

Usage Scenario

This article serves as a guide to for the various features available in the Trip Management System. The Use Case Document is a business document which provides a story of how a system, and its actors, will be utilized to achieve a specific goal. The document provides a detailed step-by-step description of how the system will be used by its actors to achieve the planned outcome. The purpose of the Use Case is to tie the business needs of the system to the design parameters of the system to ensure that the completed system achieves the goals established by the business requirements.

Legend:

1. Name of Use Case: A concise title for the Usage Scenario representing its purpose.
2. Description: The description of the Use Case. This section elaborates on the activities involved in this scenario.
3. Actors: This section lists the entities which participate in this scenario.
4. Preconditions: This section describes any conditions that must be true or activities that must be completed prior to executing the use case.
5. Postconditions: This section should describe the state of the system at the conclusion of the use case. Postconditions include conditions for both successful and unsuccessful execution of the use case.
6. Flow: This section describes all actions of the user and the expected system responses for planned normal execution of the use case. The description is sequential and provides adequate detail to understand all user actions and system responses.
7. Alternative Flows: Many use cases have varying or special extensions or conditions which are separate from the main flow but also necessary. Alternative flows are usually the result of options or exceptions built into the use case which may alter the primary flow.

Registration Module - Usage Scenario

Module:

Name of Use Case:	Register for an Account	
Created By: CSCI - 5308: Group 16		Last Updated By: Benny Daniel
Description:	A new user in the system registers for an account	
Actors:	New User (Vehicle Owner / Customer)	
Preconditions:	<ol style="list-style-type: none">1. The user does not have an existing account (using the same Email Address) with the application2. The email address of the user is valid	
Postconditions:	<ol style="list-style-type: none">1. The user has an account created in the application2. The user will use this account for all future activities	
Flow:	<ol style="list-style-type: none">1. New users navigate to the "Registration" page from the "Login" page2. Users enter their First Name3. Users enter their Last Name4. Users enter their Email address5. Users enter their desired password and confirm the password6. A new account is created for the user.	
Alternative Flows:	<ol style="list-style-type: none">1. In step 4 of the normal flow, if registrants do not input a valid email address, they will be prompted again to enter a valid email address, till the application recognizes the email address as a valid one.2. Once a valid email address is entered, the Use Case resumes at step 5 of the normal flow	

Login Module - Usage Scenario

Module:

Name of Use Case:	Login to an Account	
Created By: CSCI - 5308: Group 16		Last Updated By: Benny Daniel
Description:	A user in the system logs in to an account	
Actors:	Existing User (Vehicle Owner / Customer)	
Preconditions:	The user has an existing account (using the same Email Address) with the application	

Postconditions:	The user has logged into the application.
Flow:	<ol style="list-style-type: none"> 1. Users navigate to the "Login" page 2. Users enter their Email address 3. Users enter their password 4. Users click on submit
Alternative Flows:	<ol style="list-style-type: none"> 1. In step 3 of the normal flow, if registrants do not input a valid email address or password, they will be prompted again to enter a valid email address or password, till the application recognizes the credentials as valid ones. 2. Once valid credentials are entered, the Use Case resumes at step 4 of the normal flow

Add New Car - Usage Scenario

Module:

Name of Use Case:	Add a New Car		
Created By: CSCI - 5308: Group 16			Last Updated By: Benny Daniel
Description:	A Vehicle Owner adds a new car to his fleet		
Actors:	Vehicle Owner		
Preconditions:	The user has an existing "Vehicle Owner" account with the application		
Postconditions:	A new vehicle has been added to the Vehicle Owner's fleet		
Flow:	<ol style="list-style-type: none"> 1. Vehicle Owners navigate to the "Login" page and log into their account 2. Owners click on add vehicle 3. Owners furnish the details of the vehicle 4. Owners click on submit 		
Alternative Flows:			

Create a New Ride - Usage Scenario

Module:

Name of Use Case:	Create a New Ride		
Created By: CSCI - 5308: Group 16			Last Updated By: Benny Daniel
Description:	A Vehicle Owner creates an instance of a new ride		
Actors:	Vehicle Owner		
Preconditions:	The user has an existing account (using the same Email Address) with the application		
Postconditions:	A new ride schedule has been uploaded to the server.		
Flow:	<ol style="list-style-type: none"> 1. Vehicle Owners navigate to the "Login" page and log into their account 2. Owners click on start new ride 3. Owners select a vehicle for the ride 4. Owners select the time and trip route 5. Owners submit the new schedule 		
Alternative Flows:			

View Cars Available for Use - Usage Scenario

Module:

