



SIMPLYFLY

PROJECT OVERVIEW

www.HEXWARE.com





PROJECT SUMMARY

- SimplyFly is a web-based air ticket booking application.
- Modules:
 - User Registration & Authentication
 - Flight Management
 - Route Management
 - Booking System
 - Seat Management



TECHNOLOGY STACK



1.

BACKEND: SPRING BOOT (REST APIS)

2.

SECURITY: JWT AUTHENTICATION

3.

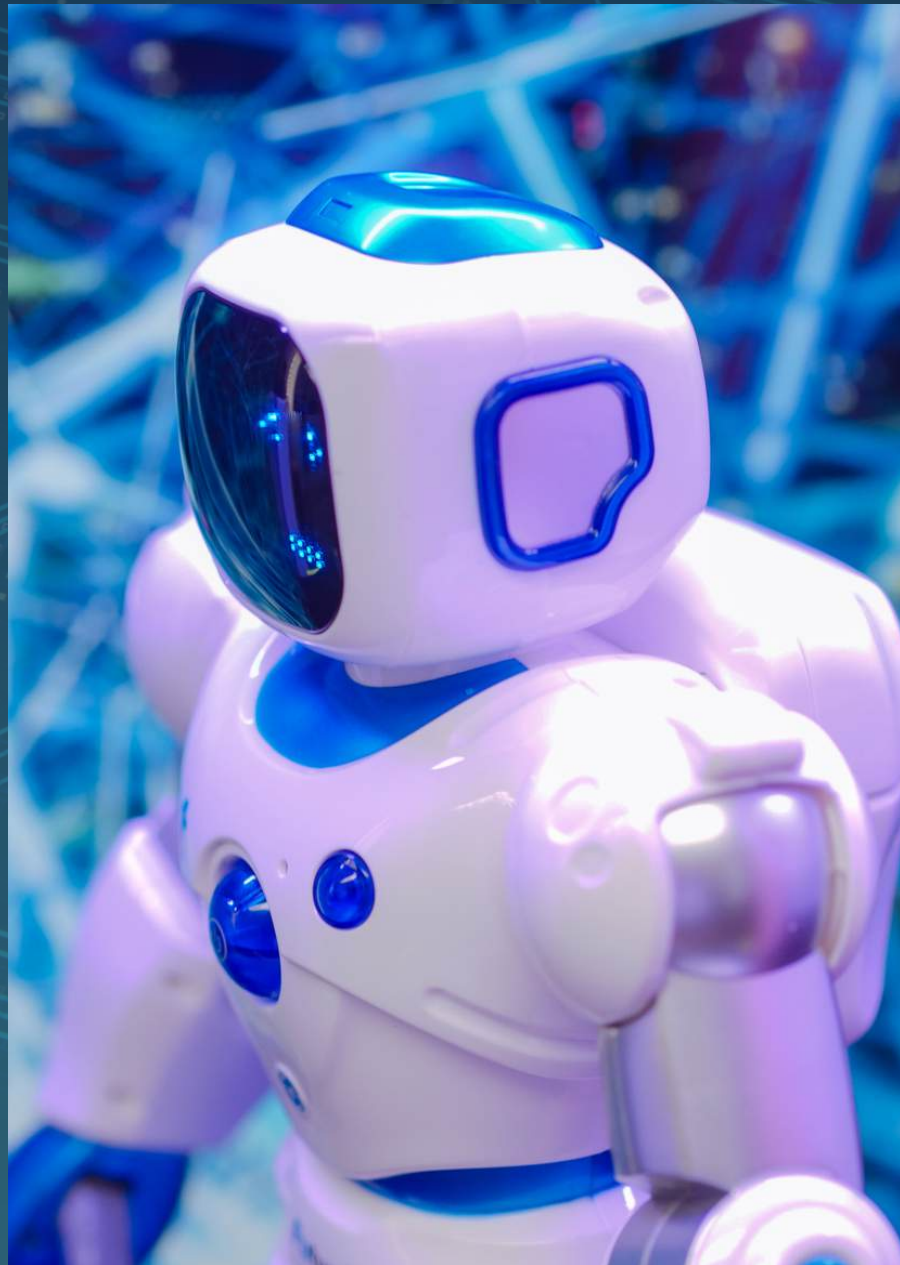
FRONTEND: REACT (NOT INCLUDED HERE)

4.

