



AIRLINE RESERVATION SYSTEM

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Airline reservation system (Aeroreserve) is a computerized system which retrieve information and conduct transactions for air travel.

It will allow passengers to search flights between two cities and display the available flights. Passenger can book the preferred flight and their info is stored in the system.

Passenger has to enter details like name, age, gender, mobile number to book flight.

The main purpose of our project is to reduce manual errors involved in airline reservation process and make it convenient for customers to book flight.

What it can do:

- Users can register, log in, and log out.
- Can provide Airline Schedules.
- Can make multiple passenger reservations.
- Keeps the booking records.
- Keeps the passenger records.

Mission, Vision, and Values

1

MISSION

Our mission is to reduce the manual errors and also for saving time while booking the tickets.

2

VISION

Our vision is to make it possible for everyone for planning their trip. Through our easy, simple and safe services

3

VALUES

Our values are creating a top-notch website with the maximum facilities available.

Technologies Used:

- MySQL
- Django
- Html
- CSS
- JavaScript

PROJECT BACKEND

Number of templates:

13 HTML templates

Number of models:

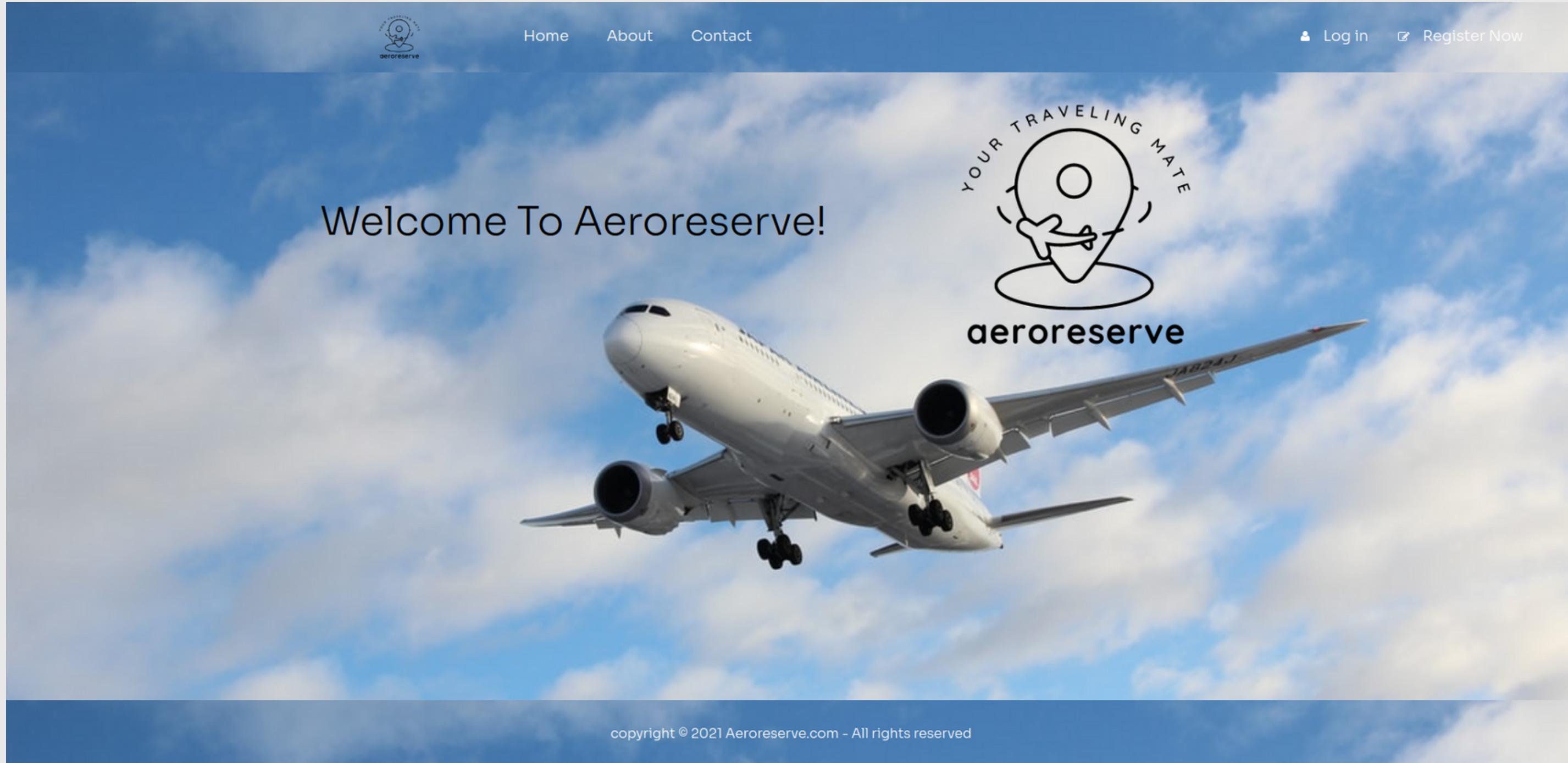
4 (+10 by default in django)

