

Use Cases

for

Wanderful

Prepared by One Direction

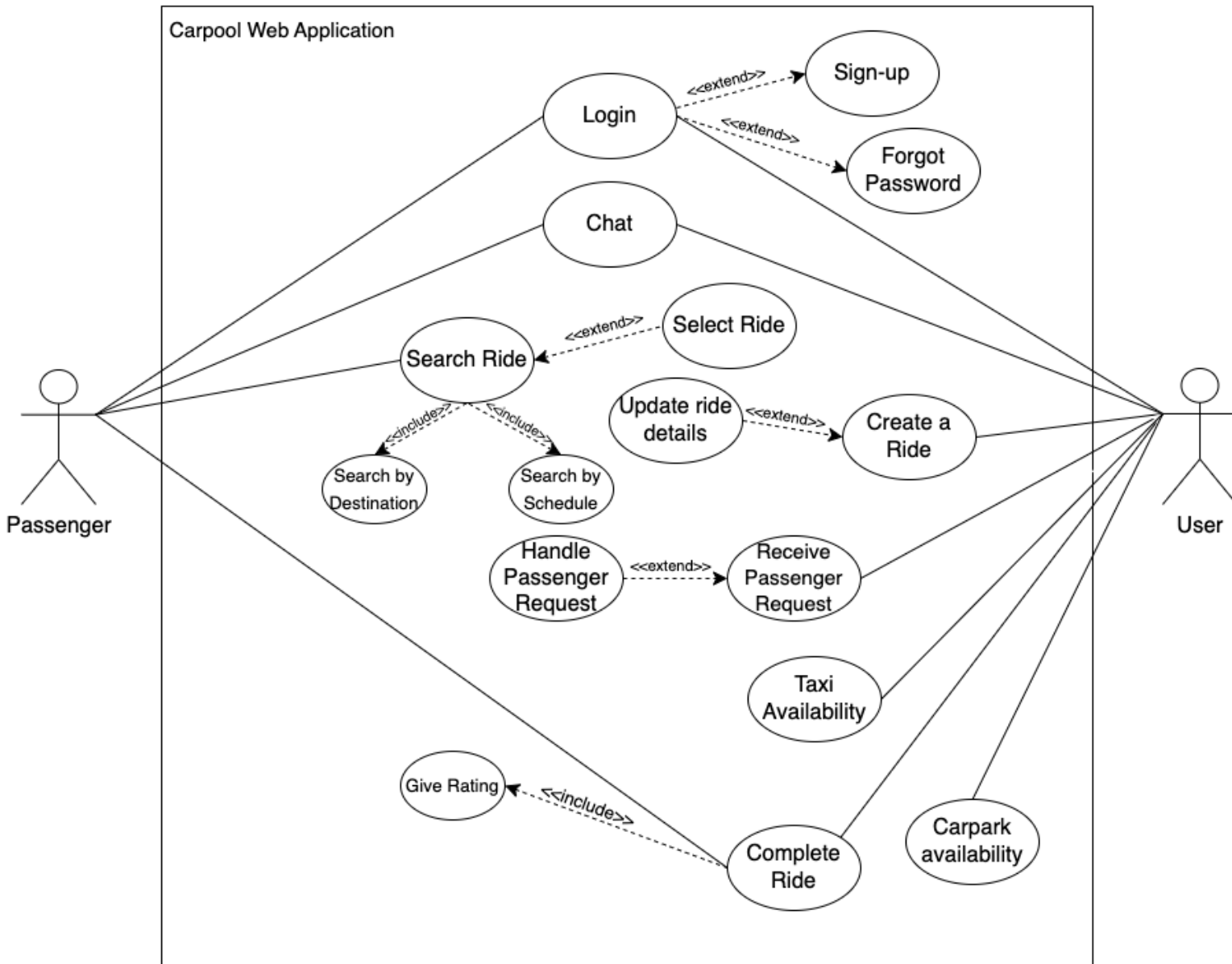
Nanyang Technological University

21/02/2023

Revision History

Name	Date	Reason For Changes	Version
Sethi Aryan	07/02/2023	First Draft	1.0
Sethi Aryan	21/02/2023	Second Draft	2.0

Use Case Diagram



Index For Use Cases

Use Case ID	Use Case Name
1	Sign-up
2	Login
3	Forgot Password
4	Create Ride
5	Update Ride Details
6	Search and Request Ride
7	Receive Passenger Request
8	Handle Passenger Request
9	Chat
10	Complete Ride
11	Taxi Availability
12	Carpark Availability