DATABASE: MYSQL

5.

API DOCS: SWAGGER/OPENAPI



KEY DTOS (DATA TRANSFER OBJECTS)

- RegisterRequest
- LoginRequest
- AuthResponse
- FlightRequest / FlightResponse
- BookingRequest / BookingResponse
- AddRouteRequest
- FlightSearchRequest
- SeatDTO



SAMPLE FLIGHT REQUEST PAYLOAD

- "flightNumber": "AI2025",
- "flightName": "Air India Express",
- "routeId": 10001,
- "totalSeats": 180,
- "fare": 4999.99,
- "baggageCheckin": "20kg",
- "baggageCabin": "7kg",
- "departureTime": "2025-06-28T09:30:00",





SECURITY & AUTHORIZATION

- JWT Token-based authentication
- Role-based access to endpoints
- Swagger integrated with security schemes





TESTING FLOW SECURITY



•1. REGISTER (POST
/API/AUTH/REGISTER)



LOGIN (POST
/API/AUTH/LOGIN)



. ADMIN/OWNER HAVE
ACCESS TO ALL ROUTES



•USE TOKEN TO:
•ADD FLIGHTS, ROUTES
•BOOK FLIGHTS
•VIEW BOOKINGS



OUTPUT (SCREEN SHOTS)



Swagger UI


SimplyFly/Simply Fly.docx at m

Download history

Swagger UI

(5485) How to Take a Scrolling

localhost:9999/swagger-ui/index.html#/

 Swagger
Supported by SMARTBEAR

/v3/api-docs

Explore

SimplyFly API

1.0 OAS 3.1

/v3/api-docs

Air Ticket Booking System

Servers

http://localhost:8081

Authorize

User Management

Manage users, roles, and profile updates

Flight Management

Create, update, and manage flights

Authentication

Handles user registration and login


Route Management

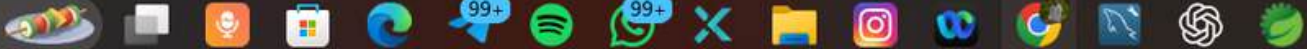
Manage air routes and route availability

Seat Management

Manage seat availability and selection

23°C
Partly sunny

 Search



ENG
US

6:55 AM
6/28/2025

MySQL Workbench

Local instance MySQL80 (simplyflyy)Local instance MySQL80 (sim... x

FileEditViewQueryDatabaseServerToolsScriptingHelp

SQL File 1* x

Limit to 1000 rows

157

158 • create database simplyflyyy;

159 • use simplyflyyy;

160

161 • drop database simplyflyyy;

162

163 • SELECT * FROM flights;

164 • SELECT * FROM routes;

Navigator

SCHEMAS

Filter objects

employeedbhexwarehwmydbproductdbprojectproject simplyfly simplyflyy

Tables

bookingsflightsroutesseatsusers

AdministrationSchemas

Information

Table: you can book your air_tickets here

Columns:

idbigint AI PK

booking_datetimestamp(6)

seat_countint

statusvarchar(255)

total_pricedouble

flight_idbigint

user_idbigint

Object InfoSession

SQL File 1* x

Limit to 1000 rows

157

158 • create database simplyflyyy;

159 • use simplyflyyy;

160

161 • drop database simplyflyyy;

162

163 • SELECT * FROM flights;

164 • SELECT * FROM routes;

Result Grid

Filter Rows:

Edit:Export/Import:Wrap Cell Content:

Result Grid

Form Editor

Field Types

ApplyRevertContext HelpSnippets

Output

Action Output

#TimeActionMessageDuration / Fetch

2208:34:42SELECT * FROM seats LIMIT 0, 1000540 row(s) returned0.000 sec / 0.000 sec

2308:34:46SELECT * FROM users LIMIT 0, 10007 row(s) returned0.000 sec / 0.000 sec

2408:34:51SELECT * FROM bookings LIMIT 0, 1000Error Code: 1146. Table 'simplyflyy.fbookings' doesn't exist0.000 sec

2508:35:00SELECT * FROM bookings LIMIT 0, 10001 row(s) returned0.000 sec / 0.000 sec

2608:35:14SELECT * FROM flights LIMIT 0, 10003 row(s) returned0.000 sec / 0.000 sec

2708:35:21SELECT * FROM routes LIMIT 0, 10002 row(s) returned0.000 sec / 0.000 sec

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

2

Windows Taskbar

8:35 AM 6/28/2025

MySQL Workbench

Local instance MySQL80 (simplyflyy)Local instance MySQL80 (sim...

