

ITI Institute – Helwan University Branch

Final Project Summer Code Camp for Web Development Using .NET Track.



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Level : Two _ 2



Project System User-Guide
for
SwiftAir
(Airline Management System)

Version 1.0

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For ITI Institute - Helwan University Branch

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SwiftAir - Project System User

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Introduction

SwiftAir is a comprehensive airline management system designed to streamline flight operations, manage passenger records, and handle booking processes efficiently. This system provides a complete suite of features for airline staff to monitor flights, manage passengers, and maintain operational excellence.

Product Overview

Key Features

- **Flight scheduling and management**
- **Passenger record management**
- **Boarding pass generation**
- **Real-time flight status tracking**
- **Comprehensive search capabilities**
- **User-friendly interface**

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- System Overview.

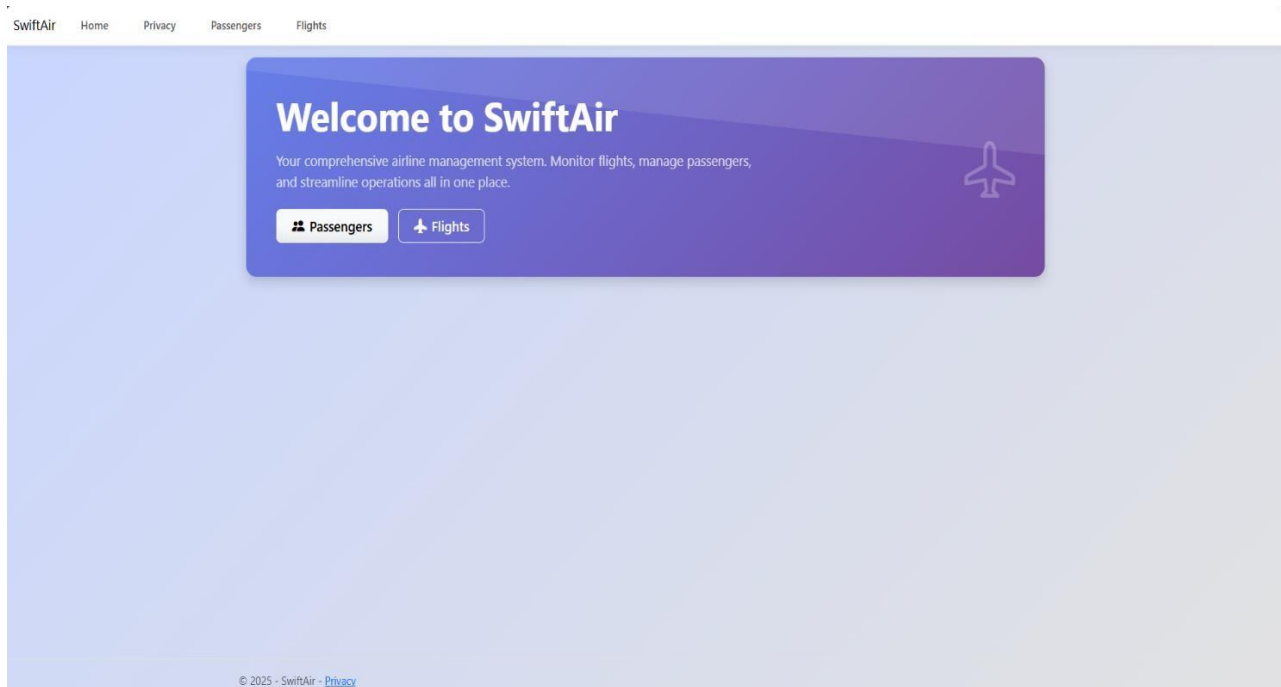
Main Navigation:

- The SwiftAir system consists of four main sections accessible via the top navigation bar:.
 - Home: Dashboard and overview
 - Privacy: Privacy policies and developer information
 - Passengers: Passenger management system
 - Flights: Flight operations and scheduling
- Dashboard Features:
 - Quick access to passenger and flight management
 - Real-time system status
 - Easy navigation between modules

