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| Use Case ID: | 1 | | |
| Use Case Name: | Login | | |
| Created By: | Group5 | Last Updated By: | Group5 |
| Date Created: |  | Date Last Updated: |  |

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| Actors: | Carpooling system users (LUMS community), DBMS |
| Description: | A LUMS community member new to the system logs into his/her account on the website so that he/she can be a part of car-pooling community at LUMS. |
| Trigger: |  |
| Preconditions: | 1. The user must access the website. The user must be a LUMS community member and therefore must provide the campusmail credentials to the system. |
| Postconditions: | 1. The system navigates the user to his/her personalized page. |
| Normal Flow: | **Login:**   1. A new user accesses the car-pooling website and the displays the homepage to the user. 2. The user clicks on the Login button on the homepage. 3. The system prompts the user to provide the LUMS campusmail credentials so that he/she is recognized as a legitimate user and a member of the LUMS community. 4. The user provides his/her LUMS campusmail credentials to the system. |
| Alternative Flows: | None. |
| Exceptions: | **Invalid Credentials:**   1. The system displays a failure message to the user indicating that the LUMS campusmail credentials entered are invalid. |
| Includes: | Update Database. |
| Priority: | High |
| Business Rules: | N/A |
| Assumptions: | None. |

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| Use Case ID: | 2 | | |
| Use Case Name: | Advertise Lift | | |
| Created By: | Group5 | Last Updated By: | Group5 |
| Date Created: |  | Date Last Updated: |  |

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| Actors: | Car-pooling system users (LUMS community), DBMS |
| Description: | A lift-provider advertises a lift mentioning a route. |
| Trigger: |  |
| Preconditions: | The lift-provider must be logged into the system and therefore must be a LUMS community member. |
| Postconditions: | The information provided by the lift-provider is stored in the database. |
| Normal Flow: | **Advertise Lift:**   1. The lift-provider logs into the system. 2. The lift-provider clicks the Advertise Ride button. 3. The system presents a form to the lift-provider. 4. The lift-provider provides the essential information such as route, time, date (DD-MM-YYYY format), expected charges, contact number etc. 5. The lift-provider fills out the form satisfying the following conditions: 6. LUMS must be either a source or a destination or both. 7. The lift-provider must mention the type of vehicle. 8. The form will further contain the following options for the lift-provider which are specific to the LUMS context: 9. The lift-provider will have to mention gender preference or restriction. 10. The lift-provider will be given an option to mention whether he/she is providing this lift for one time only or there is a possibility of such lift on a regular basis (weekly,monthly etc.) |
| Alternative Flows: | None. |
| Exceptions: | **Incomplete Form:**  If the form filled out by the lift-provider lacks any of the essential information, the system rejects form submission displaying “Incomplete Form” message.  **Violation of conditions:**  If the form filled out by the lift-provider violates any of the two necessary conditions mentioned above in **5**, the system will reject form submission and will display the reason for rejection.  **Conflicting times:**  If the lift-provider has already advertised a lift before whose time interval conflicts with the time interval of the current lift, then the system will reject form submission and will display “Two or more lifts with conflicting times” error. |

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| Use Case ID: | 3 |
| Use Case Name: | Search Lifts |

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| Actors: | Carpooling system users (LUMS community), DBMS |
| Description: | Any system user who is logged into the system can search for currently available lifts by mentioning basic parameters such as time, date, route etc. |
| Trigger: |  |
| Preconditions: | The user must be logged into the system. |
| Postconditions: | The system will provide a ranked list of results of currently available lifts. |
| Normal Flow: | **Search Lifts:**   1. The user clicks on the **Search Lifts** button on his/her page. 2. The system navigates the user to a form which displays several search criteria such as time, date, route etc. 3. The user fills out the form. 4. The system displays a ranked list of currently available lifts to the user. |
| Alternative Flows: | None. |
| Exceptions: | None. |

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| Use Case ID: | 4 |
| Use Case Name: | Apply for lift |

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| Actors: | Carpooling system users (LUMS community), DBMS |
| Description: | The user can apply for any lift that appears in his/her search results.  He/She will be wait-listed if that lift has already been occupied. |
| Trigger: |  |
| Preconditions: | The user must be logged into the system and has searched for the currently available lifts. |
| Postconditions: | The user’s current state of lift-waitlists and lift-arrangements will be updated. |
| Normal Flow: | **Apply for lift:**   1. The user logs into the system, searches for currently available lifts and then clicks on any of the lifts to apply. 2. If the specified lift has not already been engaged, then the applicant is assigned that lift and the database records are updated. 3. If the lift has already been assigned, then the applicant is put into the wait-list for that lift and the database records are updated. |
| Alternative Flows: | Applicant can apply for multiple lifts. |
| Exceptions: | None. |

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| Use Case ID: | 5 |
| Use Case Name: | Cancel Lift |

