Use Case List

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| --- | --- | --- |
| ID | Primary Actor | Use Case Title |
| 0 | Renter | Searching |
| 1 | Space owner, Renter | Haggling |
| 2 | Space owner, Renter | Payment |
| 3 | Renter or Space owner | User profile creation |
|  |  |  |
| 4 | Space owner and Renter | Reviews and comments for profiles |
| 5 | Space owner  and Renter | Advanced scheduling/reserving |

Use Case Template

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| --- | --- | --- | --- |
| Use Case ID: | 0 | | |
| Use Case Name: | Searching | | |
| Created By: | Ji Eun Yang | Last Updated By: |  |
| Date Created: | 2/16/16 | Date Last Updated: | 29/4/16 |

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| --- | --- |
| Actors: | Space owner, Renter |
| Description: | Leshen wants to park his car for a baseball game. He has difficulty finding public parking and looks to iPark. He successfully parks nearby in someone’s private space he rented. After his game he gets his car and leaves. |
| Trigger: | There is an excessive high demand for parking in a localized area. |
| Preconditions: | 1. Space owners have already registered rentable spaces nearby.  2. All actors are authenticated.  3. Leshen is already in his car looking for parking. |
| Postconditions: | 1. Leshen finds and sends a request to an available. |
| Normal Flow: | 0.0 Location services provide Leshen’s location  0.1 App finds available spaces near the location  0.2 App sends Leshen a list of nearby options, ranked by price and distance  0.3 Leshen chooses one and requests it |
| Alternative Flows: | 0.0 ibid  0.1 ibid  0.2 There are no available spaces nearby |
| Exceptions: |  |
| Includes: | “taken” flag to indicate whether a space is taken |
| Priority: | 1. Web portal 2. User authentication 3. Database |
| Frequency of Use: | 3-5 times over a ten minute span. Probably once or so a week. |
| Business Rules: | None |
| Special Requirements: | Must update states of available parking quickly. |
| Assumptions: | 1. It’s not easy for users to find available public parking spots  by driving around that area.  2. There are people who would like to rent out their private parking spaces.  3. Users want a way to rent parking spots. |
| Notes and Issues: | None |

**Use Case Template**

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| --- | --- | --- | --- |
| Use Case ID: | 1 | | |
| Use Case Name: | Haggling | | |
| Created By: | Nisa Gurung | Last Updated By: | Leshen Sui |
| Date Created: | 3/23/2016 | Date Last Updated: | 4/29/2016 |

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| --- | --- |
| Actors: | Space owner, Renter |
| Description: | After the renter finds a place, he or she can contact the space owner to negotiate price. |
| Trigger: | Space owner always wants to maximize profit but renter wants to save money. |
| Preconditions: | 1. The renter has found an available price.  2. The renter thinks the listed price is too high. |
| Postconditions: | 1. The renter and the space owner reach an agreement |
| Normal Flow: | 1.0 The renter receives information on the available parking spaces through the app  1.1 The renter choose one of them and contacts the space owner through email or phone depending on what contact information the owner has provided |
| Alternative Flows: | 1.0 There are no available spaces nearby and thus, there is no possibility of negotiation or the renter is satisfied with the price |
| Exceptions: | None |
| Includes: | Information from the space owner’s profile |
| Priority: | 1. Web portal  2. Database |
| Frequency of Use: | 1-2 times over a ten minute span. |
| Business Rules: | None |
| Special Requirements: | None |
| Assumptions: | 1.Renters want to spend the extra time in negotiation.  2.Space owners and renters are “nice” and willing to negotiate. |
| Notes and Issues: | None |

**Use Case Template**

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| --- | --- | --- | --- |
| Use Case ID: | 2 | | |
| Use Case Name: | Payment | | |
| Created By: | Group 3 | Last Updated By: | Leshen Sui |
| Date Created: | 3/23/2016 | Date Last Updated: | 3/23/2016 |

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| --- | --- |
| Actors: | Space owner, Renter |
| Description: | The renter makes a payment which the owner of the selected space receives. |
| Trigger: | Renters have to pay for the space they rent, and space owner need a way to receive money. |
| Preconditions: | 1. All actors are authenticated.  2. The renter has found a available parking space  3. The renter agrees the space owner’s conditions(price, time range, etc...) |
| Postconditions: | The space owner receives the payment and allows the renter to park for a period of time. |
| Normal Flow: | 2.0 The website pops up a window “Do you agree to pay \_\_\_$ for parking on \_\_\_\_\_(location) for \_\_\_\_\_\_\_\_\_\_(time range)”  2.1 The renter click “yes” and choose a payment method  2.2 The renter inputs related information  2.3 The renter completes payment and the space owner receives the money |
| Alternative Flows: | 2.0 The website pops up a window “Do you agree to pay \_\_\_$ for parking on \_\_\_\_\_(location) for \_\_\_\_\_\_\_\_\_\_(time range)”  2.1 The renter click “no”  2.2 The website pops up a window “Are you sure you want to decline the transaction?”  2.3 The renter clicks “yes” to cancel the order, or click “no” to go back to the transaction or contact the owner for any negotiation. |
| Exceptions: | 2.0.E.0 The payment method fails  2.0.E.1 The system detects the payment cannot be done  2.0.E.2 A message will be sent to the renter and asks  to use another payment method |
| Includes: | Haggling |
| Priority: | 1.Web portal  2.User authentication |
| Frequency of Use: | 3-5 times over a ten minute span. Probably once or so a week. |
| Business Rules: | None |
| Special Requirements: | Protect the renters’ payment information. Make sure they will not be disclosed. |
| Assumptions: | 1. The space owner linked a bank account to accept payment  2. The renter is willing to pay through the app |
| Notes and Issues: | None |