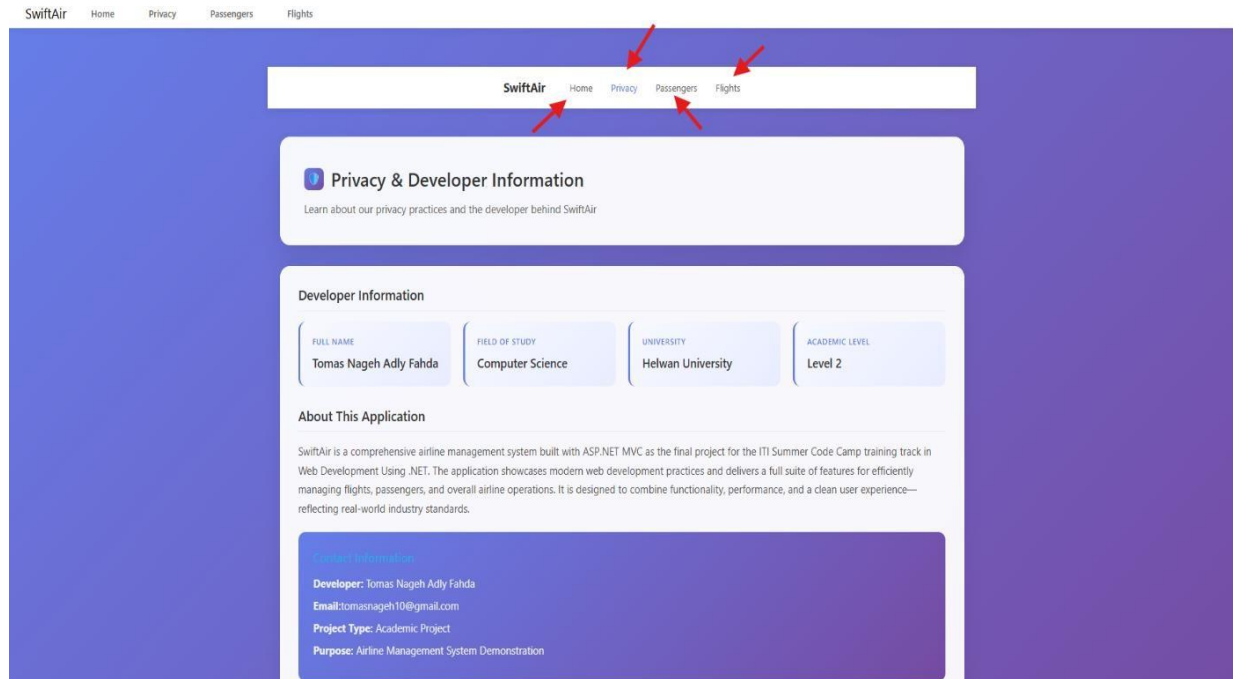
Main Dashboard

The dashboard provides:

- Welcome message and system description
- Direct access to Passengers and Flights modules
- Clean, intuitive interface design



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Privacy and Developer Information

Developer Details

- **Developer:** Tomas Nageh Adly Fahda
- **Field of Study:** Computer Science
- **University:** Helwan University
- **Academic Level:** Level 2
- **Email:** tomasnageh10@gmail.com
- **Project Type:** Academic Project
- **Purpose:** Airline Management System Demonstration

Application Information

SwiftAir is built with:

- **Framework:** ASP.NET MVC / EF / SQL
- **Purpose:** Final project for ITI Summer Code Camp
- **Focus:** Web Development Using .NET
- **Design Philosophy:** Modern web development practices with clean user experience

Technical Features

- Functional performance optimization
- Clean, intuitive user interface
- Real-world industry standards implementation
- Comprehensive feature set for airline operations

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Flight Management

Flight Information Display

The flight management system provides detailed information for each flight:

SwiftAir Home Privacy Passengers Flights

[✚ Add Flight](#)

