

### Use Cases – Iteration 3

Use cases for Iteration 3 are simply Iteration 2 modified uses cases to comply with the new requirements.

#### USE CASE 08.2: Client Books a Solo Trip

ID	UC08.2
Title	Client Books a Trip
Description	As a client of the Rail Network, I should be able to book a trip for myself according to the desired connection I searched for. However, I don't to wait for a long time for my layover, so I only want to see such options.
Primary Actor	Client.
Preconditions	<ul style="list-style-type: none"><li>- Client selected option to book on the terminal.</li><li>- System successfully displayed the results of the search.</li><li>- System only displays connections with layovers of 1-2 hours maximum during the day and 30 minutes maximum at night.</li><li>- Client has identified a desired connections amongst the connections displayed from the search result.</li><li>- Number of travellers is 1.</li><li>- Desired connection has available seats/capacity/space.</li><li>- Client inputs necessary information (name, age and id).</li></ul>
Postconditions	<ul style="list-style-type: none"><li>- Trip object created.</li><li>- Newly created trip has a unique id.</li><li>- Reservation created for all travellers.</li><li>- Ticket created for reservation (just one since it's a solo trip) with a unique identifier.</li><li>- Trip recorded in Trip Registry.</li><li>- Trip saved to the database.</li><li>- System displays booking confirmation to client.</li></ul>
Inputs	<ul style="list-style-type: none"><li>- Selected connection (amongst connection search results).</li><li>- Client information: name, age and id.</li><li>- Number of travellers is entered as 1.</li></ul>
Outputs	<ul style="list-style-type: none"><li>- Booking confirmation containing trip id.</li><li>- Error message if there isn't enough space on connection or if failure.</li><li>- Ticket information.</li><li>- Trip details (connection details).</li></ul>
Main Success Scenario	<ol style="list-style-type: none"><li>1. Client selects the 'Book a trip' option from the terminal.</li><li>2. Client searches for a connection.</li><li>3. System displays connection search results.</li><li>4. Client selects the connection they want to book.</li><li>5. System asks for client details and client inputs details.</li><li>6. System asks if client wants to add travellers.</li><li>7. Client selects 'No'.</li></ol>

	<p>8. System validates client details and makes sure no duplicate trip/reservation exists.</p> <p>9. System creates Trip, Reservation and Ticket objects (one of each).</p> <p>10. System displays booking confirmation and details.</p> <p>11. System records created trip in Trip Registry and into the database.</p> <p>12. System prompts user if they want to go back to main menu or exit program.</p>
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#### USE CASE 09.2: Client Books a Family Trip

ID	UC09
Title	Client Books a Family Trip
Description	As a client of the Rail Network, I should be able to book a family trip for travellers other than myself according to the desired connection I searched for. However, we don't to wait for a long time for our layover, so I only want to see such options.
Primary Actor	Client.
Preconditions	<ul style="list-style-type: none"> <li>- Client has previously searched for a connection via option 2 on the terminal.</li> <li>- System successfully displayed the results of the search.</li> <li>- System only displays connections with layovers of 1-2 hours maximum during the day and 30 minutes maximum at night.</li> <li>- Client has identified a desired connections amongst the connections displayed from the search result.</li> <li>- Client has entered the number of travellers.</li> <li>- Number of travellers is more than 1.</li> <li>- Desired connection has available seats/capacity/space for the number of travellers.</li> <li>- Client inputs necessary information (name, age and id of each traveller).</li> </ul>
Postconditions	<ul style="list-style-type: none"> <li>- Trip object created.</li> <li>- Newly created trip has a unique id.</li> <li>- Reservations created for all travellers.</li> <li>- Ticket created for each reservation (if a client books 3 reservations for 3 travellers, then 3 tickets are created) with a unique identifier.</li> <li>- Trip recorded in Trip Registry.</li> <li>- Trip saved to the database.</li> <li>- System displays booking confirmation.</li> </ul>
Inputs	<ul style="list-style-type: none"> <li>- Selected connection (amongst connection search results).</li> <li>- Client information: names, ages and ids of each traveller.</li> <li>- Number of travellers.</li> </ul>
Outputs	<ul style="list-style-type: none"> <li>- Booking confirmation containing trip id.</li> <li>- Error message if there isn't enough space on connection or if failure.</li> <li>- Tickets information.</li> </ul>

	- Trip details (connection details).
Main Success Scenario	<ol style="list-style-type: none"> <li>1. Client selects the 'Book a trip' option from the terminal.</li> <li>2. Client searches for a connection.</li> <li>3. System displays connection search results.</li> <li>4. Client selects the connection they want to book.</li> <li>5. System asks for client details and client inputs details.</li> <li>6. System asks if client wants to add travellers.</li> <li>7. Client selects 'Yes'.</li> <li>8. Steps 5 and 6 are repeated until client selects 'No' when prompted to add travellers.</li> <li>9. System validates client details and makes sure no duplicate trip/reservation exists.</li> <li>10. System creates Trip and Reservation (one of each) and Ticket objects (one for each traveller client has entered details for).</li> <li>10. System displays booking confirmation and details.</li> <li>11. System records created trip in Trip Registry and into the database.</li> <li>12. System prompts user if they want to go back to main menu or exit program.</li> </ol>