Number of functions

14 python functions in views.py

HOME PAGE

1. Contains a summary of all tabs and services provided by the website.
2. It includes the login, register, about, contact, home buttons.



ABOUT PAGE

This page basically tells about the website's primary feature- booking airplane tickets.

It also tells information about us, the developers.

[Home](#) [About](#) [Contact](#)
[Log in](#) [Register Now](#)

About us

Aeroreserve- your traveling mate is a user friendly website from where you can book flight to your favourite destinations! Our main aim is to help our users get the best service involving airline booking. After registering and logging in, click on "Book flight" to get started.

Developers

This website is designed by Nikita Singh, Computer Science and Engineering student, Indian Institute of Technology (BHU) Varanasi and Archana Chaudhary, Computer Science and Engineering student, Indian Institute of Technology (BHU) Varanasi.

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[Home](#) [About](#) [Contact](#)
[Log in](#) [Register Now](#)

Contact Us

Call Us:
(+91) 0000000000

Email:
support@Aeroreserve.com

Working hours:
All days of the week

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CONTACT PAGE

Displays the contact details of website like helpline email and number and working hours.
Also displays the location.

LOGIN AND REGISTER



Home About Contact

Create New Account

Username: Required. 150 characters or fewer. Letters, digits and @/./+/-/_ only.

Password:

- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

Password confirmation: Enter the same password as before, for verification.

[Register](#)