FileEditViewQueryDatabaseServerToolsScriptingHelp

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SCHEMAS

Filter objects

employeedbhexwarehwmydbproductdbproject
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Tables
bookings
flights
routes
seats
users

Administration

Schemas

Information

Table: you can book your air_tickets here

Columns:
idbigint AI PK
booking_datetimestamp(6)
seat_countint
statusvarchar(255)
total_pricedouble
flight_idbigint
user_idbigint

Object Info

Session

SQL File 1*

cartcartcustomersorder_itemsorders

Limit to 1000 rows

Execute the selected portion of the script or everything, if there is no selection

```
158 • create database simplyflyyy;  
159 •  
160  
161 • drop database simplyflyyy;  
162  
163 • SELECT * FROM flights;  
164 • SELECT * FROM routes;  
165 • SELECT * FROM seats;
```

Result Grid

Filter Rows:

Edit:Export/Import:Wrap Cell Content:

	id	is_booked	seat_number	status	booking_id	flight_id
▶	1	0	S1	AVAILABLE	HULL	1
	2	0	S2	AVAILABLE	HULL	1
	3	0	S3	AVAILABLE	HULL	1
	4	0	S4	AVAILABLE	HULL	1
	5	0	S5	AVAILABLE	HULL	1
	6	0	S6	AVAILABLE	HULL	1
	7	0	S7	AVAILABLE	HULL	1
	8	0	S8	AVAILABLE	HULL	1
	9	0	S9	AVAILABLE	HULL	1
	10	0	S10	AVAILABLE	HULL	1
	11	0	S11	AVAILABLE	HULL	1

seats 20 ×

ApplyRevert

Context HelpSnippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 23	08:34:46	SELECT * FROM users LIMIT 0, 1000	7 row(s) returned	0.000 sec / 0.000 sec
✗ 24	08:34:51	SELECT * FROM fbookings LIMIT 0, 1000	Error Code: 1146. Table 'simplyflyy.fbookings' doesn't exist	0.000 sec
✓ 25	08:35:00	SELECT * FROM bookings LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
✓ 26	08:35:14	SELECT * FROM flights LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
✓ 27	08:35:21	SELECT * FROM routes LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
✓ 28	08:35:28	SELECT * FROM seats LIMIT 0, 1000	540 row(s) returned	0.000 sec / 0.000 sec

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2

2

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employeeedbhexwarehwmydbproductdbproject
simplyfly
simplyflyy
Tables
bookings
flights
routes
seats
users

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Information

Table: you can book your air_tickets here

Columns:
idbigint AI PK
booking_datetimestamp(6)
seat_countint
statusvarchar(255)
total_pricedouble
flight_idbigint
user_idbigint

Object Info

Session

SQL File 1*

cartcartcustomersorder_itemsorders

Limit to 1000 rows

Execute the selected portion of the script or everything, if there is no selection

create database simplyflyy;

drop database simplyflyy;

SELECT * FROM flights;

SELECT * FROM routes;

SELECT * FROM seats;

Result Grid

Filter Rows:

Edit:

Export/Import:

Wrap Cell Content:

Result Grid

Form Editor

Field Types

Apply

Revert

Context Help

Snippets

	id	is_booked	seat_number	status	booking_id	flight_id
▶	1	0	S1	AVAILABLE	HULL	1
	2	0	S2	AVAILABLE	HULL	1
	3	0	S3	AVAILABLE	HULL	1
	4	0	S4	AVAILABLE	HULL	1
	5	0	S5	AVAILABLE	HULL	1
	6	0	S6	AVAILABLE	HULL	1
	7	0	S7	AVAILABLE	HULL	1
	8	0	S8	AVAILABLE	HULL	1
	9	0	S9	AVAILABLE	HULL	1
	10	0	S10	AVAILABLE	HULL	1
	11	0	S11	AVAILABLE	HULL	1

seats 20 ×

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓	23 08:34:46	SELECT * FROM users LIMIT 0, 1000	7 row(s) returned	0.000 sec / 0.000 sec
✗	24 08:34:51	SELECT * FROM fbookings LIMIT 0, 1000	Error Code: 1146. Table 'simplyflyy.fbookings' doesn't exist	0.000 sec
✓	25 08:35:00	SELECT * FROM bookings LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
✓	26 08:35:14	SELECT * FROM flights LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
✓	27 08:35:21	SELECT * FROM routes LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
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FileEditViewQueryDatabaseServerToolsScriptingHelp

