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| --- | --- | --- |
| Use Case ID: | 1 | |
| Use Case Name: | Park-in | |
| Actors: | Driver | |
| Pre-conditions: | The driver enters his vehicle’s info | |
| Post-conditions: | The driver gets in the garage | |
| Flow of events: | **User Action** | **System Action** |
| 1- The driver enters his vehicle’s info |  |
|  | 2- The system selects a suitable free slot for the vehicle depends on his info |
| 3- The driver park his vehicle in garage |  |
|  | 4- system set time of entering automatic |
|  |  |
| Exceptions: | **User Action** | **System Action** |
| 1- The driver enters his vehicle data |  |
|  | 2- no available slots  3- no suitable free slots |
| Includes: | Enter vehicle’s info | |
| Notes and Issues: |  | |

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| --- | --- | --- |
| Use Case ID: | 2 | |
| Use Case Name: | Enter the vehicle’s info | |
| Actors: | Driver | |
| Pre-conditions: | The driver enters his vehicle’s info | |
| Post-conditions: | System save the data | |
| Flow of events: | **User Action** | **System Action** |
| 1- The driver enters his vehicle’s info |  |
|  | 2- The system save vehicle’s info |
|  |  |
|  |  |
|  |  |
| Exceptions: | **User Action** | **System Action** |
| 1- The driver enters wrong info |  |
|  | Display error messages |
| Includes: |  | |
| Notes and Issues: |  | |

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| --- | --- | --- |
| Use Case ID: | 4 | |
| Use Case Name: | Pick free Slot | |
| Actors: | Driver | |
| Pre-conditions: | The driver enters his vehicle’s info | |
| Post-conditions: | System Pick free Slot | |
| Flow of events: | **User Action** | **System Action** |
| 1- The driver enters his vehicle’s info |  |
|  | 2- The system Pick free Slot depends on come first served slots and slot with the minimum dimension to hold the vehicle |
|  |  |
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| Exceptions: | **User Action** | **System Action** |
|  | 1- not found suitable slot  2- not found available slot |
|  |  |
| Includes: | Enter vehicle’s info | |
| Notes and Issues: |  | |

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| --- | --- | --- |
| Use Case ID: | 5 | |
| Use Case Name: | Park-out | |
| Actors: | Driver | |
| Pre-conditions: | The driver asks to get out of the garage | |
| Post-conditions: | The driver gets out of the garage | |
| Flow of events: | **User Action** | **System Action** |
| 1- The driver asks to get out of the garage |  |
|  | 2- System calculates the parking fees |
| 3- The driver pays the parking fees |  |
|  | 4- System opens the exit door |
| 5- The driver gets out of the garage |  |
| Exceptions: | **User Action** | **System Action** |
|  |  |
|  |  |
| Includes: | Pay fees | |
| Notes and Issues: |  | |

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| --- | --- | --- |
| Use Case ID: | 6 | |
| Use Case Name: | Pay fees | |
| Actors: | Driver, Bank | |
| Pre-conditions: | The driver asks to pay parking fees | |
| Post-conditions: | system confirms the success of the payment process | |
| Flow of events: | **User Action** | **System Action** |
| 1- The driver asks to pay parking fees |  |
|  | 2- System shows the parking fees and payment methods (cash – credit card) |
| 3- The driver Choose the payment method and pay them |  |
|  | 4- system confirms the success of the payment process |
|  |  |
| Exceptions: | **User Action** | **System Action** |
|  |  |
|  |  |
| Includes: |  | |
| Notes and Issues: | If system of bank is down .. the driver should pay cash | |

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| --- | --- | --- |
| Use Case ID: | 7 | |
| Use Case Name: | Pay using Credit Card | |
| Actors: | Driver, Bank | |
| Pre-conditions: | The driver asks to pay parking fees using Credit Card | |
| Post-conditions: | system confirms the success of the payment process | |
| Flow of events: | **User Action** | **System Action** |
| 1- The driver asks to pay parking fees using Credit Card |  |
|  | 2- The system connects the driver to the bank system |
| 3- The driver interacts with the bank system |  |
|  | 4- system confirms the success of the payment process |
|  |  |
| Exceptions: | **User Action** | **System Action** |
| 1- the driver has not enough money |  |
|  | 2- The system does not open the exit door |
| Includes: |  | |
| Notes and Issues: | If system of bank is down .. the driver should pay cash | |

