|  |  |
| --- | --- |
| Use Case Name | List connections |
| Use Case Description | All connections available in the system are displayed on screen. For customers these are only the active ones, for staff they can also see all the inactive ones. |
| Use Case Author(s) | Adam |
| Actor(s) | Customer, Staff |
| Locations | T-Train Website: Homepage/Filtered connections |
| Primary pathway | The user presses a button “All connections” and is brought to a screen which is full of connections sorted alphabetically and separated into multiple pages. |
| Alternate pathways | None |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

# Connections

|  |  |
| --- | --- |
| Use Case Name | Find connection |
| Use Case Description | A particular connection is returned on screen with all its details. |
| Use Case Author(s) | Adam |
| Actor(s) | Customer, Staff |
| Locations | T-Train Website: Filtered connections/All connections |
| Primary pathway | On the list of connections, the user scrolls and moves pages to find the appropriate connection and next presses a button “More details”. |
| Alternate pathways | T-Train staff member enters an incorrect connection number, and, receives an error message saying that no such connection exists. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Filter connections |
| Use Case Description | A list of all connections is filtered by the user and the returned list is presented on screen. |
| Use Case Author(s) | Adam |
| Actor(s) | Customer, Staff |
| Locations | T-Train Website: Homepage/Filtered connections/All connections |
| Primary pathway | Once a list of all connections is brought up, certain filters will be shown on top of the screen to use. Once decided on which filters to use, the user presses the button to “Filter List”. All results are then filtered and displayed on screen. |
| Alternate pathways | The user selects an invalid filter (such as connection taking place in the past) and the filter is not applied, presenting the user with an error message. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Manage connections |
| Use Case Description | A new connection can be added, an existing one changed or an existing one deleted. |
| Use Case Author(s) | Adam |
| Actor(s) | Staff |
| Locations | T-Train Website: Particular connection screen |
| Primary pathway | To add a connection, staff member presses “Add connection” on the staff homepage. Then they fill a form and submit it. To modify an existing connection, the staff member has to first find a connection and then press “Modify connection” in the highlighted area. Then they fill a form and submit it. To delete a connection, the staff member has to first find a connection, and then press “Delete connection” in the highlighted area and confirm the decision. |
| Alternate pathways | The T-Train user decides not to perform the action intended and so they press a “Cancel” button when asked for confirmation. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Validate connection |
| Use Case Description | The system checks whether an inserted connection is valid and whether it already exists in the system or not. |
| Use Case Author(s) | Adam |
| Actor(s) | System |
| Locations | T-Train Website: Add connection/Modify connection |
| Primary pathway | The system accepts a parameter of class connection, and, checks for whether all input fields are valid and filled as expected. If that matches, the system will check whether the connection already exists in the database. If not, they will be added, edited or found depending on intended user action. |
| Alternate pathways | T-Train staff member adds a connection only to see that this connection already exists in the database.  T-Train staff member forgets to input a crucial piece(s) of data and the system will not allow the incomplete connection to be added to the database.  T-Train staff member attempts to change the connection details, however, he changes the details to ones that will not be validated by the system. The T-Train staff member will see a red error message over the field which contains invalid data.  T-Train staff member tries to remove a connection that was, for some reason, already removed. An error message will be displayed.  T-Train staff member fails to pass the security check, and, therefore, is not allowed to proceed with deletion. They will have to log in again and try the action again. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

