









### Applications Development Project 3 –ADPA301

#### Software Requirements Specification (SRS) – Increment 1 & Increment 2

**I have read, understood and agree to the contents of this document. I accept full responsibility for any errors and omissions in this document.**

Group number: \_\_\_\_11\_\_\_\_\_  
Oasis\_\_\_\_\_

Group name: \_\_\_\_Innovation

	Reg No	First name	Surname	sign	Meetings held	Number attended
1	<b>22251989</b>	<b>Linamandla</b>	<b>Thutha</b>		3	3
2	22129902	Sfundo	Xulu		3	2
3	22128794	Minenhle	Mendo		3	3
4	22229447	Sisanda	Radebe		3	3
5	22229009	Sipho	Shali		3	2
6	22217222	Esethu	Mchiza		3	2
7	22116318	Mfihlakalo	Ncama		3	2
8	22132693	Fezekile	Ndebele		3	3

Business Domain	Tripease.co.za
Business name	TripEase

Contact Person	Minenhle Mendo
Contact number	065 680 1715
Email address	<a href="mailto:22128794@dut4life.ac.za">22128794@dut4life.ac.za</a>

## Contents

<b>Business processes (List all Business processes for the project) .....</b>	<b>4</b>
<b>Business use cases (List all Business use cases in sequence for the project) .....</b>	<b>4</b>
<b>Use case description .....</b>	<b>6</b>
Minutes of meeting .....	15
Minutes of meeting .....	16
Minutes of meeting .....	17

**Business processes (List all Business processes for the project)**

No	Business process	Se m / Inc	Brief description
1	Book attraction	1/2	Provide online ticket booking options.
2	Car rental	1/2	Users can search for available cars based on location, date, and time, apply filters, sort results, and view detailed car information. They can book cars, process payments, receive booking confirmations, and cancel reservations if needed. Users select or enter pick-up and drop-off locations and receive detailed instructions for both.

**Business use cases (List all Business use cases in sequence for the project)**

No	Use case	Sem / Inc	Brief Use Case description	Full Name	Completed Yes / No
1.	Discount & Coupons	1/2	Customers apply discounts or coupons to their car rental reservations to receive a price reduction. This involves verifying the validity of the discount or coupon and adjusting the reservation total accordingly.	Minenhle Mendo	No
2.	Reserve vehicle	1/2	The customer selects a vehicle, specifies rental dates, provides necessary personal	Esethu Mchiza	No

			information, and confirms the reservation.		
3.	Payment process	1/2	Secure payment gateways for handling transactions.	Linamandla Thutha	No
4.	Car pick-up	1/2	Customer arrives at the car rental location to collect the vehicle they reserved.	Sisanda Radebe	no
5.	Car drop-off	1/2	This use case describes the process for users to return the rented car to a designated drop-off location at the end of the rental period.	Minenhle Mendo	
6.	Inspect vehicle	1/2	After the vehicle rented by a customer the rental company then uses a digital checklist for inspection.	Linamandla Thutha	No
7.	Ratings and reviews	1/2	After returning a car, the user can leave ratings about their experience with the car and the rental service.	Fezekile Ndebele	No
8.	Ticket booking	1/2	Users can search for events or services based on criteria like date, location, or category. Users can view a seating chart and choose their preferred seats; Users can book tickets by providing necessary information.	Sipho Shali	No
9.	Cancel ticket booking	1/2	User can be able to cancel bookings or is allowed to cancel his or her ticket booking	Sfundo Xulu	No

<b>10.</b>	<b>Refund Processing</b>	<b>1/2</b>	<b>User can make a refund request after cancelling the booking</b>	<b>Mfihlakalo Ncama</b>	<b>No</b>
------------	--------------------------	------------	--	-------------------------	-----------

## Use case description

<b>Use case number</b>	1
<b>Use case name</b>	<b>Discount &amp; Coupons</b>
<b>Brief description</b>	Customers apply discounts or coupons to their car rental reservations to receive a price reduction. This involves verifying the validity of the discount or coupon and adjusting the reservation total accordingly.
<b>Triggering event</b>	The customer attempts to apply a discount or coupon to their reservation.
<b>Actor(s)</b>	<ul style="list-style-type: none"> <li>• Customer</li> <li>• System</li> <li>• Rental Agent</li> </ul>
<b>Preconditions</b>	<ul style="list-style-type: none"> <li>• The customer has a valid discount or coupon code.</li> <li>• The discount or coupon is applicable to the customer's reservation (e.g., not expired, meets the conditions of the promotion).</li> <li>• The rental agent has access to the car rental system to verify and apply the discount or coupon.</li> </ul>
<b>Flow of activities</b>	<ul style="list-style-type: none"> <li>• Customer decides to use a discount or coupon for their reservation.</li> <li>• Customer provides the discount or coupon code.</li> <li>• System verifies the validity of the discount or coupon.</li> </ul>

