | Hotel manager | Food details | Food | E | 1 |
| 4.The hotel manager submits the form. |  |  |  |  |  |
| 5.The system checks that the food and description contain at least three characters. |  |  |  |  |  |
| 6.The system checks that price is greater than or equal to 0. |  |  |  |  |  |
| 7.The system records the new details of the food associated with the given category in persistent storage. |  | Food details | Food | W | 1 |
| 8.The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 9.a1.The system shows an error message stating that the provided data are not valid. |  | Messages | Message | X | 0 |
| 10.b1.The system shows an error message stating that the provided food already exists in persistent storage |  | Messages | Message | X | 0 |
| 11.c1.The system shows a system error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **3** |

## Check-in

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The user selects the sub-option “check-in”. |  |  |  |  |  |
| 2.The system displays a form containing the reservation details. |  |  |  |  |  |
| 3.The user selects the room of his interest and executes the search. | Hotel manager | Room details | Booked Room | E | 1 |
| 4.The system searches for the room guests. |  | Guest deails | Room Guest | R | 1 |
| 5. The system searches for each guest's relative details. |  | Customer details | Customer | R | 1 |
| 6.The system lists the guests in the selected room. |  | Customer details | Customer | X | 1 |
| 7.The user clicks “Add guest”. |  |  |  |  |  |
| 8.The system shows a form to search customers containing the following filters: surname, name, fiscal code. |  |  |  |  |  |
| 9.The user optionally fills in the filters and executes the search. | Hotel manager, Operator | Customer details | Customer | E | 1 |
| 10.The system searches for customers that meet the search criteria. |  | Customer details | Customer | R | 1 |
| 11.The system displays the list of available customers. |  | Customer details | Customer | X | 1 |
| 12.The user clicks the "Select" sub-option. |  |  |  |  |  |
| 13.The system displays a formatted screen for the customer’s details. |  |  |  |  |  |
| 14.The user optionally enters new values for the customer’s details. | Hotel manager | Customer details | Customer | E | 1 |
| 15.The user selects the room to assign to the customer. | Hotel manager | Room details | Room | E | 1 |
| 16.The system asks the user to confirm. |  |  |  |  |  |
| 17.The user confirms the assignment. |  |  |  |  |  |
| 18.The system checks the provided of the customer’s details. |  |  |  |  |  |
| 19.The system updates the new customer’s details. |  | Customer details | Customer | W | 1 |
| 20.The system updates the booked room details, increasing the number of guests by one. |  | Booked room details | Booked Room | W | 1 |
| 21.The system inserts the new guest for the given room. |  | Room Guest details | Room Guest | W | 1 |
| 22.The system changes the reservation status to “Checked-in.” |  | Reservation status | Reservation | W | 1 |
| 23.The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1 |  |  |  |  |  |
| 7.a1.The flow of events resumes at step no. 6 of the main scenario to allow the user to add all guests. |  |  |  |  |  |
| Exceptions |  |  |  |  |  |
| 5.a1.The system shows an error message. |  | Messages | Message | X | 0 |
| Alternative flow no. 1: UC-SOG-01.2 |  |  |  |  |  |
| 1.The user fills in the surname, name, date of birth, address, city, email address, fiscal code fields, and optionally the notes field. | Hotel manager, Operator | Customer details | Customer | E | 1 |
| 2.The user submits the form. |  |  |  |  |  |
| 3.The system checks that: the surname and name fields contain at least two characters, the fiscal code field is valid, the date of birth is correct, the email address is valid. |  |  |  |  |  |
| 4.The system records the new customer in persistent storage. |  | Customer details | Customer | W | 1 |
| 5.The flow of events resumes at step no. 5 of the main scenario. |  |  |  |  |  |
| Alternative flow no. 2: UC-SOG-01.2 |  |  |  |  |  |
| 7.a1.The user does not confirm. The flow of events resumes at step no. 3 of the main scenario. |  |  |  |  |  |
| Exceptions |  |  |  |  |  |
| 5.a1.The system shows an error message. |  | Messages | Message | X | 0 |
| 6.a2.The system shows an error message (i.e., the selected customer already has an assigned room, the information provided is not valid, Etc.) |  | Messages | Message | X | 0 |
| 6.a3.The system shows an error message indicating that there are not enough beds in the room. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **16** |

## View current room services

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The user selects the sub-option "List room services". |  |  |  |  |  |
| 2.The system shows a form to filter the room services by description. |  |  |  |  |  |
| 3.The user optionally fills in the filter fields. | Hotel manaer | Filter fields | Requested services | E | 1 |
| 4.The user presses the “Search” button. |  |  |  |  |  |
| 5.The system searches for the requested services for the given customer’s room. |  | Requested service details | Requested service | R | 1 |
| 6.For each requested service the system looks up the service details. |  | Service details | Service | R | 1 |
| 7.The system lists the currently requested services for the given customer’s room. |  | Requested service details | Requested service | X | 1 |
| 8.The system lists the services details. |  | Service details | Service | X | 1 |
| 9.The user browses the results. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 10.The system shows an error message stating that no results match the search criteria. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **6** |

