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**SE-4A**

lab 9

Project name:

Rent A Ride- Bus/Car riding and car booking system.

# Group member:

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# Section:

SE-4A

# Operational contracts:

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| **Contract name** | AdminLogin |
| **Operation** | Admin Login (ID: string, Password: string) |
| **Cross reference** | Use case: Admin Login |
| **Pre-condition** | Admin already have an account on the server |
| **Post-condition** | A al instance form Admin was created. (Instance created)  al.id was associated with ID. (Association)  al.password was associated Password. (Association)  al.credentials became login. (Modification) |

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| **Contract name** | TrackCars |
| **Operation** | CarTracking (Tracking ID: Int, car: String, Driver: String, Admin: String) |
| **Cross reference** | Use case: Track Cars |
| **Pre-condition** | Cars is already being used as rented or for a ride. |
| **Post-condition** | A tc instance form Admin was created. (Instance created)  tc was associated with Car. (Association)  tc was associated with Driver. (Association)  tc became Tracking ID. (Modification)  tc was disassociated. (Disassociation)  tc instance deleted. (Instance deletion) |

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| **Contract name** | ManageDrivers |
| **Operation** | Admin (driver, license no, customer, car) |
| **Cross reference** | Use case: Manage Driver |
| **Pre-condition** | Admin is logged in to the application. |
| **Post-condition** | An instance Md form Rent was generated. (Instance created)  Md was associated with Driver. (Association)  Md.status was associated with rent to check driver’s availability. (Association)  Md.License No. was verified. (Modification)  Md was disassociated. (Disassociation)  Md instance deleted. (Instance deletion) |

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| **Contract name** | viewfeedback |
| **Operation** | feedback(Admin: String, Driver: string) |
| **Cross reference** | Use case: View feedback |
| **Pre-condition** | Access to diver description available. |
| **Post-condition** | A view instance was generated from view. (Instance created)  view was associated with Admin. (Association)  view.driver became feedback(Rating, experience). (Modification) |

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| **Contract name** | ManageCars |
| **Operation** | Admin (Car, Rent, customer, Ride) |
| **Cross reference** | Use case: Manage car |
| **Pre-condition** | Admin is logged in to the application. |
| **Post-condition** | An instance Mc form Rent and Ride was generated. (Instance created)  Mc was associated with Car. (Association)  Mc.status was associated with rent and ride to check car’s availability. (Association)  Mc.details was displayed. (Modification)  Mc was disassociated. (Disassociation)  Mc instance deleted. (Instance deletion) |

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| **Contract name** | CustomerLogin |
| **Operation** | Customer (email id, password, username) |
| **Cross reference** | Use case: Sign-in/log-in |
| **Pre-condition** | Customer has an account if not he should sign-up first. |
| **Post-condition** | A cL instance form Customer was created. (Instance created)  cL.id was associated with ID. (Association)  cL.password was associated Password. (Association)  cL.credentials became login. (Modification)  cL was deleted(instance deletion) |

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| **Contract name** | AvailableCars |
| **Operation** | Cars ( Car description, Admin) |
| **Cross reference** | Use case: View available cars |
| **Pre-condition** | Cars is available to be rented. |
| **Post-condition** | A Vc instance form Customer was created. (Instance created)  Vc was associated with Car. (Association)  Vc was associated with Admin. (Association)  Vc.car was rented (Modification)  Vc was disassociated. (Disassociation)  Vc instance deleted. (Instance deletion) |

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| **Contract name** | SheduleRental. |
| **Operation** | SheduleRentalCar (Car: string, Rent: string, customer: string) |
| **Cross reference** | Use case: Rent Car |
| **Pre-condition** | Customer is logged in to the application. |
| **Post-condition** | A rc instance form Rental was created. (Instance created)  rc was associated with car. (Association)  rc.car became CarSelect. (Modification)  rc was associated with rent. (Association)  rc.rent became schedule(time, date, location, returndate). (Modification)  rc was associated with customer. (Association)  rc.customer became confirmShedule(payment()). (Modification)  rc was disassociated. (Disassociation)  rc instance deleted. (Instance deletion) |

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| **Contract name** | SheduleRide |
| **Operation** | SheduleRideitem (Car: string, Bus: string, Ride: string customer: string) |
| **Cross reference** | Use case: Ride car |
| **Pre-condition** | Customer is logged in to the application. |
| **Post-condition** | A r instance form ride was generated. (Instance created)  r was associated with vehicle. (Association)  r.vehicle became Book(bus, car). (Modification)  r was associated with Ride. (Association)  r.Ride became Booked(vehicle, time, date, location). (Modification)  r was associated with customer. (Association)  r.customer became confirmBooking(payment()). (Modification)  r was disassociated. (Disassociation)  r instance deleted. (Instance deletion) |

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| **Contract name** | SelfDrive |
| **Operation** | RentSelfDrive (Car: string, Rent: string, customer: string) |
| **Cross reference** | Use case: Self Drive |
| **Pre-condition** | Customer is logged in to the application. |
| **Post-condition** | A sd instance form Rent was generated. (Instance created)  sd was associated with Car. (Association)  sd.car became CarSelect. (Modification)  sd was associated with rent. (Association)  sd was associated with License No. (Association)  sd.License No. was verified. (Modification)  sd became confirmRent(payment()). (Modification)  sd was disassociated. (Disassociation)  sd instance deleted. (Instance deletion) |

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| **Contract name** | Feedback. |
| **Operation** | RequestFeedback (Driver: string, Rent: string, Ride: string, customer: string) |
| **Cross reference** | Use case: Give feedback |
| **Pre-condition** | Customer has availed the ride or rent service. |
| **Post-condition** | A instance form request was created as feed. (Instance created)  feed was associated with customer. (Association)  feed.customer became enterfeedback( Rating, experience). (Modification)  r was disassociated. (Disassociation)  feed instance deleted. (Instance deletion) |

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| **Contract name** | Payment |
| **Operation** | Payment (Admin: String, Customer: String, Payment amount: Int) |
| **Cross reference** | Use case: Payment Method |
| **Pre-condition** | Customer has availed the ride or rent service. |
| **Post-condition** | A p instance form Service (Rent or Ride) was generated. (Instance created)  p was associated with Service (Rent or Ride). (Association)  p.customer has availed Service (Rent or Ride). (Modification)  p.customer was associated with payment. (Association)  p.customer has paid payment amount ( Cash or Online) (Modification).  p was associated with Admin. (Association)  p.Admin Verifies Payment amount.(Modification)  p was disassociated. (Disassociation)  p instance deleted. (Instance deletion) |