	<ul style="list-style-type: none"> <li>• System applies the discount or coupon to the reservation.</li> <li>• Rental agent confirms the adjusted reservation details (if applicable).</li> </ul>
--	--

<b>Use case number</b>	2
<b>Use case name</b>	Reserve vehicle
<b>Brief description</b>	This use case describes the process for a customer to reserve a vehicle from a car rental company's system. The customer selects a vehicle, specifies rental dates, provides necessary personal information, and confirms the reservation.
<b>Triggering event</b>	The customer decides to rent a vehicle and initiates the reservation process.
<b>Actor(s)</b>	Customer, System
<b>Preconditions</b>	<ul style="list-style-type: none"> <li>• The customer has access to the car rental system (either through the website, mobile app, or in person at a branch office).</li> <li>• The customer has a valid driver's license and a valid payment method.</li> <li>• The car rental system is operational and has available vehicles for the specified rental dates.</li> </ul>
<b>Flow of activities</b>	<ul style="list-style-type: none"> <li>• Customer initiates the reservation process.</li> <li>• System displays available vehicles and rental dates.</li> <li>• Customer selects vehicle, rental dates, and location.</li> <li>• System verifies customer information and vehicle availability.</li> <li>• Customer provides payment information.</li> <li>• System processes payment and confirms reservation.</li> <li>• System sends reservation confirmation.</li> </ul>

	<ul style="list-style-type: none"> <li>• Customer receives reservation confirmation.</li> </ul>
--	---

<b>Use case number</b>	3
<b>Use case name</b>	Payment processes
<b>Brief description</b>	Secure payment gateways for handling transactions.
<b>Triggering event</b>	The user reserves a vehicle or ticket for an event and chooses to proceed with the payment.
<b>Actor(s)</b>	<i>Customer</i>
<b>Preconditions</b>	<ol style="list-style-type: none"> <li>1. The user has successfully registered and logged into the web application.</li> <li>2. The user has to reserve a vehicle or book a ticket.</li> <li>3. The user has a valid payment method (credit card, debit card, etc.)</li> </ol>
<b>Flow of activities</b>	<ol style="list-style-type: none"> <li>1. The user clicks on the 'Proceed to Payment' button.</li> <li>2. The system displays the payment page with the total amount, including any taxes and fees.</li> <li>3. The user enters their payment details or selects a saved payment method.</li> <li>4. The user clicks on the 'Pay Now' button.</li> <li>5. The system validates the payment information.</li> </ol>



	6. The system sends a payment confirmation to the user's registered email address.
--	--

<b>Use case number</b>	4
<b>Use case name</b>	Car pick-up
<b>Brief description</b>	<b>Customer arrives at the car rental location to collect the vehicle they reserved. This includes checking the customer's reservation, verify documents.</b>
<b>Triggering event</b>	The customer
<b>Actor(s)</b>	Customer, Rental agent
<b>Preconditions</b>	<ul style="list-style-type: none"> <li>• The customer has an active reservation in the system</li> <li>• The customer possesses a valid driver's license</li> <li>• The reserved car is available and in good condition at the rental location</li> <li>• The rental agents have access to the car rental system to verify details,</li> </ul>
<b>Flow of activities</b>	<ul style="list-style-type: none"> <li>• Customer arrives at the rental location to pick up their reserved car</li> <li>• Rental agent greets the customer and initiate the check-in</li> <li>• Agent entered details to the system to confirm the reservation</li> </ul>

	<ul style="list-style-type: none"> <li>• The customer takes possession of the car and leaves the rental location</li> </ul>
--	---

