USE CASE SPECIFICATIONS

1. Cancel Booking
2. Take Payment
3. Sell Ticket
4. Assign Blanks
5. Update Database
6. Generate Reports
7. Late Ticket Payment
8. Set/Maintain Discount Plan
9. Record Customer Details

Use Case 1: Cancel Ticket

Use Case: Cancel Ticket

Actors: Travel Advisor

Preconditions:

* The travel advisor must be logged in to the system.
* The ticket to be cancelled must exist in the system.
* The ticket must not have already been cancelled.

Main Flow:

1. The travel advisor selects the ticket to be cancelled from a list of tickets.
2. The system displays the ticket details and prompts the travel advisor to confirm the cancellation.
3. The travel advisor confirms the cancellation.
4. The system updates the ticket status to "cancelled."
5. The system sends a notification to the customer regarding the cancellation.

Alternative Flow 1: Ticket Not Found

2a. The system notifies the travel advisor that the ticket booking was not found.

Alternative Flow 2: Ticket Already Cancelled

4a. The system notifies the travel advisor that the ticket has already been cancelled.

Postconditions:

* The ticket status is updated to "cancelled" in the system.
* The customer has been notified of the cancellation.

OR

Use Case 1.1: Cancel Ticket

Use Case 1.1: Cancellation

Actors: Travel Advisor, Office Manager, Administrator

Pre-conditions:

* The customer has made a booking.
* The travel agent, office manager, or administrator has access to the booking information.

Main Flow:

1. The travel agent, office manager, or administrator accesses the booking information.
2. The system verifies the eligibility of the booking for cancellation based on the booking policies.
3. The travel agent, office manager, or administrator initiates the cancellation process.
4. The system calculates the cancellation fee based on the booking and cancellation policies.
5. The system processes the cancellation fee through the payment gateway.
6. The system updates the booking status to "cancelled" and the payment information to reflect the cancellation.

Alternative Flows:

* If the booking is not eligible for cancellation, the system displays an error message and the cancellation process cannot proceed.
* If the cancellation fee cannot be processed successfully through the payment gateway, the system displays an error message and the cancellation process cannot proceed.

Post-conditions:

* The customer has received the refund amount (if eligible) or has been charged the cancellation fee.
* The booking status and payment information are updated to reflect the cancellation.

Use Case 2: Take Payment

Use Case Name: Take Payment

Actors: Travel Advisor

Description: The travel advisor accepts payment from the customer for a booking.

Pre-conditions: The customer has selected a booking and is ready to pay.

Post-conditions: Payment has been accepted and the booking is confirmed.

Flow of Events:

1. The travel advisor selects the booking for which the payment is being made.
2. The travel advisor selects the payment method (credit/debit card, cash, etc.).
3. The system displays the payment screen.
4. The travel advisor enters the payment information.
5. The system verifies the payment information and processes the payment.
6. The system displays a confirmation message.
7. The travel agent confirms the payment and booking.

Alternative Flows:

4a. If the payment information is invalid, the system displays an error message and prompts the travel agent to re-enter the payment information.

5a. If the payment cannot be processed, the system displays an error message and prompts the travel agent to try another payment method.

6a. If the payment is declined, the system displays a message indicating the payment was unsuccessful and prompts the travel agent to try another payment method or cancel the booking.

Exceptions:

1. If the booking has already been paid for, the system displays a message indicating the booking has already been paid for and cannot be paid again.
2. If the booking has been cancelled, the system displays a message indicating the booking has been cancelled and payment cannot be accepted.

Note: Depending on the payment method selected, additional steps may be required to complete the payment process (e.g. authorization codes for credit/debit cards). These steps should be included in the flow of events as appropriate.

Use Case 3: Sell Ticket

Use Case Name: Sell Tickets

Actors: Travel Advisor

Description: The travel advisor sells tickets to customers for a specific flight

Pre-conditions: Travel advisor is logged in and viewing flight availability

Post-conditions: Tickets are sold to the customer and the flight is updated with the new reservation information.

Flow of Events:

1. Travel agent selects a flight for the customer
2. Travel agent confirms availability of seats for the selected flight
3. Travel agent enters customer information, including name, address, and payment details
4. System processes the payment and generates a ticket for the customer
5. System updates the flight reservation with the new customer information and reservation details
6. System sends confirmation of the ticket purchase to the customer

Alternative Flows:

2a. If there are no available seats on the selected flight, the travel agent informs the customer and suggests an alternate flight.

2b. If the customer's payment information is invalid or insufficient, the travel agent informs the customer and requests a different payment method.

2c. If the customer's information is incomplete or invalid, the travel agent requests the missing information from the customer.

4a. If the payment processing fails, the travel agent informs the customer and requests a different payment method.