## Add services to current room

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The user clicks the "Room services" button for the current room code. | Hotel manager | Room code | Booked room | E | 1 |
| 2.The system searches for the assigned services of the given room. |  | Assigned service details | Assigned service | R | 1 |
| 3.The system looks up service details in the Services file. |  | Service details | Service | R | 1 |
| 4.The system displays the details of each service. |  | Service details | Service | X | 1 |
| 5.The system displays the list of assigned services. |  | Assigned service details | Assigned service | X | 1 |
| 6.The user enters the services to add to the given reservation. | Hotel manager | Requested service details | Requested service | E | 1 |
| 7.The user presses the “Confirm” button. |  |  |  |  |  |
| 8.The system adds the selected services to the requested services file. |  | Requested service details | Requested service | W | 1 |
| 9.The system updates the Reservation file, setting the new total amount. |  | Reservation details | Reservation | W | 1 |
| 10.The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 11.The system shows an error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **9** |

## Telephone bill

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The user clicks the "Telephone bill" button for the current room code. | Hotel manager | Room code | Booked room | E | 1 |
| 2.The system looks up the telephone bill for the given room. |  | Telephone bill details | Telephone bill | R | 1 |
| 3.The system shows a form containing the Telephone bill details: number of phone calls and total cost. |  | Telephone bill details | Telephone bill | X | 1 |
| 4.The user fills in the number of phone calls field. | Hotel manager | Number of phone calls | Telephone bill | E | 1 |
| 5.The user submits the form. |  |  |  |  |  |
| 6.The system checks that the number of phone calls is greater than or equal to zero. |  |  |  | . |  |
| 7.The system searches for rooms and services configuration to get the phone call cost. |  | Phone call cost | Rooms and services configuration | R | 1 |
| 8.The system calculates the new total cost. |  |  |  | . |  |
| 9.The system inserts (or updates) the new telephone bill containing the following attributes: ID, number of phone calls, room code, reservation ID, total cost, date. |  | Telephone bill details | Telephone bill | W | 1 |
| 10.The system updates the reservation total amount: new total amount = previous total amount – previous total phone calls cost + new total phone calls cost). |  | Reservation total amount | Reservation | W | 1 |
| 11.The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 12.The system shows an error message. |  | Messages | Message | X | 0 |
| 13.The system shows an error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **8** |

## Calculate total bill

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The user clicks the "View bill" link for the given reservation. | Hotel manager | Reservation ID | Reservation | E | 1 |
| 2.The system looks up the customer’s reservation details. |  | Reservation details | Reservation | R | 1 |
| 3.The system looks up the requested services for the reservation. |  | Requested Service details | Requested Service | R | 1 |
| 4.The system searches for the Telephone bill. |  | Telephone bill details | Telephone bill | R | 1 |
| 5.The system shows the total amount of the given reservation. |  | Total amount | Reservation | X | 1 |
| 6.The system shows the list of requested services. |  | Requested Service details | Requested Service | X | 1 |
| 7.The system shows the telephone bill of each room. |  | Telephone bill details | Telephone bill | X | 1 |
| 8.The user looks at the results. |  |  |  |  |  |
| 9.The user presses the close button. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 10.a1.The system shows an error message. |  | Messages | Message | X | 1 |
| 11.b1.The system shows an error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **8** |

## Room change

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The user clicks the "Change room" link for the given customer. | Hotel manager, Hotel Operator | Customer details | Customer | E | 1 |
| 2.The system searches for all rooms of the given type to accommodate the number of guests. |  | Room details | Room | R | 1 |
| 3.For each room, the system checks if it is in the Commission file. |  | Commissioned room details | Commissiond room | R | 1 |
| 4.The system checks if the room is in the Booked Room file in the given date interval. |  | Booked room details | Booked room | R | 1 |
| 5.The system lists the available rooms. |  | Room details | Room | X | 1 |
| 6.The user selects a new room code for the customer. | Hotel manager, Hotel Operator | Room code | Room | E | 1 |
| 7.The user clicks the “search services” button. |  |  |  |  |  |
| 8.The system searches for the assigned services of the new room. |  | Assigned service details | Assigned Service | R | 1 |
| 9.The system looks up the requested services for the old customer’s room. |  | Old Assigned service details | Assigned Service | R | 1 |
| 10.The system shows the selected room details. |  | Booked room details | Booked room | X | 1 |
| 11.The system lists the requested services for the old customer’s room. |  | Old Assigned Service details | Assigned Service | X | 1 |
| 12.The system lists the assigned services of the new room. |  | New Assigned Service details | Assigned Service | X | 1 |
| 13.The user optionally enters the requestable services for the new room. | Hotel manager, Hotel Operator | Requestable Services details | Requested Service | E | 1 |
| 14.The system searches for the customer’s details. |  | Customer details | Customer | R | 1 |
| 15.The system changes the currently occupied room code to the selected room code in the Customers file. |  | Customer details | Customer | W | 1 |
| 16.The system updates the booked rooms for the given reservation. |  | Booked Room details | Booked room | W | 1 |
| 17.The system deletes the requested services for the old booked room. |  | Services details | Requested Service | W | 1 |
| 18.The system inserts the newly requested services. |  | Services details | Requested Service | W | 1 |
| 19.The system changes the room code in the Telephone Bill file to the new selected room code. |  | Telephone Bill details | Telephone Bill | W | 1 |
| 20.The system updates the total amount for the reservation. |  | Total amount | Reservation | W | 1 |
| 21.The system changes the room code in the Room Guest file. |  | Room code | Room Guest | W | 1 |
| 22.The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Alternative flow no. 1 |  |  |  |  |  |
| 5.a1.The user presses the “Close” button. The flow of events ends. |  |  |  |  |  |
| Exceptions |  |  |  |  |  |
| 3.a1.The system shows an error message. |  | Messages | Message | X | 0 |
| 4.b1.The system shows an error message. |  | Messages | Message | X | 0 |
| 7.c1.The system shows an error message. |  | Messages | Message | X | 0 |
| 10.d1.The system shows an error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **21** |