[✚ All Flights](#) Showing 17 records

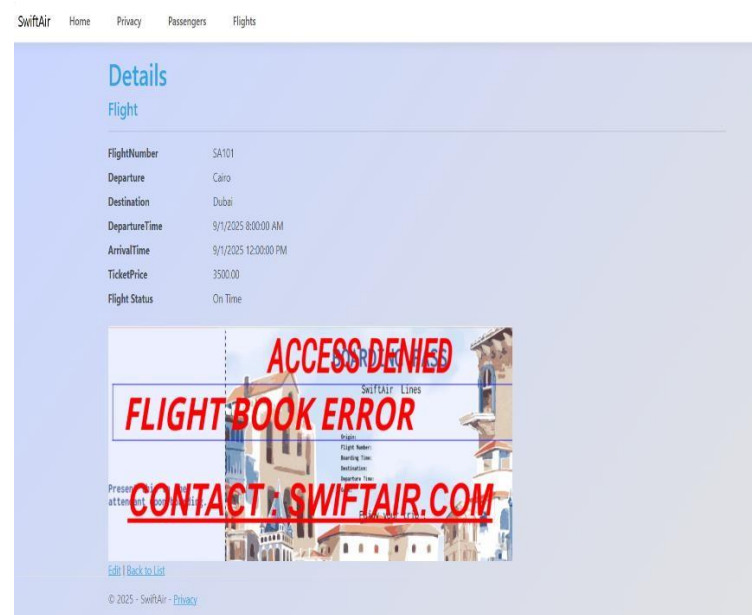
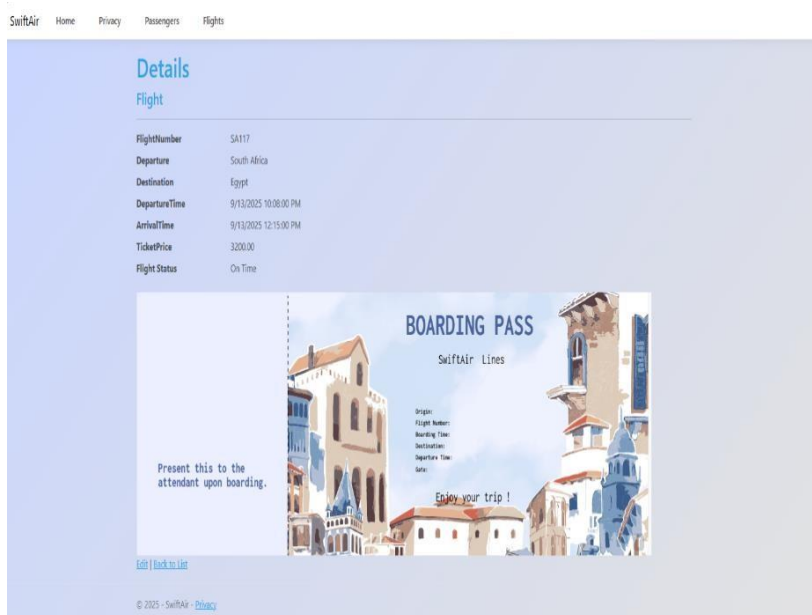
Flight Number	Departure	Destination	Departure Time	Arrival Time	Ticket Price	Status	Actions
SA101	Cairo	Dubai	9/1/2025 8:00 AM	9/1/2025 12:00 PM	\$3,500.00	On Time	View Edit Delete
SA102	Cairo	London	9/2/2025 2:00 PM	9/2/2025 8:30 PM	\$7,200.00	On Time	View Edit Delete
SA103	Alexandria	Istanbul	9/3/2025 10:15 AM	9/3/2025 1:45 PM	\$2,800.00	Delayed	View Edit Delete
SA104	Dubai	Cairo	9/4/2025 9:30 AM	9/4/2025 1:00 PM	\$3,500.00	On Time	View Edit Delete
SA105	London	Cairo	9/5/2025 10:00 PM	9/6/2025 4:00 AM	\$7,200.00	Cancelled	View Edit Delete
SA106	Cairo	Paris	9/6/2025 6:00 AM	9/6/2025 10:15 AM	\$6,900.00	Delayed	View Edit Delete
SA107	Paris	Cairo	9/7/2025 4:00 PM	9/7/2025 8:15 PM	\$6,900.00	On Time	View Edit Delete
SA108	Cairo	New York	9/8/2025 9:00 AM	9/8/2025 8:00 PM	\$12,500.00	On Time	View Edit Delete
SA109	New York	Cairo	9/9/2025 11:00 PM	9/10/2025 12:00 PM	\$12,500.00	Delayed	View Edit Delete
SA110	Cairo	Rome	9/10/2025 7:45 AM	9/10/2025 10:30 AM	\$4,200.00	Cancelled	View Edit Delete
SA111	Cairo	Berlin	9/12/2025 7:00 AM	9/12/2025 11:00 AM	\$5,100.00	On Time	View Edit Delete
SA112	Berlin	Cairo	9/13/2025 3:30 PM	9/13/2025 7:30 PM	\$5,200.00	Delayed	View Edit Delete
SA113	Cairo	Madrid	9/14/2025 9:00 AM	9/14/2025 2:00 PM	\$4,800.00	On Time	View Edit Delete
SA114	Madrid	Cairo	9/15/2025 12:00 PM	9/15/2025 5:00 PM	\$4,700.00	On Time	View Edit Delete