4b. If the ticket cannot be generated, the travel agent contacts the system administrator for support.

5a. If the flight reservation update fails, the travel agent contacts the system administrator for support.

5b. If the customer did not receive the confirmation of the ticket purchase, the travel agent requests a new confirmation to be sent to the customer.

Use Case 4: Assign Blanks

Use Case Name: Assign Blanks

Actors: Office Manager

Description: The Office Manager assigns a set of blanks to a Travel Agent for booking purposes.

Pre-conditions: The Office Manager is logged in and has access to the system, the Travel Advisor is registered in the system, and there are available blanks to assign.

Post-conditions: The assigned blanks are registered in the system and are no longer available for other Travel Advisors to book.

Flow of Events:

1. The Office Manager selects the "Assign Blanks" option from the system menu.
2. The system presents a list of available blanks to assign.
3. The Office Manager selects the desired set of blanks to assign.
4. The system presents a list of registered Travel advisors.
5. The Office Manager selects the Travel advisor to assign the blanks to.
6. The system registers the assigned blanks to the selected Travel advisor and updates the availability of the blanks in the system.

Alternative Flows:

4a. If there are no registered Travel advisor, the Office Manager is prompted to register one before proceeding with the assignment.

4b. If there are no available blanks to assign, the system displays a message indicating that there are no blanks available to assign.

Exceptions:

* If there is an error in registering the assigned blanks, the system displays an error message and prompts the Office Manager to try again.
* If there is an error in updating the availability of the blanks, the system displays an error message and prompts the Office Manager to try again.

Post-conditions:

* The selected blanks are assigned to the selected Travel advisor and are no longer available for other Travel advisors to book.
* The system updates the availability of the assigned blanks in the system.

Use Case 5: Update Database

Use Case Name: Update Database

Actors: Administrator

Description: The administrator updates the database with new information or changes existing data.

Pre-conditions: The administrator is logged into the system and has appropriate permissions to update the database.

Post-conditions: The database is updated with the new information or changes.

Flow of Events:

1. Administrator logs into the airvia system and navigates to the database update page.
2. System displays a list of available data fields that can be updated.
3. Administrator selects the data field they want to update.
4. System prompts the administrator to enter the new information.
5. Administrator enters the new information and saves the changes.
6. System updates the database with the new information.
7. System displays a confirmation message to the administrator that the update was successful.

Alternative Flow:

4a. If the administrator enters invalid data, the system displays an error message and prompts the administrator to correct the input before proceeding.

5a. If the administrator cancels the update, the system discards any changes made and returns to the database update page.

6a. If the system encounters an error while updating the database, the system displays an error message and prompts the administrator to retry the update.

Use Case 6: Generate Reports

Use Case Name: Generate Reports

Actors: Office Manager

Description: The Office Manager generates reports for analysing sales and other data.

Pre-conditions: The Office Manager is logged in and authorised to access the Airvia system.

Post-conditions: Reports are generated and can be analysed.

Flow of Events:

1. The Office Manager selects the type of report to generate (sales report, customer report and other reports).
2. The Office Manager selects the date range for the report.
3. The system generates the report based on the selected criteria.
4. The report is displayed for the Office Manager to analyse.

Alternative Flow:

2a. If the Office Manager does not select a date range, the system generates a report for all available data.

3a. If there is an error generating the report, the system displays an error message and the Office Manager can retry the report or contact support.

4a. If the report is not generated due to insufficient data, the system displays an appropriate message and the Office Manager can adjust the date range or the criteria for the report.

Exceptional Flows:

1b. If the Office Manager is not logged in or not authorised to access the system, the system displays an error message and the Office Manager is redirected to the login page.

2b. If the Office Manager selects an invalid date range (e.g. start date is after end date), the system displays an error message and the Office Manager can adjust the date range.

3b. If the system encounters an error generating the report (e.g. data corruption), the system logs the error and displays a message to the Office Manager that the report cannot be generated. The Office Manager can retry the report or contact support.

4b. If the Office Manager encounters any issues analysing the report, they can contact support for assistance.

Use Case 7: Late Ticket Payment

Use Case Name: Late Ticket Payment

Actors: Travel Advisor

Description: This use case allows a Travel Advisor to handle the situation where a customer has not paid for their ticket in time.

Pre-conditions: The Travel Advisor is logged in and has access to the customer's ticket information.

Post-conditions: The Travel Advisor has either received payment or has cancelled the ticket.

Flow of Events:

1. The Travel Advisor receives notification that a customer has not paid for their ticket in time.
2. The Travel Advisor contacts the customer to remind them to pay for their ticket.
3. If the customer pays, the Travel Advisor updates the payment information in the system and confirms the ticket.
4. If the customer does not pay within a given timeframe, the Travel Advisor cancels the ticket and updates the system accordingly.