# Customers

|  |  |
| --- | --- |
| Use Case Name | Find customers |
| Use Case Description | A particular account is returned on screen with all its details. |
| Use Case Author(s) | Adam |
| Actor(s) | Staff |
| Locations | T-Train Website: Filtered customer list/All customers |
| Primary pathway | On the list of accounts, the user scrolls and moves pages to find the appropriate account and next presses a button “More details”. |
| Alternate pathways | T-Train staff member enters an incorrect customer number, and, receives an error message saying that no such customer exists. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Filter customers |
| Use Case Description | A list of all accounts is filtered by the user and the returned list is presented on screen. |
| Use Case Author(s) | Adam |
| Actor(s) | Staff |
| Locations | T-Train Website: Filtered customers/All customers |
| Primary pathway | Once a list of all customers is brought up, certain filters will be shown on top of the screen to use. Once decided on which filters to use, the user presses the button to “Filter List”. All results are then filtered and displayed on screen. |
| Alternate pathways | The user selects an invalid filter (such as date of birth before year 1920) and the filter is not applied, presenting the user with an error message. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Create account |
| Use Case Description | A new account is to be created for the customer. |
| Use Case Author(s) | Adam |
| Actor(s) | Customer |
| Locations | T-Train Website: Create Account Page |
| Primary pathway | To create an account, guest user first presses “Create Account” in the top-right corner of the homepage. Then they fill a form and submit it. |
| Alternate pathways | The user may decide not to open an account after all and press Cancel to go back to the homepage.  The user could have pressed the wrong link and instead of Logging in, they entered the Register form. They can press Login at the top of the form if that is the case. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Close account |
| Use Case Description | The customer can close their account, making it inaccessible in the future. |
| Use Case Author(s) | Adam |
| Actor(s) | Customer, Staff |
| Locations | T-Train Website: account settings |
| Primary pathway | To close an account, the user has to first enter the account settings, which can be found in the top-right corner, find a section labelled “Delete account’, then enter their email address and password into two input boxes, and finally press “Delete account” in the highlighted area and confirm the decision. |
| Alternate pathways | The user may decide not to close their account after all and will press Cancel to go back to homepage. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Change details |
| Use Case Description | Account details of an existing customers are updated. |
| Use Case Author(s) | Adam |
| Actor(s) | Customer, Staff |
| Locations | T-Train Website: account settings |
| Primary pathway | To change details, the user has to first enter the account settings, which can be found in the top-right corner, find a section labelled “Change details’, fill the form, then enter their password into a designated input box, and finally press “Change details” in the highlighted area and confirm the decision. |
| Alternate pathways | The user may have decided not to change any details and so they press Cancel at the bottom of the form.  The user may have put in a wrong password in which case they will be asked to enter it again. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Validate customer |
| Use Case Description | The system checks whether an account entered is valid and whether it already exists in the system or not. |
| Use Case Author(s) | Adam |
| Actor(s) | System |
| Locations | T-Train Website: Add customer/Modify customer |
| Primary pathway | The system accepts a parameter of class customer, and, checks for whether all input fields are valid and filled as expected. If that matches, the system will check whether the customer already exists in the database. If not, they will be added, edited or found depending on intended user action. |
| Alternate pathways | Guest user tries to create an account only to find out that this account already exists in the database.  Guest user forgets to input a crucial piece(s) of data and the system will not allow the incomplete account to be added to the database.  T-Train user tries to remove an account that was, for some reason, already removed. An error message will be displayed.  T-Train user fails to pass the security check, and, therefore, is not allowed to proceed with deletion. They will have to log in again and try the action again.  T-Train user attempts to change the connection details, however, he changes the details to ones that will not be validated by the system. The T-Train user will see a red error message over the field which contains invalid data.  T-Train user fails to pass the security check, and, therefore, is not allowed to proceed with deletion. They will have to log in again and try the action again. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