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Home About Contact

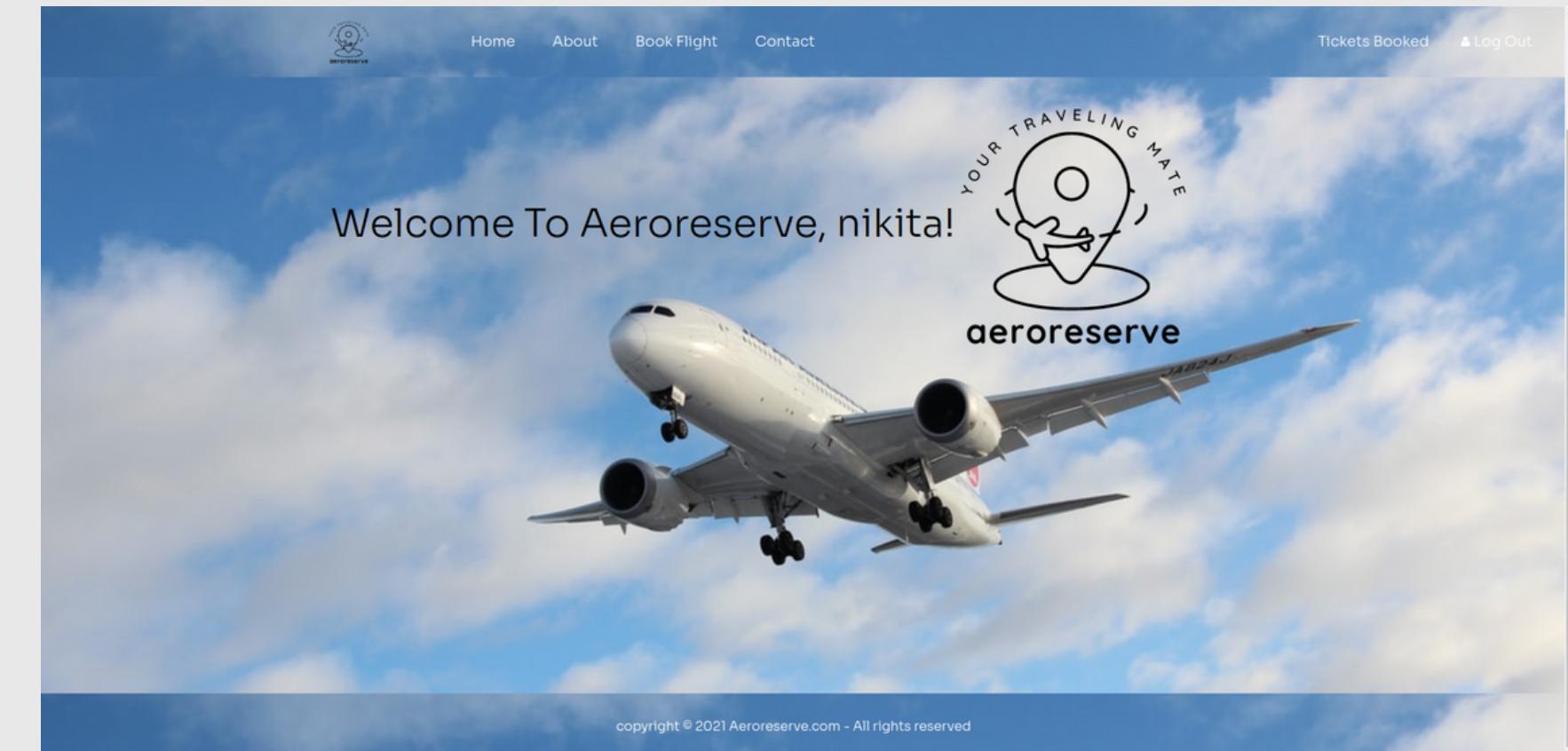
System Login

Username:

Password:

[Login](#)

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1. First, a user has to register to create their profile.
2. After that, they are redirected to the login page.
3. After logging in, they get redirected to the home page with 'Book Flight' user privilege. We can also see name of user.

For user record, we have used UserCreationForm, from django.contrib.auth.forms, a ModelForm in django.

Read more:

<https://docs.djangoproject.com/en/3.2/topics/auth/default/>

BOOK FLIGHT

1. On clicking the book flight button on the navbar, we are taken to it.
2. Here user can enter arrival and departure cities and the time of flight. The system finds the appropriate flight stored in the mysql database.
3. It also excludes flights with no seats.
4. Currently 9 flights are stored in our database.

airline_id	airline_name	arrival_time	departure_time	from	to	duration	distance	datetravel	fare	seats
12413	Nippon	08:15:00	03:00:00	England	Chicago	05:15:00	3879	2021-11-04	8368	100
17324	Lufthansa	14:40:00	08:40:00	Geneve	Ghana	06:00:00	6624	2021-11-05	3000	100
32555	Cebu	12:05:00	05:45:00	Texas	Chennai	06:20:00	9313	2021-11-06	4400	100
44598	Vistara	06:30:00	12:10:00	China	Tokyo	06:20:00	3189	2021-11-07	7500	100
54876	Qatar Airways	11:10:00	08:38:00	Georgia	California	02:32:00	2463	2021-11-08	4799	100
72156	Hainan	03:50:00	14:20:00	Beijing	Gangtok	15:30:00	2909	2021-11-09	5400	100
72558	AirAsia	14:20:00	10:06:00	Delhi	Denver	04:14:00	6394	2021-11-10	5000	100
88493	Qantas	09:45:00	06:19:00	Poland	Italy	03:26:00	1748	2021-11-11	9600	100
99836	Emirates	23:20:00	12:19:00	Bangladesh	Dallas	11:01:00	18502	2021-11-12	10000	2

The screenshot shows a web-based flight booking application. At the top, there is a dark blue header bar with the logo 'deroreserve' on the left and navigation links: Home, About, Book Flight, Contact, Tickets Booked, and Log Out. Below the header is a search form with three input fields labeled 'FROM', 'TO', and 'Date', and a 'Search' button. A message '9 flights available in total.' is displayed above a list of flight options. Each option is presented in a light blue box containing flight details and a price. The first flight listed is flight 12413 from England to Chicago, departing at 8:15 a.m. and arriving at 3 a.m., with a duration of 05:15:00, a distance of 3879 miles, and a fare of ₹ 8368/- for 100 seats available. The second flight listed is flight 17324 from Geneve to Ghana, departing at 14:40 and arriving at 08:40 the next day, with a duration of 06:00:00, a distance of 6624 miles, and a fare of ₹ 3000/- for 100 seats available.

9 flights available in total.