Use Case ID:	1.0		
Use Case Name:	Sign-Up		
Created By:	Tan Wei Yuan	Last Updated By:	Jarel Tan
Date Created:	07/02/2023	Date Last Updated:	15/02/2023

Actor:	Initiated by <i>User</i>
Description:	<i>User</i> creates an account in our system database. To create an account, users must proved a unique username and valid password.
Preconditions:	1. <i>User</i> has not created an account
Postconditions:	1. New <i>User</i> account is created 2. <i>User</i> account is added to database
Priority:	High
Frequency of Use:	Once per lifetime
Flow of Events:	<ol style="list-style-type: none"> 1. <i>User</i> Clicks on the Signup button 2. <i>User</i> is prompted to input email, username and password 3. System checks if an account already exists with the email mentioned 4. System verifies the availability of username in database 5. System verifies password meets requirements <ol style="list-style-type: none"> a. 1 Uppercase alphabet

	<ul style="list-style-type: none"> b. 1 Lowercase alphabet c. Between 8 - 24 characters <ul style="list-style-type: none"> 6. System creates <i>User</i> account and adds information of created <i>User</i> account to database 7. User is moved to the login screen
Alternative Flows:	<p>AF-S1: Entered email is already in the database</p> <ul style="list-style-type: none"> 1. User is prompted to go to the login page as the email has already been used for registration <p>AF-S2: Entered Username is already in the database and is not unique</p> <ul style="list-style-type: none"> 1. The UI displays the message "Username is already taken. Please enter another username." 2. Control returns to Step 1 <p>AF-S3: Entered Password does not meet any of the 3 requirements</p> <ul style="list-style-type: none"> 1. The UI displays the message "Password does not meet requirements. Please Enter a password with 1 Uppercase, 1 Lowercase and a length of 8 - 24 Characters." 2. UI returns to Step 1
Exceptions:	-
Includes:	-
Notes and Issues:	-

Use Case ID:	2.0		
Use Case Name:	Login		
Created By:	Tan Wei Yuan	Last Updated By:	Jarel Tan
Date Created:	07/02/2023	Date Last Updated:	15/02/2023

Actor:	Initiated by <i>User</i>
Description:	<i>User</i> logs in to his account. For user to login to an account, username and password must match the database records.
Preconditions:	<ol style="list-style-type: none"> 1. User has already created an account 2. Username and Password are entered correctly
Postconditions:	<ol style="list-style-type: none"> 1. <i>User</i> is logged in to the account
Priority:	High
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> 1. <i>User</i> clicks on the Log In button 2. <i>User</i> is prompted to input username and password 3. System verifies the account details with the database 4. <i>User</i> is logged into the account if the username and passwords match
Alternative Flows:	<p>AF-S1: Username is not present in the database (Either User has entered the wrong username or account does not exist)</p> <ol style="list-style-type: none"> 1. UI displays the message "Account does not exist. Please check log in details / Sign up with a new account." 2. UI returns to Step 1 <p>AF-S2: Username is present in database but password does not match</p>

	<ol style="list-style-type: none"> 1. UI displays the message "Password is invalid. Please re-enter the password" 2. UI returns to Step 1
Exceptions:	EX1: <i>User</i> enters an invalid password for three times <ol style="list-style-type: none"> 1. UI displays the message "Too many attempts. Please try again later." 2. UI returns to Step 1
Includes:	-
Notes and Issues:	-

Use Case ID:	3.0		
Use Case Name:	Forgot Password		
Created By:	Sethi Aryan	Last Updated By:	Sethi Aryan
Date Created:	21/02/2023	Date Last Updated:	21/02/2023

Actor:	Initiated by <i>User</i>
Description:	<i>User</i> has forgotten their password, so they are sent a verification email first to verify themselves, and then they are allowed to reset their password from the link sent to their emails
Preconditions:	<ol style="list-style-type: none"> 1. User has already created an account 2. User has forgotten their password
Postconditions:	The database has been updated with the new password for the user
Priority:	Medium
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> 1. <i>User</i> clicks on the <i>Forgot Password</i> button 2. <i>User</i> is prompted to input their email for verification 3. User receives an email and then clicks on the link to verify the user, which takes them to the password-changing page 4. <i>User</i> enters their new password, and system verifies password meets requirements: <ol style="list-style-type: none"> a. 1 Uppercase alphabet b. 1 Lowercase alphabet c. Between 8 - 24 characters 5. User details are updated and the user is taken to the login page
Alternative Flows:	AF-S1: Email is not in the database (Either User has entered the wrong email or account does not exist)