# Tickets

|  |  |
| --- | --- |
| Use Case Name | List tickets |
| Use Case Description | The user presses a button “My tickets” and is brought to a screen which is full of tickets sorted by the date and time of travel. |
| Use Case Author(s) | Adam |
| Actor(s) | Customer, Staff |
| Locations | T-Train Website: My tickets/My tickets (filtered) |
| Primary pathway | All tickets available for the user are displayed on screen. For customers these are only the active ones, for staff they can also see all the cancelled ones. |
| Alternate pathways | None |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Find ticket |
| Use Case Description | A particular ticket is returned on screen with all its details. |
| Use Case Author(s) | Adam |
| Actor(s) | Customer, Staff |
| Locations | T-Train Website: My tickets/My tickets (filtered) |
| Primary pathway | On the list of tickets, the user scrolls to find the appropriate ticket and next presses anywhere within the ticket to find and open it. |
| Alternate pathways | T-Train staff member enters an incorrect ticket number, and, receives an error message saying that no such ticket exists. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Filter tickets |
| Use Case Description | A list of all tickets is filtered by the user and the returned list is presented on screen. |
| Use Case Author(s) | Adam |
| Actor(s) | Customer, Staff |
| Locations | T-Train Website: My tickets/My tickets (filtered) |
| Primary pathway | Once a list of all tickets is brought up, certain filters will be shown on top of the screen to use. Once decided on which filters to use, the user presses the button to “Filter List”. All results are then filtered and displayed on screen. |
| Alternate pathways | The user selects an invalid filter (such as ticket start and end location being the same) and the filter is not applied, presenting the user with an error message. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Book ticket |
| Use Case Description | The system checks if there are enough tickets available and if so, adds one to the booking customer. Then redirects to make payment. |
| Use Case Author(s) | Adam |
| Actor(s) | Customer |
| Locations | T-Train Website: Particular connection screen |
| Primary pathway | To book a ticket the user must first find a connection that they are interested in. then press a large green button that says “Book ticket” and then make a payment for the ticket. |
| Alternate pathways |  |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Reissue ticket |
| Use Case Description | A ticket is reissued which means a duplicate ticket is created with all of connection’s details put in it. The old tickets becomes inactive. |
| Use Case Author(s) | Adam |
| Actor(s) | Customer |
| Locations | T-Train Website: Particular ticket screen |
| Primary pathway | To reissue the ticket, the user must first find their ticket. Next, they press a large button that says “Reissue ticket”. The operation commences immediately. |
| Alternate pathways |  |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Refund ticket |
| Use Case Description | The ticket is refunded. The customer will receive their money back and the ticket will be once again available for purchase. |
| Use Case Author(s) | Adam |
| Actor(s) | Customer |
| Locations | T-Train Website: Particular ticket screen |
| Primary pathway | To refund the ticket, the user must first find their ticket. Next, they press a large button that says “Refund ticket”. The operation commences immediately. If the button is missing or is turned grey, the option is unavailable for this ticket. |
| Alternate pathways |  |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Cancel tickets |
| Use Case Description | The tickets becomes cancelled which means it can no longer be accessed at all. |
| Use Case Author(s) | Adam |
| Actor(s) | Staff |
| Locations | T-Train Website: Particular ticket screen |
| Primary pathway | To cancel a ticket, staff member must first find a user. Next, they list all tickets of the user and then find the particular one they wish to cancel. Once they find the ticket, they press a large “Cancel ticket” button and confirm the operation. |
| Alternate pathways |  |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Validate ticket |
| Use Case Description | The system checks whether the ticket is valid and whether it already exists in the system or not. |
| Use Case Author(s) | Adam |
| Actor(s) | System |
| Locations | T-Train Website: Book ticket/Refund ticket/Reissue ticket |
| Primary pathway | The system accepts a parameter of class ticket, and, checks for whether all input fields are valid and filled as expected. If that matches, the system will check whether the ticket already exists in the database. If not, they will be added, refunded or reissued depending on intended user action. |
| Alternate pathways | T-Train user books a ticket only to see that they already own this ticket.  T-Train staff member tries to cancel a ticket that was, for some reason, already cancelled. An error message will be displayed.  T-Train staff member fails to pass the security check, and, therefore, is not allowed to proceed with cancellation. They will have to log in again and try the action again. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