Flight 12413: England → Chicago
8:15 a.m. -- 3 a.m.
100 seats available
₹ 8368/-

Flight 17324: Geneve → Ghana

TICKET AVAILABLE

1. On filling info, we get our desired flight, else no flights found message shows.
2. User clicks book to proceed to next page.

The screenshot shows a flight search interface. At the top, there's a navigation bar with links for Home, About, Book Flight, Contact, Tickets Booked, and Log Out. Below the navigation is a search form with fields for 'FROM', 'TO', and 'Date', and a 'Search' button. A message indicates '1 flights found.' Below this, a flight result is displayed: flight number 17324 from Geneve to Ghana, departing at 2:40 p.m. and arriving at 8:40 a.m., with 100 seats available. To the right of the flight details is the price ₹ 3000/- and a 'Book' button. The bottom of the page includes a copyright notice: 'copyright © 2021 Aeroreserve.com - All rights reserved'.

1 flights found.

Flight Details:

- Flight Number: 17324
- From: Geneve
- To: Ghana
- Date: 2:40 p.m. -- 8:40 a.m.
- Seats Available: 100

Price: ₹ 3000/-

Book

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NUMBER OF PASSENGERS

User enters number of passengers booking the flight.
Here, django sessions are used which basically is used to store and retrieve data on a per-site-visitor basis.
(number of passengers stored as 'N' in current session)

Max limit is no. of seats available.

The screenshot shows a flight booking interface. At the top, there's a navigation bar with a logo of a globe and the text "aeroreserve", followed by links for Home, About, Book Flight, and Contact. Below the navigation is a large blue header area containing the text "You have selected flight: 17324". Underneath this, there's an input field with the number "2" and a "Next" button. At the bottom of the page, a footer bar displays the copyright information "copyright © 2021 Aeroreserve.com - All rights reserved".

(refer: <https://docs.djangoproject.com/en/3.2/topics/http/sessions/>)

PASSENGER DETAILS

Passenger name, dob, sex, aadhar card are to entered.

These are stored in a django form which in turn transfers data to 'Passenger' model.

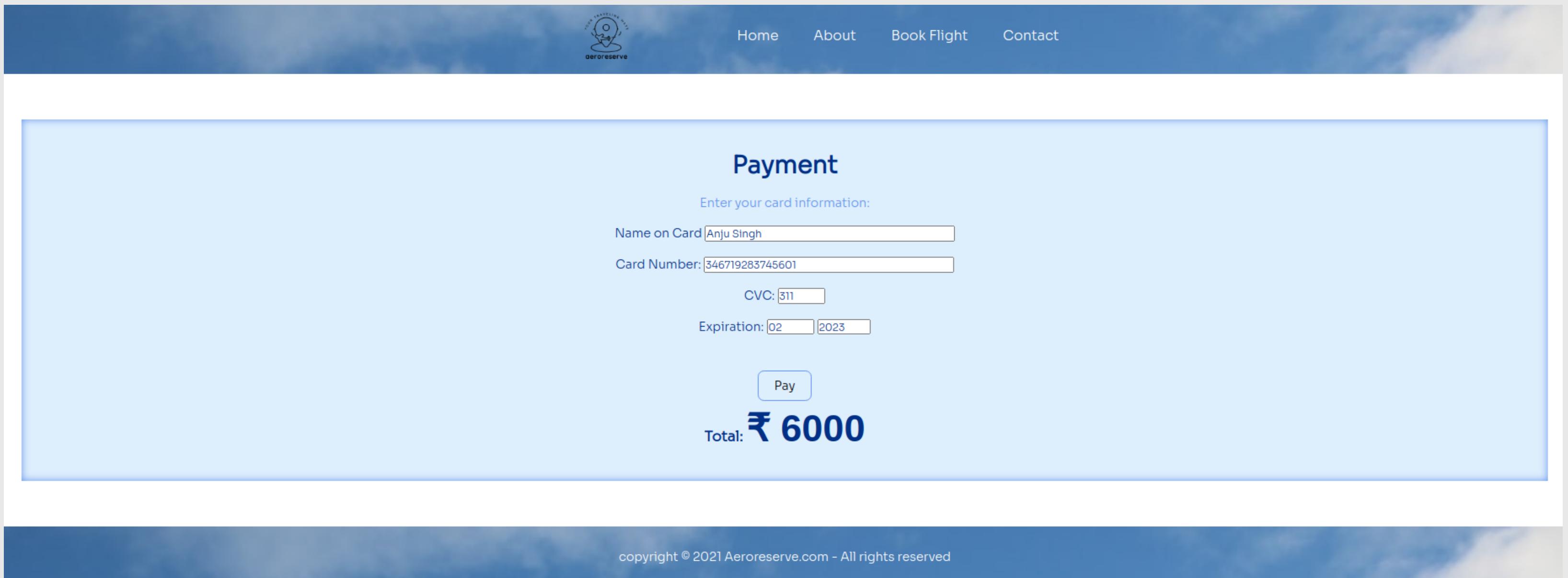
Also stored in current session of user.