	<ol style="list-style-type: none">1. UI displays the message "Account does not exist. Please check email details / Sign up with a new account."2. UI returns to Step 2
Exceptions:	-
Includes:	-
Notes and Issues:	-

Use Case ID:	4.0		
Use Case Name:	Create Ride		
Created By:	Sethi Aryan	Last Updated By:	Sethi Aryan
Date Created:	07/02/2023	Date Last Updated:	21/02/2023

Actor:	Initiated by <i>User</i>
Description:	<p><i>User</i> creates a ride as a <i>Driver</i> or as a <i>Passenger</i>. To do so, <i>User</i> has to fill up the required details of the ride such as, start and end location, date & time of ride, number of available seats on the ride, indicates if the ride is a recurring ride or a one time ride, and indicates if the user has a personal car to use or if they want someone to share a taxi with.</p>
Preconditions:	<ol style="list-style-type: none"> 1. User has an account 2. User has successfully Logged into account
Postconditions:	<ol style="list-style-type: none"> 1. The database containing all the rides has been updated with a new record
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. <i>User</i> clicks on the "Create a Ride" Button 2. <i>User</i> is prompted to enter ride details: <ol style="list-style-type: none"> a. Starting Point: (Start location) b. Ending Point: (End location) c. Date & Time: (eg. 8 Feb 2023 0900hrs) d. Available Seats: (Number of Seats) e. Recurring ride: [Yes / No (One time ride)] f. Type of Ride: (Personal Car / Taxi) 3. <i>User</i> clicks on the Create Ride Button

	4. The System will add the details of the ride into the database 5. UI displays the message "Ride Created Successfully"
Alternative Flows:	-
Exceptions:	-
Includes:	-
Notes and Issues:	-

Use Case ID:	5.0		
Use Case Name:	Update Ride Details		
Created By:	Sethi Aryan	Last Updated By:	Jarel Tan
Date Created:	21/02/2023	Date Last Updated:	21/02/2023

Actor:	Initiated by the creator of the <i>Ride</i>
Description:	<p><i>User</i> creates a ride as a <i>Driver</i> or as a <i>Passenger</i>. To do so, User has to fill up the required details of the ride such as, start and end location, date & time of ride, number of available seats on the ride, indicates if the ride is a recurring ride or a one time ride, and indicates if the user has a personal car to use or if they want someone to share a taxi with.</p>
Preconditions:	<ol style="list-style-type: none"> 1. User has an account 2. User has successfully logged into account 3. User has created a ride
Postconditions:	The database with the ride has been updated with the new details
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. <i>User</i> clicks on the “My Rides” button 2. User is shown all the rides that they have created 3. User selects a specific ride, and clicks on the ‘Edit’ icon 4. <i>User</i> is prompted to update the following details: <ol style="list-style-type: none"> a. Starting Point: (Start location) b. Ending Point: (End location) c. Date & Time: (eg. 8 Feb 2023 0900hrs) d. Available Seats: (Number of Seats) e. Recurring ride: [Yes / No (One time ride)] f. Type of Ride: (Personal Car / Taxi)

	5. <i>User</i> clicks on the 'Confirm' button 6. The System will update the details of the ride in the database 7. UI displays the message "Ride Updated Successfully"
Alternative Flows:	AF-S2: User has no rides 1. UI displays " You have no rides"
Exceptions:	-
Includes:	-
Notes and Issues:	-

Use Case ID:	6.0		
Use Case Name:	Search & Request Ride		
Created By:	Sethi Aryan	Last Updated By:	Jarel Tan
Date Created:	07/02/2023	Date Last Updated:	15/02/2023

Actor:	Initiated by <i>User (Passenger)</i>
Description:	<p><i>User searches for available rides as a Passenger</i></p> <p>When on the page to select a Wander Ride, the system will display all available rides in the system</p> <p><i>Passenger</i> is then able to select the ride to view the details of the ride and are able to request for a ride with that <i>user</i>.</p>
Preconditions:	<ol style="list-style-type: none"> 1. User has an account 2. User has successfully logged into the account
Postconditions:	A request is sent to the <i>user</i> who made the ride chosen by the <i>passenger</i> .
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. <i>Passenger</i> navigates to the page to Select a Wander Ride 2. System displays all available rides 3. <i>Passanger</i> selects a ride 4. System displays the information of the selected ride including: <ol style="list-style-type: none"> a. Start Location b. End Location c. Date & Time d. Number of Seats Available e. Recurring ride / One Time ride f. Type of ride (Personal Car / Taxi) 5. <i>Passenger</i> clicks on the Request Ride Button