Flight Operations Table

The flights table displays:

- 17 total flight records
- Sortable columns for easy data management
- Action buttons for each flight:
 - **View** (👁️): View flight details
 - **Edit** (✎️): Modify flight information
 - **Delete** (🗑️): Remove flight record

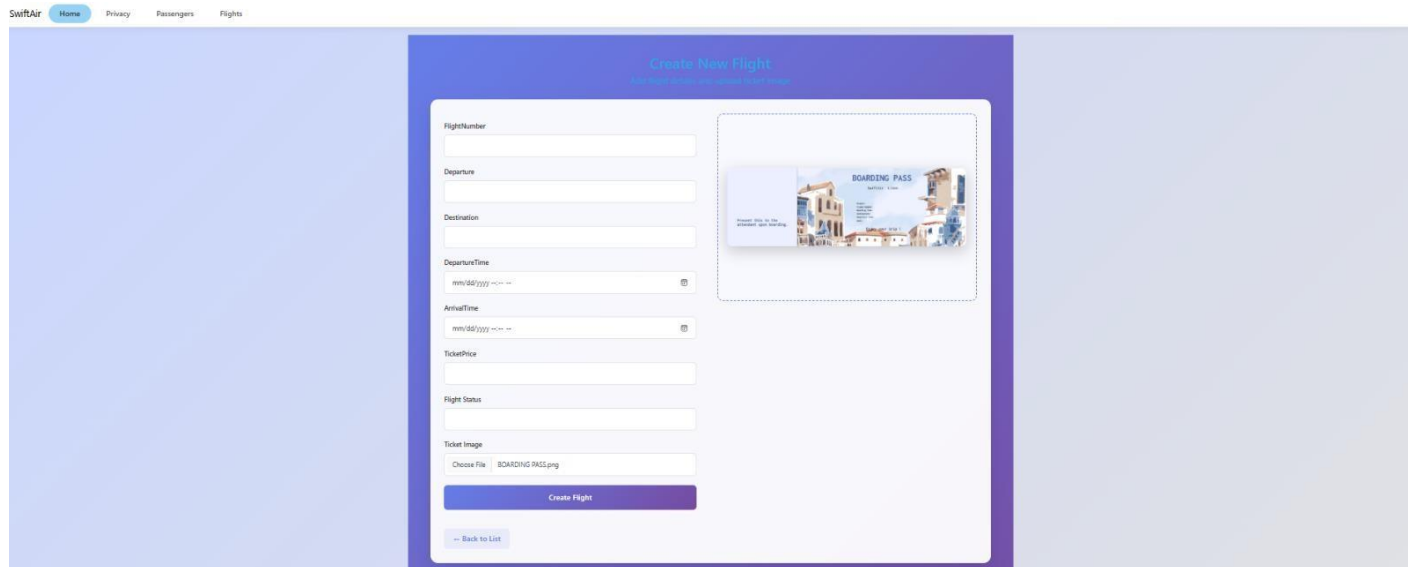
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Flight Details Include:

- **Flight Number:** Unique identifier (e.g., SA101, SA102)
- **Departure Location:** Origin city/airport
- **Destination:** Arrival city/airport
- **Departure Time:** Scheduled departure date and time
- **Arrival Time:** Expected arrival date and time
- **Ticket Price:** Fare amount in USD
- **Flight Status:** Current status (On Time, Delayed, Cancelled)

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SwiftAir [Home](#) [Privacy](#) [Passengers](#) [Flights](#)

Create New Flight

Fill in the details and upload the flight image

FlightNumber

Departure

Destination

DepartureTime

ArrivalTime

TicketPrice

Flight Status


Ticket Image
Choose File | BOARDING PASS.png

[Create Flight](#)

[Back to List](#)