Alternative Flow:

2a. The customer informs the Travel Advisor that they will not be able to pay for the ticket in time.

2a1. The Travel Advisor negotiates an alternative payment plan with the customer.

2a2. If an alternative payment plan is agreed upon, the Travel Advisor updates the payment information in the system and confirms the ticket.

2a3. If an alternative payment plan cannot be agreed upon, the Travel Advisor cancels the ticket and updates the system accordingly.

Use Case 8: Set/Maintain Discount Plan

Use Case Name: Set/Maintain Discount Plan

Actors: Office Manager

Description: The Office Manager sets and maintains the discount plan for customers.

Pre-conditions: The Office Manager is logged into the system and has permission to set and maintain the discount plan.

Post-conditions: The discount plan is updated and customers are able to receive applicable discounts.

Flow of Events:

1. The Office Manager selects the "Set/Maintain Discount Plan" option from the Airvia system menu.
2. The system displays the current discount plan.
3. The Office Manager updates the discount plan by adding, modifying or removing discounts.
4. The Airvia system validates the updated discount plan and saves it to the Airvia database.
5. The Airvia system sends a notification to customers eligible for the new discount plan.

Alternative Flow:

3a. If the Office Manager chooses to add a new discount, they enter the discount information and the system validates it. If the validation fails, the system displays an error message and prompts the Office Manager to correct the discount information.

3b. If the Office Manager chooses to modify an existing discount, they select the discount and update the information. The system validates the updated discount and saves it to the database. If the validation fails, the system displays an error message and prompts the Office Manager to correct the discount information.

3c. If the Office Manager chooses to remove a discount, they select the discount and confirm the removal. The system removes the discount from the database and sends a notification to customers who are no longer eligible for the discount.

4a. If the system encounters an error while validating the updated discount plan, it displays an error message and prompts the Office Manager to correct the discount plan.

Exceptions:

* If the Office Manager does not have permission to set/maintain the discount plan, the system displays an error message and prevents access to the option.
* If the system encounters a technical error during the discount plan update, it displays an error message and prompts the Office Manager to retry the update or contact technical support.

Use Case 9: Record Customer Details

Use Case Name: Record Customer Details

Actors: Travel Advisor

Description: The travel advisor records the personal and contact information of a new customer

Pre-conditions: Travel advisor is logged into the system and has identified a new customer

Post-conditions: Customer details are recorded in the system and can be accessed for future bookings and communications.

Flow of Events:

1. Travel advisor requests the new customer's personal and contact information
2. Travel advisor enters the customer's name, email address, phone number, and any additional information into the system
3. System validates and saves the customer details in the database
4. System sends a confirmation email to the customer with their account information.

Alternative Flows:

2a. If the customer declines to provide some information, the travel advisor will explain that the information is necessary for booking and communication purposes.

2b. If the system is unable to validate the customer's information, the travel advisor will contact the customer for clarification or correction.

Exceptions:

3a. If the system is unable to save the customer details, the travel advisor will contact the system administrator for assistance.

3b. If the confirmation email fails to send, the travel advisor will send the customer a manual confirmation and notify the system administrator of the issue.

Use Case 2: Request Refund

Use Case 2: Request Refund

Actors: Travel Advisor, Office Manager, Administrator

Pre-conditions:

* The customer has made a payment for a booking.
* The booking has been cancelled or the customer is eligible for a refund.
* The travel advisor, office manager, or administrator has access to the booking and payment information.

Main Flow:

1. The travel advisor, office manager, or administrator accesses the booking and payment information.
2. The system verifies the eligibility of the booking for a refund.
3. The travel advisor initiates the refund process.
4. The system calculates the refund amount based on the booking and refund policies.
5. The system initiates the refund process through the payment gateway.
6. The system updates the booking status and payment information to show the refund.

Alternative Flows:

* If the booking is not eligible for a refund, the system displays an error message and the refund process cannot proceed.
* If the refund process cannot be completed successfully through the payment gateway, the system displays an error message and the refund process cannot proceed.

Post-conditions:

* The customer has received the refund amount.
* The booking status and payment information are updated to show the refund.

1.View Booking Use Case

* + Actors: Travel Agent
  + Preconditions:
    - The travel agent is logged into the system.
    - A booking record exists for the user.
  + Main Flow:
    - The travel agent selects the option to view a booking.
    - The system presents a form for the travel agent to enter the booking reference number.
    - The travel agent enters the booking reference number and submits it to the system.
    - The system retrieves the booking record and presents it to the travel agent, including the user's details, itinerary, and payment information.
  + Postconditions:
    - The travel agent can view the details of the selected booking.