The screenshot displays a flight booking interface with three main sections for entering passenger information:

- Passenger Details:** A header section with a placeholder "Enter details of the passengers".
- Passenger 1:** A form for the first passenger with fields for Name (Nikita Singh), Date of Birth (10/01/2021), and Aadhar Card Number (847583927457). Below the form are gender options: MALE, FEMALE, OTHER.
- Passenger 2:** A form for the second passenger with fields for Name (Akhilesh Vikram), Date of Birth (07/13/2021), and Aadhar Card Number (496736294960). Below the form are gender options: MALE, FEMALE, OTHER.

PAYMENT

Payment details of the card holder are to be entered.



The screenshot shows a payment page for Aeroreserve. At the top, there's a logo featuring a stylized airplane and the text "Your Travelling Mate" above "aeroreserve". Below the logo is a navigation bar with links for Home, About, Book Flight, and Contact. The main content area is titled "Payment" and contains fields for card information: Name on Card (Anju Singh), Card Number (346719283745601), CVC (311), and Expiration date (02/2023). A "Pay" button is located below these fields. The total amount is displayed as "Total: ₹ 6000". At the bottom of the page, a copyright notice reads "copyright © 2021 Aeroreserve.com - All rights reserved".

Payment

Enter your card information:

Name on Card: Anju Singh

Card Number: 346719283745601

CVC: 311

Expiration: 02 2023

Pay

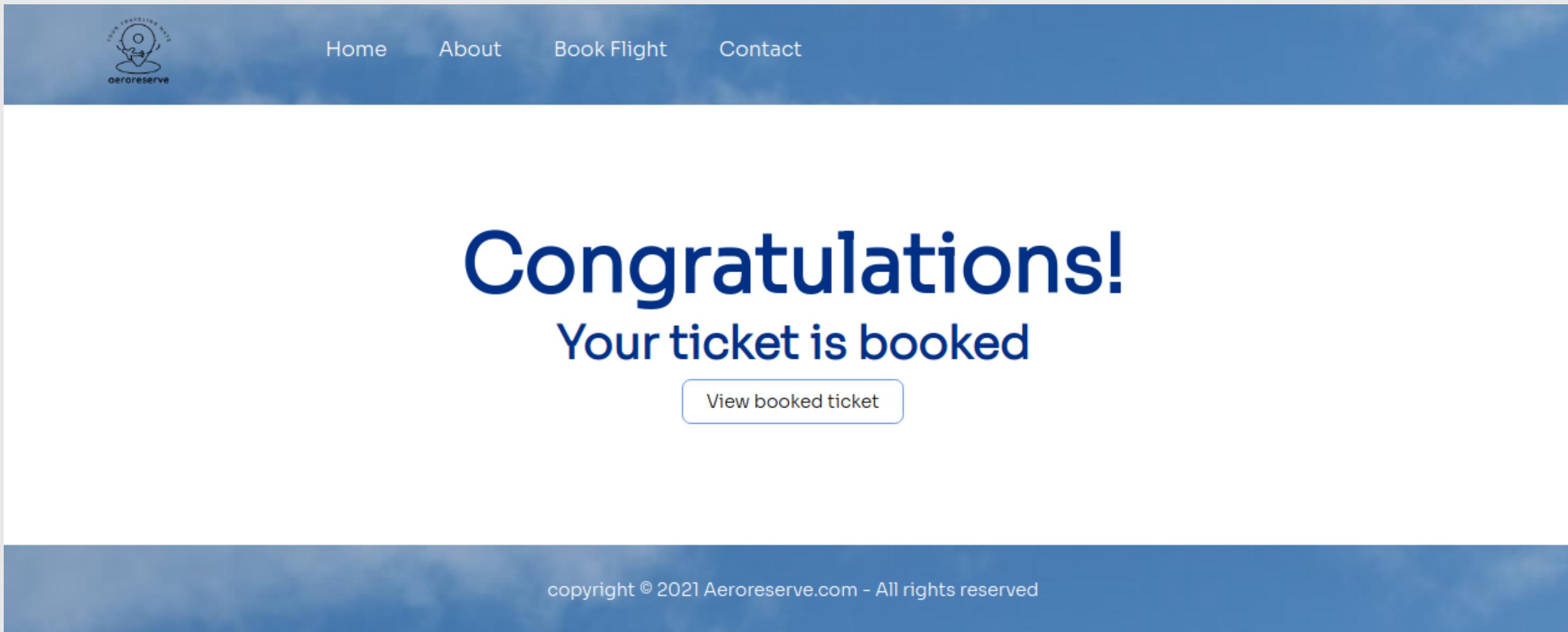
Total: ₹ 6000

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CONGRATS

While user enters payment details, payments_page function in views.py generates a random PNR of ticket (also stores in session) and after retrieving all info from current session, inserts into 'Ticket' model.

Thus ticket is book.



The screenshot shows a web page with a blue header bar. On the left is the Aeroreserve logo, which includes a stylized airplane icon and the text "AERORESERVE". To the right of the logo are four menu items: "Home", "About", "Book Flight", and "Contact". Below the header, the main content area has a white background. It features a large, bold, dark blue "Congratulations!" heading. Underneath it, in a slightly smaller dark blue font, is the text "Your ticket is booked". Below this text is a rectangular button with a thin blue border and white text that reads "View booked ticket". At the bottom of the page, there is a dark blue footer bar containing the copyright notice "copyright © 2021 Aeroreserve.com - All rights reserved" in white text.

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TICKETS BOOKED

Under tickets booked tab in navbar, all tickets booked under user's name are stored.