SQL File 1* x

Limit to 1000 rows

159 • use simplyflyyy;

160 Execute the selected portion of the script or everything, if there is no selection

161 • drop database simplyflyyy;

162

163 • SELECT * FROM flights;

164 • SELECT * FROM routes;

165 • SELECT * FROM seats;

166 • SELECT * FROM users;

Result Grid

Filter Rows:

Edit:

Export/Import:

Wrap Cell Content:

	id	address	contact_number	email	name	password	role
▶	1	22, RK Nagar, Coimbatore	9001122233	anu123@gmail.com	Ravi Kumar	\$2a\$10\$KQkZEBkZO0FcaLeaGNU5s.219oeyUyt...	USER
	80980	7,mahalingapuram	8098047670	ashwin123@gmail.com	Ashwin	Asensha@18	USER
	80981	12, Anna Nagar, Chennai	9876543210	arunkumar22@example.com	Arun Kumar	\$2a\$10\$jt1x2NxhgA8qNshkpUugJuTqOck4FOE...	USER
	80982	Updated Address	9876543210	ravi.admin@example.com	Anu Priya	\$2a\$10\$0RC8mK/kAy83qB6WeJcoS.UyHPQIqT...	ADMIN
	80983	15, Lakeview Street, Pollachi	9876543210	karthik.r.2025@gmail.com	Karthik R	\$2a\$10\$qIP.kxkoOr22vFxDNfqDaeGlz.0tUpmM...	USER
	80984	15, Lakeview Street, Pollachi	987654321	karthikr.2025@gmail.com	Karthik R	\$2a\$10\$XxEP3i6cgp0i0S2fUTSFye3Q1FJShoTZj...	USER
	80985	45, Anna Salai, Coimbatore	9090909090	divya.admin@example.com	Divya S	\$2a\$10\$shZI6Op64dFsxZBg1mUyyOg5P6d6Buo...	ADMIN
*	HULL	HULL	HULL	HULL	HULL	HULL	HULL

users 21 x

Apply

Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✖	24 08:34:51	SELECT * FROM fbookings LIMIT 0, 1000	Error Code: 1146. Table 'simplyflyy.fbookings' doesn't exist	0.000 sec
✔	25 08:35:00	SELECT * FROM bookings LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
✔	26 08:35:14	SELECT * FROM flights LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
✔	27 08:35:21	SELECT * FROM routes LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
✔	28 08:35:28	SELECT * FROM seats LIMIT 0, 1000	540 row(s) returned	0.000 sec / 0.000 sec
✔	29 08:35:38	SELECT * FROM users LIMIT 0, 1000	7 row(s) returned	0.000 sec / 0.000 sec

Navigation

SCHEMAS

Filter objects

employeedb

hexware

hw

mydb

productdb

project

simplyfly

simplyflyy

Tables

bookings

flights

routes

seats

users

Administration

Schemas

Information

Table: you can book your air_tickets here

Columns:

id

booking_date

seat_count

status

total_price

flight_id

user_id

bigint AI PK

datetime(6)

int

varchar(255)

double

bigint

bigint

Object Info

Session

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

2

Windows Taskbar

8:35 AM 6/28/2025

MySQL Workbench

Local instance MySQL80 (simplyfly); Local instance MySQL80 (sim...

