Use cases:

localhost3000/home: homepage where user can either login, register or search for the flight without logging in. Can view 30days flights

Query used: "SELECT * FROM Flight" (I filtered each flight afterwards. See app.get("/home) in the backend)

/login: user can either login as client or staff.

/clientlogin:

Query: `SELECT * FROM Customer WHERE email = '\${email}'`

/stafflogin:

`SELECT * FROM Airline_Staff WHERE username = '\${username}'`

/register: can register as client or staff.

/clientregister:

INSERT INTO Customer

(email, password, name, building_num, street, city, state, phone_num, passport_num, passport_exp_date, passport_country, date_of_birth)

VALUES ('\${email}', '\${hashedPassword}', '\${name}', '\${building}', '\${street}', '\${city}', '\${state}', '\${phone}', '\${passportnumber}', '\${passportexpire}', '\${passportcountry}', '\${birthday}')`

/staffregister:

INSERT INTO Airline Staff

(airline_name, username, password, first_name, last_name, date_of_birth) VALUES ('\${airline_name}', '\${name}', '\${hashedPassword}', '\${first_name}', '\${last_name}', '\${date_of_birth}')`

/publicsearch: can find flights via form

`SELECT * FROM Flight WHERE dept_airport='\${sourceCity}' AND arr_airport ='\${destination}'`

/clienthomepage: main menu for clients

```
/viewflight: client can see their purchased flights
```

```
`SELECT*
     FROM Flight
     WHERE airline_name = ?
     AND flight_num IN
       SELECT Ticket.flight_num
       FROM Ticket
       WHERE Ticket.ID IN
         SELECT Purchase.ticket_id
         FROM Purchase
         WHERE Purchase.email = ?
      )
     ),
```

/clientsearch: client can search flight and purchase tickets for the flight

/purchaseticket: client can purchase via card info

```
`INSERT INTO Ticket (name_on_card, card_number, card_type, exp_date, cust_email,
airline_name, flight_num, sold_price, ID, purchase_date, purchase_time)
  VALUES (?,?,?,?,?,?,?,?,?)'
```

/rate: client can rate/comment their flights

`INSERT INTO Interact (email, flight_num, airline_name, dept_date, dept_time, comment, rating)

```
VALUES (?, ?, ?, ?, ?, ?, ?)`
```

/review: client can view their rate/comment for the flights

`SELECT * FROM Interact WHERE email ='\${email}'`

/trackspending: client can view their flight spending

`SELECT * FROM Ticket WHERE ID IN (SELECT Ticket.ID FROM Ticket WHERE Ticket.ID IN (SELECT Purchase.ticket_id FROM Purchase WHERE email = ?)) AND purchase_date BETWEEN ? AND ?`

/staffhomepage: main menu for staffs

/staffviewflight: staff can view airline's flights.

/createflight: staff can create flight via form

```
INSERT INTO Flight
```

```
(flight_num, airline_name, dept_airport, arr_airport, dept_date, dept_time, arr_date, arr_time, airplane_id, flight_status, base_price)

VALUES (?, ?, ?, ?, ?, ?, ?, ?, ?)`
```

/addairplane: staff can add airplane via form

```
INSERT INTO Airplane
```

```
(ID, airline_name, seat_num, manufacture_company, age_plane) VALUES (?, ?, ?, ?, ?)`
```

/addairport: staff can add airport via form

```
`INSERT INTO Airport
(code, airport_name, city)
VALUES (?, ?, ?)`,
[
    req.body.code,
    req.body.airport_name,
    req.body.city,
]
```

/added: staff can view added flights

`SELECT * FROM Flight WHERE airline_name = '\${airline_name}'`

/changestatus: staff can change status of the flight via form

`UPDATE Flight SET flight_status = ? WHERE flight_num = ? AND airline_name = ? AND dept_airport = ? AND arr_airport = ? AND dept_date = ? AND dept_time = ?`,

```
req.body.flight_status,
   req.body.flight_num,
   reg.body.airline name,
   req.body.dept_airport,
   req.body.arr_airport,
   req.body.dept_date,
   req.body.dept_time,
/frequentcustomer: staff can view the most frequent customer info.
`SELECT COUNT(*) AS purchase_num, Customer.email
  FROM Customer, Purchase
  WHERE Customer.email = Purchase.email
  AND Purchase.ticket_id IN
    SELECT Ticket.ID
    FROM Ticket
    WHERE Ticket.airline_name = '${airline_name}'
  )
  GROUP BY Customer.email
`SELECT*
       FROM Customer
        WHERE email = ?`
/viewflightrating: staff can view a flight's rating and comment by specific customer.
`SELECT * FROM Interact WHERE airline_name = ? AND flight_num = ?`
/viewrevenue: staff can view airline's revenue
`SELECT *
  FROM Ticket
  WHERE Ticket.airline_name = '${airline_name}'`
/viewticketreport: staff can view airline's ticket reports.
`SELECT * FROM Ticket WHERE airline_name = '${airline_name}'`
```