BOARDING PASS

Adding New Flights

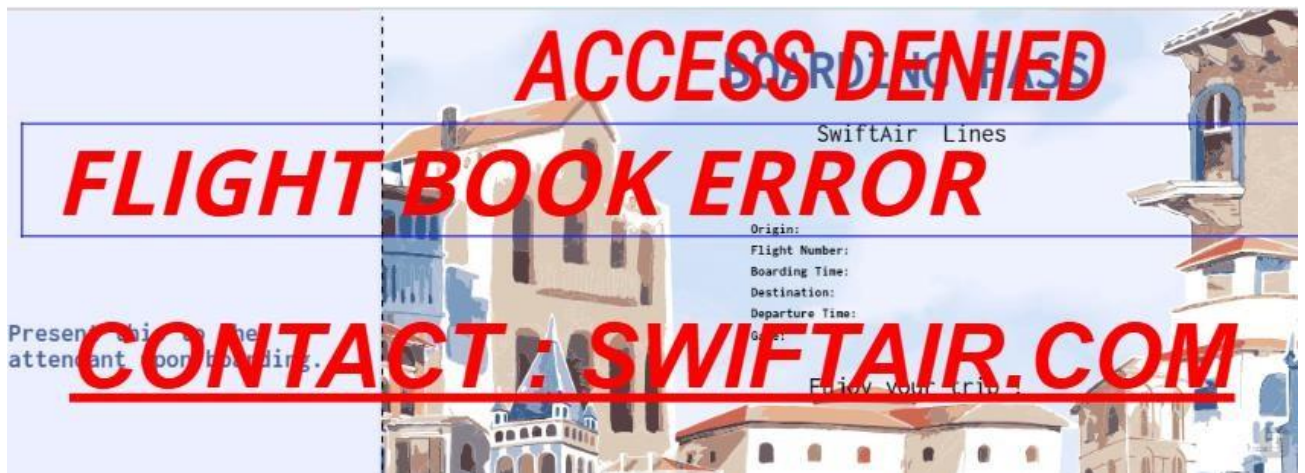
1. Click the **"Add Flight"** button (green button with  icon)
2. Fill in the flight creation form:
 - Flight Number
 - Departure location
 - Destination
 - Departure Time (mm/dd/yyyy format)
 - Arrival Time (mm/dd/yyyy format)
 - Ticket Price
 - Flight Status
 - Upload ticket image (optional)
3. Click **"Create Flight"** to save

Flight Status Management

Available status options:

- **On Time:** Flight operating as scheduled

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SwiftAir Home Privacy Passengers Flights

Passengers Management

Manage passenger records, bookings and contact details

ID	Full Name	Email Address	Phone Number	Passport Number	Flight Status	Actions
1	Ahmed Youssef	ahmed.youssef@example.com	+201234567890	A1234567	ON TIME	
17	Samir Younes	samir.younes@example.com	+201445566778	Q5678901	ON TIME	
2	Mona Ibrahim	mona.ibrahim@example.com	+201098765432	B7654321	ON TIME	
18	Nadia Magdy	nadia.magdy@example.com	+201556677889	R6789012	ON TIME	
3	Karim Hassan	karim.hassan@example.com	+201222334455	C3456789	DELAYED	
19	Adel Rashed	adel.rashed@example.com	+201667788990	57890123	DELAYED	
4	Sara Mostafa	sara.mostafa@example.com	+201555667788	D9876543	ON TIME	
20	Menna ElSayed	menna.elsayed@example.com	+201778899001	T8901234	ON TIME	
5	Omar Mahmoud	omar.mahmoud@example.com	+201670901234	E2345678	CANCELLED	
21	Hany Lotfi	hany.lotfi@example.com	+201889900112	U9012345	CANCELLED	

Passenger Operations

Adding New Passengers

1. Click "Add Passenger" button (green button with + icon)
2. Complete the passenger form with required information
3. Select associated flight from dropdown
4. Save the passenger record
- 5.