# Ticket Types

|  |  |
| --- | --- |
| Use Case Name | List ticket types |
| Use Case Description | All ticket types available in the system are displayed on screen. |
| Use Case Author(s) | Adam |
| Actor(s) | Staff |
| Locations | T-Train Website: Filtered ticket types/All ticket types |
| Primary pathway | The user presses a button “All ticket types” and is brought to a screen which is full of ticket types sorted alphabetically and separated into multiple pages. |
| Alternate pathways | None |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Find ticket type |
| Use Case Description | A particular ticket type is returned on screen with all its details. |
| Use Case Author(s) | Adam |
| Actor(s) | Staff |
| Locations | T-Train Website: Filtered ticket types/All ticket types |
| Primary pathway | On the list of ticket types, the user scrolls and moves pages to find the appropriate ticket type and next presses a button “More details”. |
| Alternate pathways | T-Train staff member enters an incorrect ticket type number, and, receives an error message saying that no such ticket type exists. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Filter ticket types |
| Use Case Description | A list of all ticket types is filtered by the user and the returned list is presented on screen. |
| Use Case Author(s) | Adam |
| Actor(s) | Staff |
| Locations | T-Train Website: Filtered ticket types/All ticket types |
| Primary pathway | Once a list of all ticket types is brought up, certain filters will be shown on top of the screen to use. Once decided on which filters to use, the user presses the button to “Filter List”. All results are then filtered and displayed on screen. |
| Alternate pathways | The user selects an invalid filter (such as ticket type that costs negative amount of money) and the filter is not applied, presenting the user with an error message. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Manage ticket types |
| Use Case Description | A new ticket type can be added, an existing one changed or an existing one deleted. |
| Use Case Author(s) | Adam |
| Actor(s) | Staff |
| Locations | T-Train Website: Particular ticket type screen |
| Primary pathway | To add a ticket type, staff member presses “Add ticket type” on the staff homepage. Then they fill a form and submit it. To modify an existing ticket type, the staff member has to first find a ticket type and then press “Modify ticket type” in the highlighted area. Then they fill a form and submit it. To delete a ticket type, the staff member has to first find a ticket type, and then press “Delete ticket type” in the highlighted area and confirm the decision. |
| Alternate pathways | T-Train staff member adds a ticket type only to see that this ticket type already exists in the database.  T-Train staff member forgets to input a crucial piece(s) of data and the system will not allow the incomplete ticket type to be added to the database.  T-Train staff member attempts to change the ticket type details, however, he changes the details to ones that will not be validated by the system. The T-Train staff member will see a red error message over the field which contains invalid data.  T-Train staff member tries to remove a ticket type that was, for some reason, already removed. An error message will be displayed.  T-Train staff member fails to pass the security check, and, therefore, is not allowed to proceed with deletion. They will have to log in again and try the action again. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Validate ticket type |
| Use Case Description | The system checks whether an inserted ticket type is valid and whether it already exists in the system or not. |
| Use Case Author(s) | Adam |
| Actor(s) | System |
| Locations | T-Train Website: Add ticket type/Modify ticket type |
| Primary pathway | The system accepts a parameter of class ticket type, and, checks for whether all input fields are valid and filled as expected. If that matches, the system will check whether the ticket type already exists in the database. If not, they will be added, edited or found depending on intended user action. |
| Alternate pathways |  |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

# Payments

|  |  |
| --- | --- |
| Use Case Name | Make payment |
| Use Case Description | The customer makes a payment for a booked ticket. |
| Use Case Author(s) | Adam |
| Actor(s) | Customer |
| Locations | External Pay Gate Provider’s Website |
| Primary pathway | To make a payment the user has to book a ticket first. Next, they are redirected to make a payment right away. |
| Alternate pathways |  |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Find payment |
| Use Case Description | A particular payment is returned on screen with all its details. |
| Use Case Author(s) | Adam |
| Actor(s) | Staff |
| Locations | T-Train Website: Filtered payments/All payments |
| Primary pathway | Selected staff member must first find customer. On the list of that customer’s payments, the user scrolls and moves pages to find the appropriate payment and next presses a button “More details”. |
| Alternate pathways | T-Train staff member enters an incorrect payment number, and, receives an error message saying that no such payment exists. |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Filter payments |
| Use Case Description | A list of all payments is filtered by the user and the returned list is presented on screen. |
| Use Case Author(s) | Adam |
| Actor(s) | Staff |
| Locations | T-Train Website: Filtered payments/All payments |
| Primary pathway | Once a list of all payments is brought up, certain filters will be shown on top of the screen to use. Once decided on which filters to use, the user presses the button to “Filter List”. All results are then filtered and displayed on screen. |
| Alternate pathways |  |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |

|  |  |
| --- | --- |
| Use Case Name | Validate payment |
| Use Case Description | An external system validates the customer’s payment and returns to T-Train whether it was successful or not. |
| Use Case Author(s) | Adam |
| Actor(s) | System |
| Locations | External Pay Gate Provider’s Website |
| Primary pathway | To validate a payment, the user first has to make the payment. This validation is performed by a Pay Gate provider which means the means of validation are outside the scope of this description. |
| Alternate pathways |  |
| Exception pathways | Database connection fails  Internet connection fails  Error displayed to the user advising of connection problem |