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

employeedb
hexware
hw
mydb
productdb
project
simplyfly
simplyfly

Tables

bookings
flights
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seats
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Information

Table: you can book your air_tickets here

Columns:
id bigint AI PK
booking_date datetime(6)
seat_count int
status varchar(255)
total_price double
flight_id bigint
user_id bigint

Object Info

Session

SQL File 1* x cart cart customers order_items orders

Limit to 1000 rows

160
161 • dr Execute the selected portion of the script or everything, if there is no selection
162
163 • SELECT * FROM flights;
164 • SELECT * FROM routes;
165 • SELECT * FROM seats;
166 • SELECT * FROM users;
167 • SELECT * FROM bookings;

Result Grid

Filter Rows:

Edit: Export/Import: Wrap Cell Content:

	id	booking_date	seat_count	status	total_price	flight_id	user_id
▶	1	2025-06-28 08:26:26.795849	2	BOOKED	6998	2	1
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

bookings22 x

Apply Revert

Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 25	08:35:00	SELECT * FROM bookings LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
✓ 26	08:35:14	SELECT * FROM flights LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
✓ 27	08:35:21	SELECT * FROM routes LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
✓ 28	08:35:28	SELECT * FROM seats LIMIT 0, 1000	540 row(s) returned	0.000 sec / 0.000 sec
✓ 29	08:35:38	SELECT * FROM users LIMIT 0, 1000	7 row(s) returned	0.000 sec / 0.000 sec
✓ 30	08:35:46	SELECT * FROM bookings LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

2

Windows Taskbar

8:35 AM 6/28/2025

SimplyFly/Simply Fly.docx at m...Download historyPicPick - All-in-one Graphic De...SimplyFly/README.md at mainSwagger UI

localhost:8081/swagger-ui/index.html#/User%20Management/getCurrentUser

Curl

```
curl -X 'GET' \
  'http://localhost:8081/api/users/me' \
  -H 'accept: */*' \
  -H 'Authorization: Bearer eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiJkaXZ5YS5hZG1pbk8leGFtcGxlLmNvbSIzInJvbGUiOiJBRE1JTjIiIsIm1hdCI6MTc1MTA3OTYxMSwiZXhwIjoxNzUxMTE1NjExfQ.7I7ExZEsgqMS00bMLGeCxSqXBuRfhzkxeUBTNoUr9Cc
```

Request URL

http://localhost:8081/api/users/me

Server response

CodeDetails

200

Response body

```
{
  "id": 80985,
  "name": "Divya S",
  "email": "divya.admin@example.com",
  "contactNumber": "9090909090",
  "address": "45, Anna Salai, Coimbatore",
  "role": "ADMIN"
}
```

Download

Response headers

```
cache-control: no-cache,no-store,max-age=0,must-revalidate
connection: keep-alive
content-type: application/json
date: Sat,28 Jun 2025 03:06:09 GMT
expires: 0
keep-alive: timeout=60
pragma: no-cache
transfer-encoding: chunked
x-content-type-options: nosniff
x-frame-options: DENY
x-xss-protection: 0
```

Responses

Code	Description	Links
200	OK	No links

2

ENG US8:36 AM6/28/2025

SimplyFly/Simply Fly.docx at main · Download history · PicPick - All-in-one Graphic De · SimplyFly/README.md at main · Swagger UI

localhost:8081/swagger-ui/index.html#/Flight%20Management/getAllFlights

Request URL

http://localhost:8081/api/flights

Server response

Code

Details

200

Response body

```
[
  {
    "id": 1,
    "flightNumber": "AI2025",
    "flightName": "Air India Express",
    "origin": "Chennai",
    "destination": "Mumbai",
    "fare": 4999.99,
    "departureTime": "2025-06-28T09:30:00",
    "arrivalTime": "2025-06-28T12:15:00"
  },
  {
    "id": 2,
    "flightNumber": "6E102",
    "flightName": "IndiGo",
    "origin": "string",
    "destination": "string",
    "fare": 3499,
    "departureTime": "2025-06-28T07:00:00",
    "arrivalTime": "2025-06-28T08:15:00"
  },
  {
    "id": 3,
    "flightNumber": "6E102",
    "flightName": "IndiGo",
    "origin": "string",
    "destination": "string",
    "fare": 3499
  }
]
```

Download

Response headers

```
cache-control: no-cache,no-store,max-age=0,must-revalidate
connection: keep-alive
content-type: application/json
date: Sat,28 Jun 2025 03:06:26 GMT
expires: 0
keep-alive: timeout=60
pragma: no-cache
transfer-encoding: chunked
```