Managing Existing Passengers

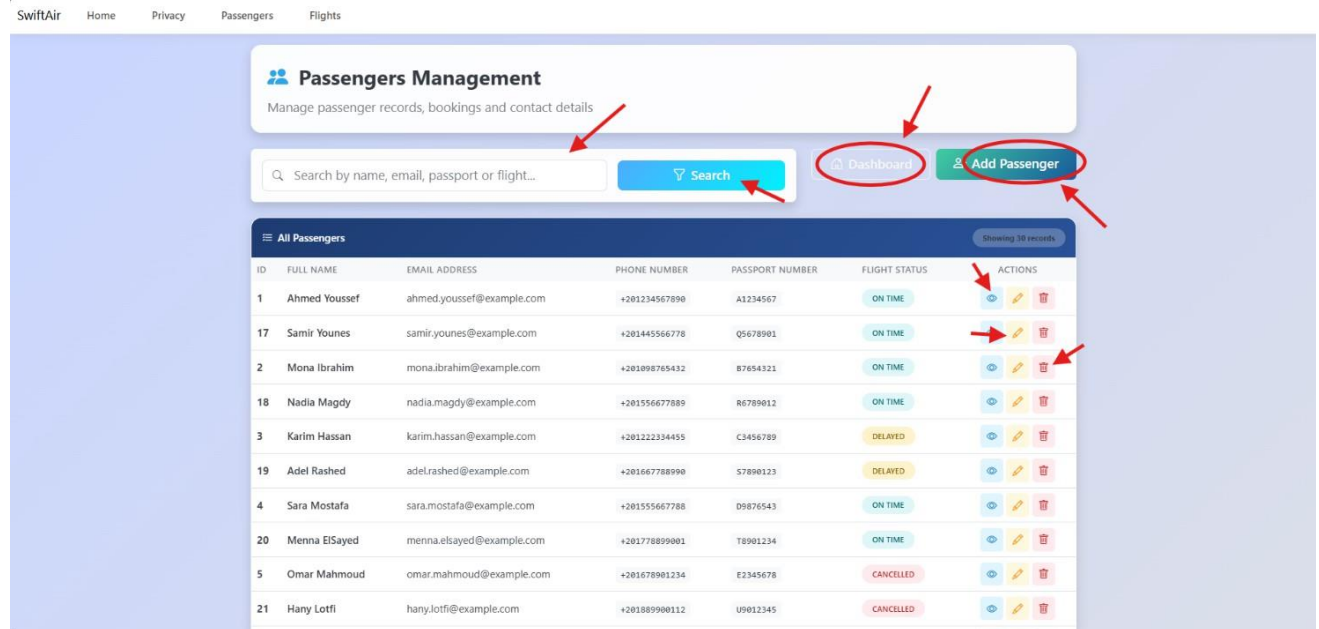
Each passenger record provides action options:

- **View** (): Display detailed passenger information
- **Edit** (): Modify passenger details
- **Delete** (): Remove passenger record with confirmation
-

Flight Status Types

- **On Time:** Passenger confirmed for on-time flight
- **Delayed:** Passenger affected by flight delays
- **Cancelled:** Booking has been cancelled

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SwiftAir Home Privacy Passengers Flights

Passengers Management

Manage passenger records, bookings and contact details

Search by name, email, passport or flight... Search

Dashboard Add Passenger

ID	FULL NAME	EMAIL ADDRESS	PHONE NUMBER	PASSPORT NUMBER	FLIGHT STATUS	ACTIONS
1	Ahmed Yousef	ahmed.youssef@example.com	+201234567890	A1234567	ON TIME	
17	Samir Younes	samir.younes@example.com	+201445566778	Q5678901	ON TIME	
2	Mona Ibrahim	mona.ibrahim@example.com	+201098765432	87654321	ON TIME	
18	Nadia Magdy	nadia.magdy@example.com	+201556677889	86789012	ON TIME	
3	Karim Hassan	karim.hassan@example.com	+201222334455	C3456789	DELAYED	
19	Adel Rashed	adel.rashed@example.com	+201667788990	57890123	DELAYED	
4	Sara Mostafa	sara.mostafa@example.com	+20155667788	D9876543	ON TIME	
20	Menna ElSayed	menna.elsayed@example.com	+201778899001	T8901234	ON TIME	
5	Omar Mahmoud	omar.mahmoud@example.com	+201678901234	E2345678	CANCELLED	
21	Hany Lotfi	hany.lotfi@example.com	+201889900112	U9012345	CANCELLED	

Passenger Search

The passenger management system includes powerful search capabilities:

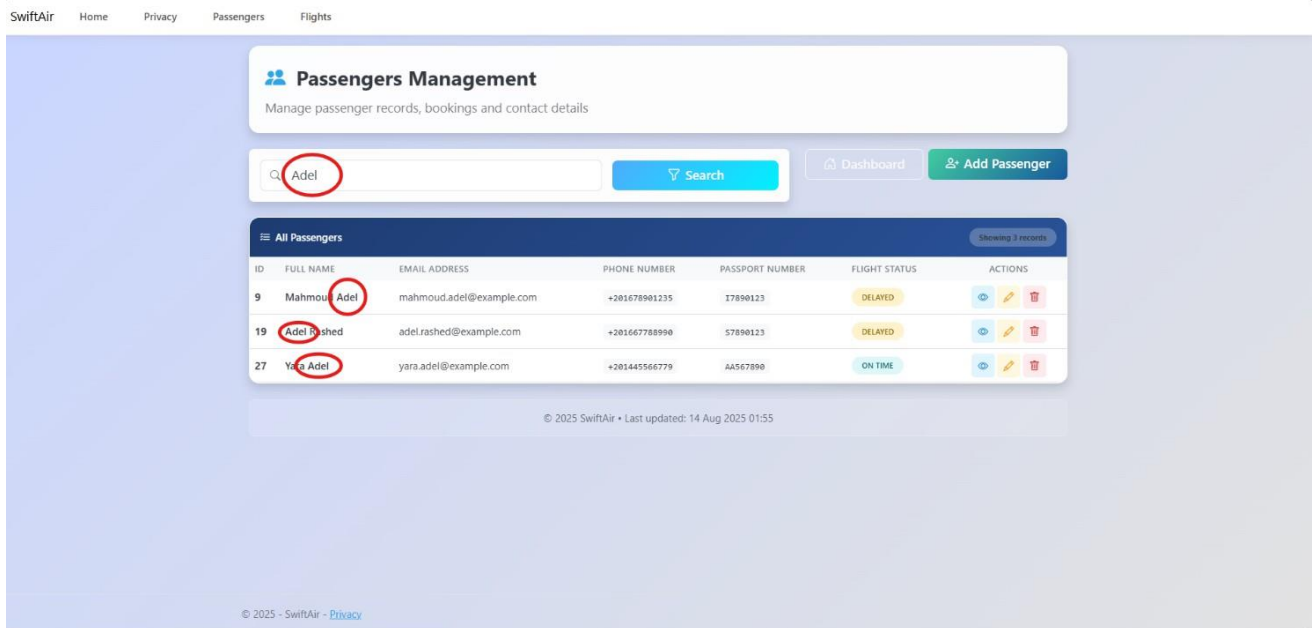
Search Parameters:

- Search by name
- Search by email
- Search by passport number
- Search by flight number

Search Process:

1. Enter search terms in the search box
2. Click the **"Search"** button (🔍 icon)
3. View filtered results
4. Use **"Dashboard"** button to return to full view

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SwiftAir Home Privacy Passengers Flights

Passengers Management

Manage passenger records, bookings and contact details

Search: Search [Dashboard](#) [Add Passenger](#)

All Passengers Showing 3 records

ID	FULL NAME	EMAIL ADDRESS	PHONE NUMBER	PASSPORT NUMBER	FLIGHT STATUS	ACTIONS
9	Mahmoud Adel	mahmoud.adel@example.com	+201678901235	T7890123	DELAYED	View Edit Delete
19	Adel Rashed	adel.rashed@example.com	+201667788990	57890123	DELAYED	View Edit Delete
27	Yara Adel	yara.adel@example.com	+201445566779	AA567890	ON TIME	View Edit Delete