	6. System Records the Details in the database and sends a ride request to the <i>Driver</i>
Alternative Flows:	AF-S1: No Existing Rides 1. UI displays message “No available rides” 2. Use Case does not continue to step 3
Exceptions:	-
Includes:	The search list can be filtered on the basis of the destination of the ride or the time for which the ride is scheduled (Use Case ID 4.1)
Notes and Issues:	-

Use Case ID:	6.1		
Use Case Name:	Search & Request Ride (Filter Function)		
Created By:	Jarel Tan	Last Updated By:	Jarel Tan
Date Created:	15/02/2023	Date Last Updated:	15/02/2023

Actor:	Initiated by <i>User (Passenger)</i>
Description:	<p><i>User searches for available rides as a Passenger</i></p> <p>When on the page to select a Wander Ride, the system will display all available rides in the system</p> <p>The <i>Passenger</i> is able to filter the rides by their desired start and end location and the system will display rides that relevant to their filter specifications.</p> <p><i>Passenger</i> is then able to select the ride to view the details of the ride and are able to request for a ride from that <i>Driver</i>.</p>
Preconditions:	<ol style="list-style-type: none"> 1. User has an account 2. User has successfully logged into the account
Postconditions:	A request is sent to the <i>driver</i> who made the ride chosen by the <i>passenger</i> .
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. <i>Passenger</i> navigates to the page to Select a Wander Ride 2. System displays all available rides 3. <i>Passenger</i> clicks on the filter button and is prompted to include all interested fields to filter by: <ol style="list-style-type: none"> a. Start Location b. End Locaiton c. Date & Time d. Type of Ride (Personal Car / Taxi) 4. <i>Passanger</i> selects a ride

	<ol style="list-style-type: none"> 5. System displays the information of the selected ride including: <ol style="list-style-type: none"> a. Start Location b. End Location c. Date & Time d. Type of Ride (Personal Car / Taxi) 6. <i>Passenger</i> clicks on the Request Ride Button 7. System Records the Details in the database and sends a ride request to the <i>Driver</i>
Alternative Flows:	<p>AF-S1: No Existing Rides</p> <ol style="list-style-type: none"> 1. UI displays message "No available rides" 2. Use Case does not continue to step 4 <p>AF-S2: No Existing Rides based on filter details</p> <ol style="list-style-type: none"> 1. UI displays message "No available rides" 2. Use Case does not continue to step 4
Exceptions:	-
Includes:	The search list can be filtered on the basis of the destination of the ride, the time for which the ride is scheduled and the type of ride
Notes and Issues:	-

Use Case ID:	7.0		
Use Case Name:	Receive Passenger Request		
Created By:	Sethi Aryan	Last Updated By:	Sethi Aryan
Date Created:	07/02/2023	Date Last Updated:	07/02/2023

Actor:	Handled by <i>Driver</i>
Description:	The <i>driver</i> receives a request made by the <i>passenger</i> to be a part of the ride scheduled, and inspects it
Preconditions:	<ol style="list-style-type: none"> 1. The <i>driver</i> has scheduled a ride 2. A <i>passenger</i> has made a request to be a part of the same ride
Postconditions:	The <i>passenger</i> is notified if their request is accepted, and then the <i>driver</i> is given the decision of either accepting or rejecting the request
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. The <i>driver</i> receives a request from the <i>passenger</i> 2. The <i>driver</i> goes through the passenger's details and either accepts or rejects the request within 5 minutes
Alternative Flows:	-
Exceptions:	-
Includes:	-

Notes and Issues:	-
----------------------	---

Use Case ID:	8.0		
Use Case Name:	Handle Passenger Request		
Created By:	Sethi Aryan	Last Updated By:	Sethi Aryan
Date Created:	07/02/2023	Date Last Updated:	07/02/2023