**Use Case Template**

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| --- | --- | --- | --- |
| Use Case ID: | 3 | | |
| Use Case Name: | User profile creation | | |
| Created By: | Nisa Gurung | Last Updated By: | Leshen Sui |
| Date Created: | 3/23/2016 | Date Last Updated: | 4/29/2016 |

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| --- | --- |
| Actors: | Any user, can either be renter or space owner |
| Description: | A user creates his profile on iPark |
| Trigger: | A user wants to register an account so he/she can use iPark conveniently. |
| Preconditions: | 1. The user wants to become a subscriber of iPark.  2. The user is authenticated. |
| Postconditions: | The user successfully creates his/her account. |
| Normal Flow: | 3.0 The user click the “sign up” button  3.1 The user fills in his information following the instructions provided by the app.  3.2 The user completes his profile creation; the profile is stored in database.  3.3 After the user logs in and clicks the “profile” button, his information will be displayed. |
| Alternative Flows: | 3.0 The user clicks the “sign up” button  3.1 The user provides an email address which are not exist.  3.2 The app will not allow the user to register successfully. |
| Exceptions: | 3.0.E.0 The user did not provide a required information  3.0.E.1 The application will remind the user to fill out the required parts  3.0.E.2 The user fills out the registration form correctly |
| Includes: | An email validation API |
| Priority: | 1. Database |
| Frequency of Use: | Just one time when the users first sign up |
| Business Rules: | None |
| Special Requirements | None |
| Assumptions: | It’s not easy for users to find public parking spaces, so they want to use websites like iPark to rent spaces  The space owner wants to make money by renting his space out when he doesn’t use it. |
| Notes and Issues: | None |

**Use Case Template**

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| --- | --- | --- | --- |
| Use Case ID: | 5 | | |
| Use Case Name: | Reviews and comments | | |
| Created By: | Group 3 | Last Updated By: | Leshen Sui |
| Date Created: | 3/23/2016 | Date Last Updated: | 3/23/2016 |

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| --- | --- |
| Actors: | Renters |
| Description: | The renter writes reviews and comments on the app to share his experience with others. |
| Trigger: | After the renter has used a parking space, he or she might want to comment on their experiences |
| Preconditions: | 1. The renter has had experience using a space of the owner he or she is writing review of |
| Postconditions: | 1. Other people can see the reviews and comments online. |
| Normal Flow: | 5.0 The user clicks the “review and comment” button to send a request for comment.  5.1 The server receives the request and pops up a window for the user to write.  5.2 The user completes his comment and clicks “submit”  5.3 The comment will be stored and shared. |
| Alternative Flows: | None |
| Exceptions: | None |
| Includes: | None |
| Priority: | 1. Web Portal  2. Server  3. Database |
| Frequency of Use: | Probably once or twice a week depending on how frequently they rent |
| Business Rules: | None |
| Special Requirements: | Comments must be polite, otherwise it will be shielded. |
| Assumptions: | The renters want to share their experience with other people. |
| Notes and Issues: | None |

**Use Case Template**

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| --- | --- | --- | --- |
| Use Case ID: | 6 | | |
| Use Case Name: | Advanced scheduling/reserving | | |
| Created By: | Group 3 | Last Updated By: | Leshen Sui |
| Date Created: | 3/23/2016 | Date Last Updated: | 3/23/2016 |

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| Actors: | Space owner, Renter |
| Description: | The renter contacts the space owner in advance to book an available parking space, knowing that it’s hard to find a public parking space in his/her designated area. |
| Trigger: | There is an excessive high demand for parking in a localized area. |
| Preconditions: | 1. Space owners have already registered rentable spaces nearby.  2. All actors are authenticated.  3. The renter decides to book a parking space in advance. |
| Postconditions: | 1. The renter successfully books an available spot and drive there . |
| Normal Flow: | 6.0 The renter inputs a location online.  6.1 App finds available spaces near the location  6.2 App sends the renter a list of nearby options, ranked by price and distance  6.3 the renter chooses one and requests it, and communicate with the owner. |
| Alternative Flows: | 6.0 The renter inputs a location online.  6.1 App finds available spaces near the location  6.2 There are no available spaces nearby |
| Exceptions: | 6.0.E.0 Unavailable space is listed as available space.  6.0.E.1 Owner accepts 2 requests at conflicting times.  6.0.E.2 DoubleBookedChecker() checks if the location and time are double booked.  6.0.E.3 One person is removed from the spot  6.0.E.4 An apology message is sent to the removed person telling them they’ve been bumped and also blaming the spot owner  6.0.E.5 They’re given a try again option and prioritized in some way  6.0.E.6 The owner is told off. Perhaps penalized. |
| Includes: | DoubleBookedChecker() |
| Priority: | 1. Web Portal  2. User authentication  3. Database |
| Frequency of Use: | 3-5 times over a ten minute span. Probably once or so a week. |
| Business Rules: | None |
| Special Requirements: | Must update states of available parking quickly. |
| Assumptions: | 1. It’s not easy for users to find available public parking spots  by driving around that area.  2. There are people who would like to rent out their private parking spaces.  3. Users want a way to rent parking spots in advance to save time. |
| Notes and Issues: | None |