<b>Use case number</b>	5
<b>Use case name</b>	Drop off
<b>Brief description</b>	<b>This use case describes the process for users to return the rented car to a designated drop-off location at the end of the rental period.</b>
<b>Triggering event</b>	The rental period is about to end, and the user needs to return the car.
<b>Actor(s)</b>	Customer, System
<b>Preconditions</b>	<ul style="list-style-type: none"> <li>• ?The user has an active car rental booking.</li> <li>• The rental period is nearing its end or has ended.</li> <li>• The user has received or can access drop-off instructions</li> </ul>
<b>Flow of activities</b>	<ul style="list-style-type: none"> <li>• <b>Initiate Drop-off:</b> The user opens the app and selects the "Return Car" option.</li> <li>• <b>Confirm Drop-off Location:</b> The app displays the designated drop-off location. The user confirms or adjusts the location if allowed.</li> <li>• <b>Navigate to Drop-off Location:</b> The app provides navigation instructions to the drop-off location.</li> <li>• <b>Inspect Car:</b> The user conducts a preliminary inspection of the car to ensure it is in the same condition as when rented.</li> <li>• <b>Complete Drop-off Checklist:</b> The user follows the app's checklist, which might include taking photos of the car, checking fuel levels, and removing personal belongings.</li> <li>• <b>Confirm Return:</b> The user confirms the return via the app, which may include submitting photos or other required information.</li> </ul>

	<ul style="list-style-type: none"><li>• <b>Receive Confirmation:</b> The app confirms the successful return and provides a receipt or confirmation message.</li></ul>
--	---

<b>Use case number</b>	6
<b>Use case name</b>	Inspect vehicle
<b>Brief description</b>	After the vehicle rented by a customer the rental company then uses a digital checklist for inspection.
<b>Triggering event</b>	This action triggers the entire vehicle inspection process, including performing the inspection, recording the results, and generating a report for the customer to view.
<b>Actor(s)</b>	Rental Company
<b>Preconditions</b>	<ul style="list-style-type: none"> <li>• The customer must be logged into the system.</li> <li>• The customer must have an active rental booking.</li> </ul>
<b>Flow of activities</b>	<ul style="list-style-type: none"> <li>• <b>User Authentication:</b> Implement secure login for customers and inspection officers.</li> <li>• <b>Scheduling Module:</b> Develop a system for customers to book inspection times.</li> <li>• <b>Inspection Checklist:</b> Create a digital checklist for inspection officers.</li> <li>• <b>Recording Module:</b> Build a feature for recording inspection results.</li> <li>• <b>Notification System:</b> Set up notifications to inform customers about inspection schedules and results.</li> <li>• <b>Report Generation:</b> Implement a report feature for presenting inspection results to customers.</li> </ul>

<b>Use case number</b>	7
<b>Use case name</b>	Ratings and reviews
<b>Brief description</b>	After returning a car, the user can leave ratings about their experience with the car and the rental service based on the condition of the car.
<b>Triggering event</b>	The customer navigates to the option where they can leave their ratings and reviews.
<b>Actor(s)</b>	user
<b>Preconditions</b>	<ul style="list-style-type: none"> <li>• The customer has completed a car rental transaction.</li> <li>• The user is logged into their account.</li> </ul>

<b>Flow of activities</b>	<ul style="list-style-type: none"> <li>• Customer logs in to their account and navigates to the rental section.</li> <li>• The user selects the rental they want to leave a review for.</li> <li>• The user selects a rating and writes a review including any comment or feedback about the car.</li> <li>• The user submits their review.</li> </ul>
---------------------------	--

<b>Use case number</b>	8
<b>Use case name</b>	<b>Ticket booking</b>
<b>Brief description</b>	Users can search for events or services based on criteria like date, location, or category. Users can view a seating chart and choose their preferred seats; Users can book tickets by providing necessary information.
<b>Triggering event</b>	The user decides to book a ticket for an event.
<b>Actor(s)</b>	<ul style="list-style-type: none"> <li>• Customer</li> <li>• System</li> </ul>
<b>Preconditions</b>	<ul style="list-style-type: none"> <li>• The user has access to the ticket booking (via website or mobile app).</li> <li>• The event or service has available tickets.</li> <li>• The user has a valid payment method.</li> </ul>
<b>Flow of activities</b>	<ul style="list-style-type: none"> <li>• The user searches for the desired event or services.</li> <li>• The system displays available options based on the user's search criteria.</li> <li>• The user selects the preferred option.</li> <li>• The system displays seat availability and pricing.</li> <li>• The user selects the desired seat(s).</li> <li>• The system prompts the user to enter personal and payment details.</li> <li>• The user enters the required information and submits the booking request.</li> </ul>