Actor:	Handled by <i>Driver</i>
Description:	The <i>Driver</i> accepts or rejects a request made by the <i>passenger</i> to be a part of the ride scheduled
Preconditions:	The <i>driver</i> received a request made by a <i>passenger</i> to be a part of the ride scheduled by the <i>driver</i>
Postconditions:	The <i>Passenger</i> is notified if their request is accepted, and then a communication link is established between the <i>passenger</i> and the <i>driver</i>
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. After inspecting the request, the <i>driver</i> either accepts or rejects the request 2. If the request is accepted, a communication link is established between the <i>driver</i> and the <i>passenger</i>
Alternative Flows:	
Exceptions:	If the <i>driver</i> fails to respond to the request of the <i>passenger</i> , the request automatically gets declined
Includes:	-

Notes and Issues:	-
----------------------	---

Use Case ID:	9.0		
Use Case Name:	Chat		
Created By:	Tan Wei Yuan	Last Updated By:	Tan Wei Yuan
Date Created:	07/02/2023	Date Last Updated:	07/02/2023

Actor:	<i>Driver</i> and <i>Passenger</i>
Description:	To allow the <i>driver</i> to communicate with the passenger
Preconditions:	<ol style="list-style-type: none"> 1. <i>Driver</i> must have accepted the ride request 2. Ride confirmed between <i>driver</i> and <i>passenger</i> 3. Conversation must be stored on a database
Postconditions:	-
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. A ride is confirmed between <i>driver</i> and <i>passenger</i> 2. <i>Driver</i> and <i>passenger</i> use the chat window to coordinate pick up location
Alternative Flows:	-
Exceptions:	-

Includes:	-
Notes and Issues:	-

Use Case ID:	10.0		
Use Case Name:	Complete Ride		
Created By:	Tan Wei Yuan	Last Updated By:	Tan Wei Yuan
Date Created:	07/02/2023	Date Last Updated:	07/02/2023

Actor:	<i>Driver</i> and <i>Passenger</i>
Description:	Upon reaching the destination, the <i>driver</i> and <i>passenger</i> must acknowledge that the ride has completed
Preconditions:	<ol style="list-style-type: none"> 1. Ride confirmed between passenger and driver 2. End location reached
Postconditions:	<ol style="list-style-type: none"> 1. The ride status is changed to completed 2. The carpoolers are prompted to give a rating to each other
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. At the end location, the driver and the passenger are prompted to confirm the rides completion 2. Once either parties confirm, the ride status is set to complete
Alternative Flows:	-
Exceptions:	-
Includes:	The carpoolers are prompted to give a rating to the passengers they shared a ride with
Notes and Issues:	-

Use Case ID:	11.0		
Use Case Name:	Taxi Availability		
Created By:	Sethi Aryan	Last Updated By:	Sethi Aryan
Date Created:	21/02/2023	Date Last Updated:	21/02/2023

Actor:	Initiated by <i>User</i>
Description:	After a taxi ride created by the <i>user</i> has been confirmed, the <i>user</i> can get the information and location about all the taxis in a 200m radius from the starting point to help them with tracking down a taxi
Preconditions:	<ol style="list-style-type: none"> 1. User has an account 2. User has successfully logged into account 3. User has created a taxi ride
Postconditions:	-
Priority:	Medium
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> 1. <i>User</i> clicks on the 'Taxi Availability' button under a taxi ride page 2. <i>User</i> is given all the information related to all the taxis in a 200m radius from the starting point mentioned in the trip 3. User can then track the taxi, which makes it easier for the user to catch it
Alternative Flows:	-
Exceptions:	-

Includes:	-
Notes and Issues:	-

Use Case ID:	12.0		
Use Case Name:	Carpark Availability		
Created By:	Sethi Aryan	Last Updated By:	Sethi Aryan
Date Created:	21/02/2023	Date Last Updated:	21/02/2023

Actor:	Initiated by <i>User</i>
Description:	<i>User</i> is shown a list of all the carparks around Singapore and they can select a specific carpark and get information about it
Preconditions:	<ol style="list-style-type: none"> 1. User has an account 2. User has successfully logged into account
Postconditions:	-
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> 1. <i>User</i> clicks on the "Carpark Availability" Button 2. <i>User</i> is shown a list of all the carparks in different areas around Singapore 3. <i>User</i> can filter the list on the basis of location 4. After selecting a specific carpark, the <i>user</i> can get all the information about the carpark and its location.
Alternative Flows:	-
Exceptions:	-
Includes:	-

Notes and Issues:	-
----------------------	---