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| Actors: | Carpooling system users (LUMS community), DBMS |
| Description: | Either the lift-provider or the applicant who has applied for the lift withdraws from his/her proposal. |
| Trigger: |  |
| Preconditions: | The user must be logged into the system and has already applied for or advertised at least one lift. |
| Postconditions: | The user’s name is removed from the specified lift, the other party is notified and the database records are updated. |
| Normal Flow: | **Cancel Lift:**   1. The user logs into the system and opens the list of lifts that he/she is currently involved in. 2. The user then selects one or more of these lifts and clicks on the Cancel button. 3. The selected lifts are removed from the user’s list of lifts, the other party is notified and the database records are updated. |
| Alternative Flows: | None. |
| Exceptions: | None. |

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| Use Case ID: | 6 |
| Use Case Name: | Check rating |

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| Actors: | Carpooling system users (LUMS community), DBMS |
| Description: | The user can check overall rating for all users including him/herself given by their peers. |
| Trigger: |  |
| Preconditions: | The user must be logged into the system. |
| Postconditions: | The system displays the ratings of the user whose rating is searched. Or it displays the ratings of all users in ascending/descending order. |
| Normal Flow: | **Check rating:**   1. The user logs into the system. 2. The user clicks on the check rating button. 3. The system then prompts the user to enter the name of the user whose rating is to be searched. 4. If the user enters the name of the user, then the rating of that particular user is displayed. 5. Otherwise, the ratings of all users are displayed in ascending/descending order. |
| Alternative Flows: | None. |
| Exceptions: | None. |

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| Use Case ID: | 7 |
| Use Case Name: | Check my lifts |

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| Actors: | Carpooling system users (LUMS community), DBMS |
| Description: | The user can check the list of lifts that he/she is currently involved in. |
| Trigger: |  |
| Preconditions: | The user must be logged into the system. |
| Postconditions: | The system displays the list of lifts that the user is currently involved in. |
| Normal Flow: | **Check my lifts:**   1. The user logs into the system and clicks on the “Check my lifts” button. 2. The system displays the list of all lifts that the user is currently involved in. |
| Alternative Flows: | None. |
| Exceptions: | None. |

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| Use Case ID: | 8 |
| Use Case Name: | Update Personal Information |

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| Actors: | Carpooling system users (LUMS community), DBMS |
| Description: | The user can update his/her personal information on his/her profile. |
| Trigger: |  |
| Preconditions: | The user must be logged into the system. |
| Postconditions: | The personal information of the user is updated in the database records. |
| Normal Flow: | **Update Personal Information:**   1. The user logs into the system and clicks on the “Update Personal Info” button. 2. The system displays the personal information of the user in the form of several fields. 3. The user changes some of the fields and clicks on the “Save button”. 4. The personal information of the user is updated in the database. |
| Alternative Flows: | None. |
| Exceptions: | None. |

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| Use Case ID: | 9 |
| Use Case Name: | Rate partner |

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| Actors: | Carpooling system users (LUMS community), DBMS |
| Description: | Both the lift-provider and the applicant can rate their travel partner on a scale of 1-5 (where 1 means worst and 5 means best) after the journey is completed. |
| Trigger: | None. |
| Preconditions: | The user must be logged into the system and must have completed at least one ride. |
| Postconditions: | The rating given by the user to his/her travel partner is stored and the database records are updated. |
| Normal Flow: | **Rate Partner:**   1. The user logs into the system and clicks on “Rate Partner” button. 2. The system displays the list all completed lifts for which the user has not rated his/her partner. 3. The user selects anyone of them and rates his/her partner(s) on scale of 1-5 (where 1 means worst and 5 means best). |
| Alternative Flows: | None. |
| Exceptions: | None. |

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| Use Case ID: | 10 |
| Use Case Name: | Modify trip specs |

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| Actors: | Carpooling system users (LUMS community), DBMS |
| Description: | The user can change the trip specs of the lift such as time, destination and date. The other party will be notified of the change once it is made. |
| Trigger: | None. |
| Preconditions: | The user must be logged into the system and must be engaged in a lift. |
| Postconditions: | The modified specs will be communicated to the other party. |
| Normal Flow: | **Modify trip specs:**   1. The user logs into the system and clicks on the “Modify trip specs” button. 2. The system displays the list of all lifts that the user is currently engaged in. 3. The user selects one of the lifts and modifies its different attributes such as time, date and destination. 4. The system updates the change and notifies the other party. |
| Alternative Flows: | None. |
| Exceptions: | None. |

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| Use Case ID: | 11 |
| Use Case Name: | Confirm lift |

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| Actors: | Carpooling system users (LUMS community), DBMS |
| Description: | The user confirms the lift at least one day the before the actual time of the lift. |
| Trigger: | None. |
| Preconditions: | The user must be logged into the system and must have planned at least one trip. |
| Postconditions: | The user’s confirmation is saved and the other party is notified. |
| Normal Flow: | **Confirm lift:**   1. The user logs into the system and clicks the “Confirm lift” button. 2. The system displays the list of lifts that the user is currently involved in. 3. The user selects some of them and confirms them. 4. The user’s confirmation is saved and the other party is notified. |
| Alternative Flows: | None. |
| Exceptions: | None. |