(By tickets = Ticket.objects.filter(username=request.user).select_related('fk_flights'))

The screenshot shows the Aeroreserve website interface. At the top, there is a dark blue header bar with the Aeroreserve logo (a stylized 'Q' with wings) on the left, and navigation links for Home, About, Book Flight, Contact, Tickets Booked, and Log Out on the right. Below the header, the main content area has a light blue background. The first section is titled "Tickets Booked". Underneath, there are two entries, each enclosed in a light blue box. Each entry contains a PNR number, a flight route, and a "SHOW" button. The first entry is for PNR 54581698 from England to Chicago. The second entry is for PNR 87642418 from Geneve to Ghana.

Tickets Booked

PNR: 54581698
England » Chicago

SHOW

PNR: 87642418
Geneve » Ghana

SHOW

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TICKET

To view ticket booked, we can either click on tickets booked or 'view booked ticket' in congrats page.

1. Ticket having PNR of particular session is stored with the aadhar card(SSN) of passenger. Thus single PNR can have multiple SSN relation in database.
2. Here we use reverse related object lookup to return all SSNs related to a particular PNR. They all are printed as passenger details.

The screenshot shows a flight booking confirmation page with a blue header and footer. The header includes a logo for 'aeroreserve', navigation links for 'Home', 'About', 'Book Flight', 'Contact', 'Tickets Booked', and 'Log Out'. The main content area displays flight details and passenger information.

PNR: 87642418

**Geneve -> 8:40 a.m.
Ghana -> 2:40 p.m.**

Passengers:

Name Akhilesh Vikram Nikita Singh	Date of birth July 13, 2021 Oct. 1, 2021	Gender male female
--	---	---------------------------------

Price: ₹ 6000/-

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URLS

```
urlpatterns = [
    path("", views.main, name="main"),
    path("login/", LoginView.as_view(), name="login"),
    path("register/", views.register, name="register"),
    path("logout/", LogoutView.as_view(next_page="login"), name="logout"),
    path("about", views.about, name="about"),
    path("contact", views.contact, name="contact"),
    path("index", views.index, name="index"),
    path("index/<slug:pk>", views.plane_detail_book, name="plane_detail_book"),
    path("payment", views.payments_page, name="payments_page"),
    path("congrats", views.congrats, name="congrats"),
    path("tickets/<int:pk>/", views.bookedtickets, name="bookedtickets"),
    path("ticketlist", views.ticketlist, name="ticketlist"),
    path("passenger_info", views.passenger_info, name="passenger_info")
]
```

A black and white photograph of a modern building with a balcony and palm trees.

THANK YOU!