2

ENG US 8:36 AM 6/28/2025

SimplyFly/Simply Fly.docx at m...Download historyPicPick - All-in-one Graphic De...SimplyFly/README.md at mainSwagger UI

localhost:8081/swagger-ui/index.html#/Authentication/register

User ManagementManage users, roles, and profile updates

Flight ManagementCreate, update, and manage flights

AuthenticationHandles user registration and login

POST/api/auth/register

ParametersTry it outReset

No parameters

Request bodyrequiredapplication/json

Example Value | Schema

```
{  "name": "Divya S",  "email": "divya.admin@example.com",  "password": "Divya@Admin123",  "contactNumber": "9090909090",  "address": "45, Anna Salai, Coimbatore",  "role": "ADMIN"}}
```

Responses

Curl

2

ENG US8:36 AM6/28/2025

SimplyFly/Simply Fly.docx at m...

Download history

PicPick - All-in-one Graphic De...

SimplyFly/README.md at main...

Swagger UI

localhost:8081/swagger-ui/index.html#/Authentication/login

Responses

Curl

```
curl -X 'POST' \
  'http://localhost:8081/api/auth/login' \
  -H 'accept: */*' \
  -H 'Authorization: Bearer eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiJhbnUxMjZlbnV5Z29tIiwicm9sZSI6IiVTRVVIiLCJpYXQiOi0jE3NTEwNzkzNTMsImV4cCI6MTc1MTEwNTM3O. zdQya8jSEodPZFRG14Sm3kg-yysRgmBV2djlcfIuIVY' \
  -H 'Content-Type: application/json' \
  -d '{
    "email": "divya.admin@example.com",
    "password": "Divya@Admin123"
  }'
```

Request URL

http://localhost:8081/api/auth/login

Server response

Code	Details
200	<div><div>Response body</div><div><pre>{ "token": "eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiJkaXZ5S5hZG1pbk8leGFtcGxlLnV5Z29tIiwicm9sZSI6IiVTRVVIiLCJpYXQiOi0jE3NTEwNzkzNTMsImV4cCI6MTc1MTEwNTM3O. 7I7ExZEsgqMS00bMLGeCxSqXBuRfhzkeUBTNoUr9Cc", "role": "ADMIN", "message": "Login successful" }</pre></div><div><div>Download</div></div></div> <div><div>Response headers</div><div><pre>cache-control: no-cache,no-store,max-age=0,must-revalidate connection: keep-alive content-type: application/json date: Sat,28 Jun 2025 03:00:11 GMT expires: 0 keep-alive: timeout=60 pragma: no-cache transfer-encoding: chunked x-content-type-options: nosniff x-frame-options: DENY x-xss-protection: 0</pre></div></div>

Responses

2

Windows Taskbar

8:36 AM 6/28/2025

SimplyFly/Simply Fly.docx at m...

Download history

PicPick - All-in-one Graphic De...

SimplyFly/README.md at main...

Swagger UI

localhost:8081/swagger-ui/index.html#/Seat%20Management/getSeatsByFlight

Curl

```
curl -X 'GET' \
  'http://localhost:8081/api/seats/flight/2' \
  -H 'accept: */*' \
  -H 'Authorization: Bearer eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiJkaXZ5S5hZG1pbk8leGFtcGxlLnNvbSI6InJvbGU0IjBRE1JT1iIsIm1hdCI6MTc1MTA3OTYxMSwiZXhwIjoxNzUxMTE1NjExfQ.7I7ExZEsgqMS00bMLGeCxSqXBuRfhzkxeUBTN0Ur9Cc
```

Request URL

```
http://localhost:8081/api/seats/flight/2
```

Server response

Code

Details

200

Response body

```
[
  {
    "id": 183,
    "seatNumber": "S3",
    "booked": false
  },
  {
    "id": 184,
    "seatNumber": "S4",
    "booked": false
  },
  {
    "id": 185,
    "seatNumber": "S5",
    "booked": false
  },
  {
    "id": 186,
    "seatNumber": "S6",
    "booked": false
  },
  {
    "id": 187,
    "seatNumber": "S7",
    "booked": false
  },
  {
    "id": 188,
    "seatNumber": "S8",
    "booked": false
  }
]
```

Download

Response headers

2

Windows Taskbar

8:37 AM 6/28/2025



THANK YOU!

BY- S.NISHANTH