## Checkout

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The user clicks the "Checkout" button regarding the given reservation. | Hotel manager | Reservation details | Reservation | E | 1 |
| 2.The system changes the reservation status in the Customer file. |  | Reservation status | Customer | W | 1 |
| 3.The system changes the room reference in the Customer file. |  | Customer details | Customer | W | 1 |
| 4.The system shows a confirmation message. |  | Messages | Message | X | 1 |
| Exceptions: |  |  |  |  |  |
| 5.The system shows an error message. |  | Messages | Message | X | 0 |
| TOTAL | | | | | **4** |

## Print total bill

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Step | FU | DG | OOI | DM | CFP |
| 1.The user clicks the "Print bill" button regarding the given reservation. | Hotel manager | Reservation details | Reservation | E | 1 |
| 2.The system displays the bill using the information already present on the screen but properly formatting them. |  | Bill details | Bill | X | 1 |
| 3.The user gives the printed bill to the customer. |  |  |  |  |  |
| Exceptions: |  |  |  |  |  |
| 4.The system shows an error message. |  | Messages | Message | X | 1 |
| TOTAL | | | | | **3** |

Legend:

N/A = Not applicable

AC = Already counted

# Measurement Summary

|  |  |  |
| --- | --- | --- |
| N. | Functional Process | CFP |
| 1 | Search for rooms | 4 |
| 2 | View room details | 4 |
| 3 | Edit room details | 6 |
| 4 | Insert a new room | 3 |
| 5 | Search for services | 4 |
| 6 | View service details | 4 |
| 7 | Edit service details | 3 |
| 8 | Insert a new service | 3 |
| 9 | Search for customers | 4 |
| 10 | View customer’s details | 4 |
| 11 | Edit customer details | 3 |
| 12 | Add a customer | 3 |
| 13 | Search for seasons configuration | 4 |
| 14 | View season configuration details | 4 |
| 15 | Edit season configuration | 3 |
| 16 | Remove season configuration | 3 |
| 17 | Add a season configuration | 3 |
| 18 | View rooms and services configuration | 4 |
| 19 | Edit rooms and services configuration | 3 |
| 20 | View room services | 4 |
| 21 | Add service for room | 6 |
| 22 | Delete room service | 3 |
| 23 | Book a room | 27 |
| 24 | Blocked rooms management | 5 |
| 25 | Search for blocked rooms | 4 |
| 26 | Change reservation status for a blocked room | 3 |
| 27 | View reservation details | 10 |
| 28 | Cancel reservation | 6 |
| 29 | Edit reservation details | 23 |
| 30 | Change reservation details | 15 |
| 31 | List customer’s reservations | 4 |
| 32 | Search for agencies | 4 |
| 33 | View Agency details | 6 |
| 34 | Edit Agency details | 3 |
| 35 | Insert agency | 3 |
| 36 | Add commissioned room | 8 |
| 37 | Remove a commissioned room | 3 |
| 38 | Search for orders | 4 |
| 39 | View order details | 6 |
| 40 | Place order | 8 |
| 41 | Add food to meal | 9 |
| 42 | Remove food from meal | 4 |
| 43 | Cancel order | 5 |
| 44 | Prepare bill | 3 |
| 45 | Print bill | 6 |
| 46 | Pay bill | 4 |
| 47 | Search for menu category | 4 |
| 48 | View menu category details | 6 |
| 49 | Edit menu category details | 3 |
| 50 | Insert menu category | 3 |
| 51 | Remove menu category | 4 |
| 52 | Edit food | 3 |
| 53 | Remove food | 3 |
| 54 | Insert food | 3 |
| 55 | Check-in | 16 |
| 56 | View current room services | 6 |
| 57 | Add services to current room | 9 |
| 58 | Telephone bill | 8 |
| 59 | Calculate total bill | 8 |
| 60 | Room change | 21 |
| 61 | Checkout | 4 |
| 62 | Print total bill | 3 |
| TOTAL | | **359** |

Average FP size = 5.69

Max FP size = 27

Min FP size = 3