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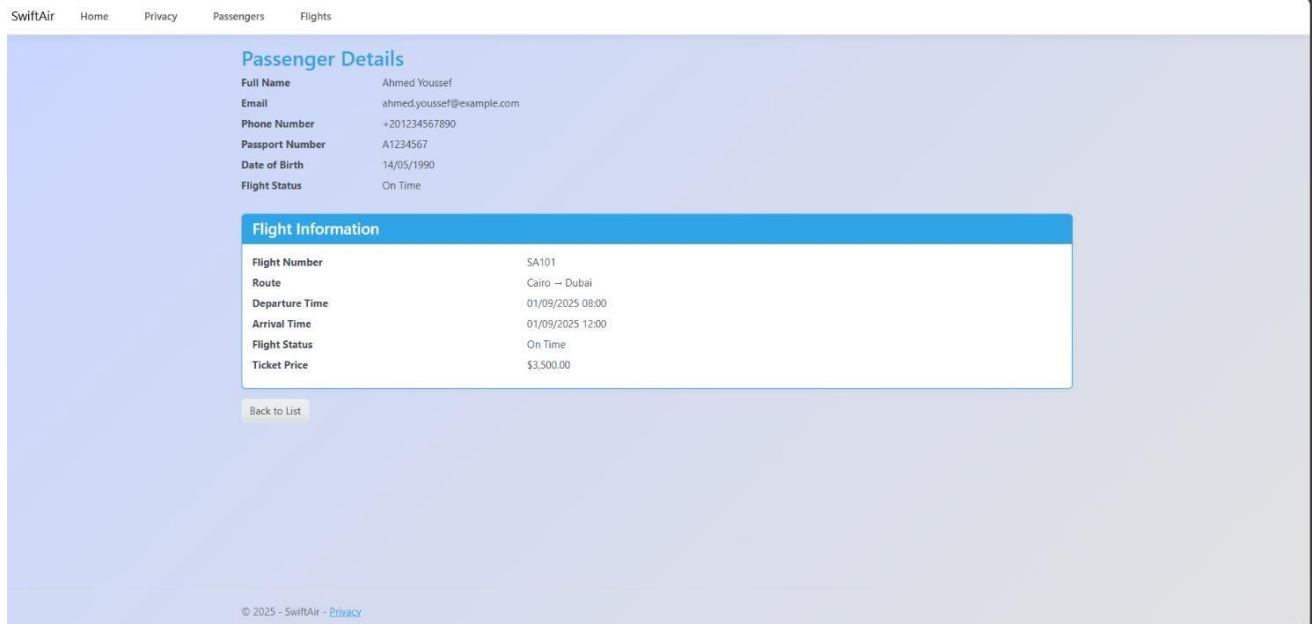
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Search Results Display (ex : Adel)

- Shows number of records found (e.g., "Showing 3 records")
- Maintains all passenger information columns
- Preserves action buttons for filtered results
- Real-time filtering as you type

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- **Delayed:** Flight experiencing delays
- **Cancelled:** Flight has been cancelled



The screenshot shows the 'Passenger Details' page of the SwiftAir system. The page has a navigation bar at the top with links: SwiftAir, Home, Privacy, Passengers, and Flights. The main content area is divided into two sections: 'Passenger Details' and 'Flight Information'.

Passenger Details

Full Name	Ahmed Youssef
Email	ahmed.youssef@example.com
Phone Number	+201234567890
Passport Number	A1234567
Date of Birth	14/05/1990
Flight Status	On Time

Flight Information

Flight Number	SA101
Route	Cairo → Dubai
Departure Time	01/09/2025 08:00
Arrival Time	01/09/2025 12:00
Flight Status	On Time
Ticket Price	\$3,500.00

Back to List

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⇒ Passenger Management

Passenger Information System

The passenger management module handles complete passenger records:

Passenger Details Include:

- **Passenger ID:** Unique identifier
- **Full Name:** Complete passenger name
- **Email Address:** Contact email
- **Phone Number:** Contact number with country code
- **Passport Number:** Travel document number
- **Date of Birth:** Passenger's birth date
- **Flight Status:** Current booking status



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SwiftAir Home Privacy Passengers Flights

Are You Sure You Want To Delete This Passenger?

PassengerId	1
Full Name	Ahmed Youssef
Email Address	ahmed.youssef@example.com
Phone Number	+201234567890
Passport Number	A1234567
Date of Birth	14/05/1990

Delete Back To List

Flight Information

Flight Number	SA101
From	Cairo
To	Dubai
Departure	01/09/2025 08:00
Arrival	01/09/2025 12:00
Flight Status	On Time
Ticket Price	\$3500.00

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Delete Confirmation Process

When deleting a passenger record, the system provides a comprehensive confirmation dialog to prevent accidental deletions. The delete confirmation view displays:

- **Passenger Details:** Complete passenger information including ID, full name, email address, phone number, passport number, and date of birth
- **Associated Flight Information:** Shows the linked flight details including flight number, route (From/To), departure and arrival times, flight status, and ticket price
- **Confirmation Question:** "Are You Sure You Want To Delete This Passenger?" prominently displayed
- **Action Buttons:**
 - **Delete** button (red) to confirm deletion
 - **Back To List** button to cancel and return to passenger management