Name of Use Case:	View Cars Available for Use
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Created By: CSCI - 5308: Group 16		Last Updated By: Benny Daniel
Description:	A Vehicle Owner navigates to his vehicle collection and views the attributes associated with each vehicle	
Actors:	Vehicle Owner	
Preconditions:	<ol style="list-style-type: none"> 1. The user has an existing account (using the same Email Address) with the application 2. The user must have registered at least one vehicle in the application 	
Postconditions:	Vehicle Owners have accessed information about their vehicle(s)	
Flow:	<ol style="list-style-type: none"> 1. Vehicle Owners navigate to the "Login" page and log into their account 2. Owners click on a vehicle's card and view the vehicle's attributes 3. Owners exit the application 	
Alternative Flows:		


View Previous Rides (Vehicle Owner) - Usage Scenario

Module:

Name of Use Case:	View Previous Rides (Vehicle owner)	
Created By: CSCI - 5308: Group 16		Last Updated By: Benny Daniel
Description:	Vehicle Owners view the ride(s) that they have previously initiated	
Actors:	Vehicle Owner	
Preconditions:	<ol style="list-style-type: none"> 1. The user has an existing account (using the same Email Address) with the application 2. The user must have initiated rides in the past 	
Postconditions:	Vehicle Owners have accessed information relevant to the ride(s) that they have previously initiated	
Flow:	<ol style="list-style-type: none"> 1. Vehicle Owners navigate to the "Login" page and log into their account 2. Owners click on view previous rides 3. A history of rides initiated by the owner is rendered 4. Owners exit the application 	
Alternative Flows:		

Analyze Fuel Economy- Usage Scenario

Module:

 The colors on the top-right corner of each vehicle's card summarize the Fuel Economy indicators where green denotes a 'favorable' value, red an 'unfavorable' value and amber a 'neutral' value.

Name of Use Case:	Analyze Fuel Economy	
Created By: CSCI - 5308: Group 16		Last Updated By: Benny Daniel
Description:	Vehicle Owners view the ride(s) that they have previously initiated	
Actors:	Vehicle Owner	
Preconditions:	<ol style="list-style-type: none"> 1. The user has an existing account (using the same Email Address) with the application 2. The Vehicle Owner should have initiated at least 1 trip with the vehicle whose Fuel Economy value they desire to analyze 	
Postconditions:	Vehicle Owners have accessed Fuel Economy information of their vehicles	

Flow:	<ol style="list-style-type: none"> 1. Vehicle Owners navigate to the “Login” page and log into their account 2. Owners click on any card that represents one of their vehicles. 3. The Fuel economy value of the vehicle, corresponding to the most recent trip, is rendered 4. Owners exit the application
Alternative Flows:	

[View Previous Rides \(Customers\) - Usage Scenario](#)

Module:

Name of Use Case:	Login to an Account	
Created By: CSCI - 5308: Group 16		Last Updated By: Benny Daniel
Description:	Customers (Carpoolers) view the ride(s) that they have previously booked	
Actors:	Customer A.K.A Carpooler	
Preconditions:	<ol style="list-style-type: none"> 1. The user has an existing account (using the same Email Address) with the application 2. The user must have booked rides in the past 	
Postconditions:	Customers have accessed information relevant to the ride(s) that they have previously booked	
Flow:	<ol style="list-style-type: none"> 1. Customers navigate to the “Login” page and log into their account 2. Customers click on view previous rides 3. A history of rides booked by the Customers is rendered 4. Customers exit the application 	
Alternative Flows:		

[Purchase Credits - Usage Scenario](#)

Module:

Name of Use Case:	Purchase Credits	
Created By: CSCI - 5308: Group 16		Last Updated By: Benny Daniel
Description:	Customers (Carpoolers) purchase credits for booking rides in the future	
Actors:	Customer A.K.A Carpooler	
Preconditions:	<ol style="list-style-type: none"> 1. The user has an existing account (using the same Email Address) with the application 2. Users must have sufficient balance in their bank account 	
Postconditions:	Customers have purchased credits that can be used to book rides.	
Flow:	<ol style="list-style-type: none"> 1. Customers navigate to the “Login” page and log into their account 2. Customers click on Purchase credits 3. Customers enter their card details (Card Number, CVV & Expiration Date) 4. Customers online wallet is credited with the credits that they have purchased 	
Alternative Flows:	<ol style="list-style-type: none"> 1. In step 3 of the normal flow, if registrants do not input card details, they will be prompted again to enter the details of a valid card, till the application recognizes the credentials as valid ones. 2. Once valid credentials are entered, the Use Case resumes at step 4 of the normal flow 	

Related Articles

Articles relevant to Continuous Integration & Development or Build & Deployment, can be accessed through the following pages:

- [Usage Scenario](#)
- [Continuous Integration & Development \(CI/CD\)](#)
- [Build & Deployment](#)