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| --- | --- | --- |
| Use Case ID: | 8 | |
| Use Case Name: | Pay Cash | |
| Actors: | Driver | |
| Pre-conditions: | The driver asks to pay parking fees Cash | |
| Post-conditions: | system confirms the success of the payment process | |
| Flow of events: | **User Action** | **System Action** |
| 1- The driver asks to pay parking Cash |  |
|  | 2- ?? |
| 3- The driver pay cash |  |
|  | 4- system confirms the success of the payment process |
|  |  |
| Exceptions: | **User Action** | **System Action** |
| 1-the driver has not enough money |  |
|  | 2- The system does not open the exit door |
| Includes: |  | |
| Notes and Issues: |  | |

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| --- | --- | --- |
| Use Case ID: | 9 | |
| Use Case Name: | No Money | |
| Actors: | Driver | |
| Pre-conditions: | the driver has not enough money | |
| Post-conditions: | The system does not open the exit door | |
| Flow of events: | **User Action** | **System Action** |
| 1- user has not enough money |  |
|  | 2- The system does not open the exit door |
|  |  |
|  |  |
|  |  |
| Exceptions: | **User Action** | **System Action** |
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| Includes: |  | |
| Notes and Issues: |  | |

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| --- | --- | --- |
| Use Case ID: | 10 | |
| Use Case Name: | Show income | |
| Actors: | Manager | |
| Pre-conditions: | Manager asks to Show income | |
| Post-conditions: | Display income | |
| Flow of events: | **User Action** | **System Action** |
| 1- Manager asks to Show income and enter the time |  |
|  | 2- Display income in the selected time |
|  |  |
|  |  |
|  |  |
| Exceptions: | **User Action** | **System Action** |
|  |  |
|  |  |
| Includes: | Enter Time | |
| Notes and Issues: |  | |

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| --- | --- | --- |
| Use Case ID: | 11 | |
| Use Case Name: | Enter Time | |
| Actors: | Manager | |
| Pre-conditions: | Manager Enter Time | |
| Post-conditions: | System save the Time | |
| Flow of events: | **User Action** | **System Action** |
| 1- Manager Enter Time |  |
|  | 2- System save the Time |
|  |  |
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| Exceptions: | **User Action** | **System Action** |
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| Includes: |  | |
| Notes and Issues: |  | |

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| --- | --- | --- |
| Use Case ID: | 12 | |
| Use Case Name: | Show Available parking slots | |
| Actors: | Manager | |
| Pre-conditions: | Manager asks to show available slots | |
| Post-conditions: | Display Available parking slots | |
| Flow of events: | **User Action** | **System Action** |
| 1- Manager asks to show available slots |  |
|  | 2-Display Available parking slots |
|  |  |
|  |  |
|  |  |
| Exceptions: | **User Action** | **System Action** |
|  | 1- not found slot available |
|  |  |
| Includes: |  | |
| Notes and Issues: |  | |

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| --- | --- | --- |
| Use Case ID: | 13 | |
| Use Case Name: | Show Number of vehicle | |
| Actors: | Manager | |
| Pre-conditions: | Manager asks to Show Number of vehicle | |
| Post-conditions: | Display Number of vehicle | |
| Flow of events: | **User Action** | **System Action** |
| 1- Manager asks to Show Number of vehicle and enter the time |  |
|  | 2-Display Number of vehicle in selected time |
|  |  |
|  |  |
|  |  |
| Exceptions: | **User Action** | **System Action** |
|  |  |
|  |  |
| Includes: | Enter time | |
| Notes and Issues: |  | |

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| --- | --- | --- |
| Use Case ID: | 14 | |
| Use Case Name: | Enter Slots Details | |
| Actors: | Manager | |
| Pre-conditions: | Manager asks to Enter Slots Details | |
| Post-conditions: | Manager Enter Slots Details | |
| Flow of events: | **User Action** | **System Action** |
| 1- Manager asks to Enter Slots Details |  |
|  | 2- system allows Manager to enter Slots Details |
| Manager Enter Slots Details |  |
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|  |  |
| Exceptions: | **User Action** | **System Action** |
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| Includes: |  | |
| Notes and Issues: |  | |