<b>Use case number</b>	9
<b>Use case name</b>	Cancel ticket booking
<b>Brief description</b>	This use case describes the process for a customer to cancel the ticket that they have already booked .
<b>Triggering event</b>	The customer decides to cancel the ticket
<b>Actor(s)</b>	Customer
<b>Preconditions</b>	<ul style="list-style-type: none"> <li>• The customer has access to the car system (either through the website, mobile app, or in person at a branch office).</li> <li>• The customer decide to cancel the ticket booking for or her reasons.</li> </ul>
<b>Flow of activities</b>	<ul style="list-style-type: none"> <li>• Customer log in.</li> <li>• Go to tickets and bookings a customer can review his or her ticket booking</li> <li>• Customer press cancel ticket button and save.</li> <li>• Can provide a reason for canceling</li> </ul>

<b>Use case number</b>	10
<b>Use case name</b>	Refund Processing
<b>Brief description</b>	User can make a refund request after cancelling the booking
<b>Triggering event</b>	The customer has canceled the ticket/booking
<b>Actor(s)</b>	Customer
<b>Preconditions</b>	<ul style="list-style-type: none"> <li>• The customer must have a paid booking or ticket</li> <li>• The customer has canceled the ticket or booking</li> </ul>
<b>Flow of activities</b>	<ul style="list-style-type: none"> <li>• Customer log in</li> <li>• Customer navigates to the canceled tickets and bookings section</li> </ul>

	<ul style="list-style-type: none"> <li>• Customer selects the specific booking</li> <li>• Customer presses the "Request Refund" button</li> <li>• Customer submits the refund request</li> </ul>
--	--

## Minutes of meeting

### MEETING DETAILS

Team Name:	Innovators
Meeting date:	25 July 2024
Meeting time:	10h00
Venue:	DB001
Attendees:	5
Absentees:	3
Minutes taker:	Ndebele Fezekile

### AGENDA DETAILS

Present possible use cases and business processes
Split approved use cases within group members

### MEETING MINUTES

Action	By
<b>Ticket booking</b>	Linamandla Thutha
<b>Discount and coupon</b>	Sfundo Xulu
<b>Cancel ticket booking</b>	Fezekile Ndebele
<b>Refund Processing</b>	Luyanda Radebe
	Minenhle Mendo

## Minutes of meeting

### MEETING DETAILS

Team Name:	Innovators
Meeting date:	29 July 2024
Meeting time:	20h00
Venue:	MS Teams
Attendees:	8
Absentees:	0
Minutes taker:	Sfundo Xulu

### AGENDA DETAILS

Add another business process
Create new use cases to meet target
Split approved use cases within group members

### MEETING MINUTES

Action	By
<b>Responsible for use case payment process and vehicle inspection</b>	Linamandla Thutha
<b>Cancel ticket booking</b>	Sfundo Xulu
<b>Ratings and reviews</b>	Fezekile Ndebele
<b>Vehicle pickup</b>	Luyanda Radebe



<b>Responsible for use case Discount and coupons</b>	Minenhle Mendo
<b>Reservation of vehicle</b>	Esethu Mchiza
<b>Attraction ticket booking</b>	Sipho Shali
<b>Refund Payment</b>	Prince Nama

## Minutes of meeting

### MEETING DETAILS

Team Name:	Innovators
Meeting date:	30 July 2024
Meeting time:	10h00
Venue:	MS Teams
Attendees:	8
Absentees:	0
Minutes taker:	Prince Ncama

### AGENDA DETAILS

Finalized the car rental business user cases, discussing various scenarios and functionalities that need to be covered in the project.

Key user cases include booking a car, managing rentals, handling payments, and customer support.

### MEETING MINUTES

Action	By
<b>Final user cases have been approved. to assign the user cases to the individuals.</b>	All members Sisanda Radeebe

**Prepare to present these user cases to the lecturer.** All members.

## Minutes of meeting

### MEETING DETAILS

Team Name:	Innovators
Meeting date:	01 August 2024
Meeting time:	20h00
Venue:	MS Teams
Attendees:	8
Absentees:	0
Minutes taker:	Sipho Shali

### AGENDA DETAILS

Finalizing the approved use cases
Write the use case description within the group members

### MEETING MINUTES

Action	By
<b>Responsible for use case payment process and vehicle inspection</b>	Linamandla Thutha
<b>Cancel ticket booking</b>	Sfundo Xulu
<b>Ratings and reviews</b>	Fezekile Ndebele
<b>Vehicle pickup</b>	Luyanda Radebe

<b>Responsible for use case Discount and coupons</b>	Minenhle Mendo
<b>Reservation of vehicle</b>	Esethu Mchiza
<b>Attraction ticket booking</b>	Sipho Shali
<b>Refund Payment</b>	Prince Nama