Frontend

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Flight Search</title>

<style>

body {

font-family: Arial, sans-serif;

margin: 20px;

line-height: 1.6;

max-width: 600px;

margin: 0 auto;

}

.info-container {

margin-top: 20px;

padding: 10px;

border: 1px solid #ccc;

border-radius: 5px;

background-color: #f9f9f9;

}

.error {

color: red;

display: none;

}

form {

background-color: #f4f4f4;

padding: 20px;

border-radius: 5px;

}

select, input, button {

width: 100%;

padding: 10px;

margin: 5px 0;

box-sizing: border-box;

}

button {

background-color: #4CAF50;

color: white;

border: none;

cursor: pointer;

transition: background-color 0.3s;

}

button:hover {

background-color: #45a049;

}

</style>

</head>

<body>

<h1>Flight Search</h1>

<form id="flightForm">

<label for="origin">Origin:</label>

<select id="origin" name="origin" required>

<option value="JFK">New York (JFK)</option>

<option value="LAX">Los Angeles (LAX)</option>

<option value="ORD">Chicago (ORD)</option>

<option value="ATL">Atlanta (ATL)</option>

<option value="SFO">San Francisco (SFO)</option>

</select>

<label for="destination">Destination:</label>

<select id="destination" name="destination" required>

<option value="LAX">Los Angeles (LAX)</option>

<option value="ORD">Chicago (ORD)</option>

<option value="JFK">New York (JFK)</option>

<option value="ATL">Atlanta (ATL)</option>

<option value="SFO">San Francisco (SFO)</option>

</select>

<label for="date">Date:</label>

<input type="date" id="date" name="date" required>

<label for="cabinClass">Cabin Class:</label>

<select id="cabinClass" name="cabinClass" required>

<option value="economy">Economy</option>

<option value="business">Business</option>

<option value="first">First Class</option>

</select>

<label for="passengers">Number of Passengers:</label>

<select id="passengers" name="passengers" required>

<option value="1">1</option>

<option value="2">2</option>

<option value="3">3</option>

<option value="4">4</option>

<option value="5">5</option>

<option value="6">6</option>

<option value="7">7</option>

<option value="8">8</option>

<option value="9">9</option>

<option value="10">10</option>

</select>

<button type="submit">Search Flights</button>

</form>

<div class="info-container" id="infoContainer" style="display: none;">

<h2>Available Flights</h2>

<ul id="flightInfo"></ul>

</div>

<p class="error" id="errorMessage"></p>

<script>

*document*.getElementById('flightForm').addEventListener('submit', async (event) => {

event.preventDefault();

const formData = new FormData(event.target);

const params = *Object*.fromEntries(formData.entries());

const errorMessage = *document*.getElementById('errorMessage');

const infoContainer = *document*.getElementById('infoContainer');

const flightInfo = *document*.getElementById('flightInfo');

// Reset previous states

errorMessage.textContent = '';

errorMessage.style.display = 'none';

infoContainer.style.display = 'none';

flightInfo.innerHTML = '';

try {

const response = await fetch('./get\_flights.php', {

method: 'POST',

headers: { 'Content-Type': 'application/json' },

body: *JSON*.stringify(params)

});

if (!response.ok) {

throw new Error(`HTTP error! Status: ${response.status}`);

}

Backend

<?php

header('Content-Type: application/json');

header('Access-Control-Allow-Origin: \*');

header('Access-Control-Allow-Methods: POST, GET, OPTIONS');

header('Access-Control-Allow-Headers: Content-Type');

// Database connection details

$servername = "localhost";

$username = "root";

$password = "";

$dbname = "flights\_db";

// Suppress error output

ini\_set('display\_errors', 0);

ini\_set('log\_errors', 1);

error\_log("Error in get\_flights.php");

// Connect to the database

$conn = new mysqli($servername, $username, $password, $dbname);

// Check connection

if ($conn->connect\_error) {

echo json\_encode(["error" => "Database connection failed: " . $conn->connect\_error]);

exit;

}

// Retrieve input

$input = json\_decode(file\_get\_contents('php://input'), true);

$origin = $conn->real\_escape\_string($input['origin'] ?? null);

$destination = $conn->real\_escape\_string($input['destination'] ?? null);

$date = $conn->real\_escape\_string($input['date'] ?? null);

$cabinClass = $conn->real\_escape\_string($input['cabinClass'] ?? 'economy');

$passengers = $conn->real\_escape\_string($input['passengers'] ?? 1);

if (!$origin || !$destination || !$date || !$cabinClass || !$passengers) {

echo json\_encode(["error" => "Missing required input fields."]);

exit;

}

// Fetch flight data from the Skyscanner API

$apiUrl = "https://sky-scanner3.p.rapidapi.com/flights/search-multi-city";

$apiHeaders = [

"X-RapidAPI-Host: sky-scanner3.p.rapidapi.com",

"X-RapidAPI-Key: YOUR\_RAPIDAPI\_KEY",

"Content-Type: application/json"

];

$requestBody = json\_encode([

"trips" => [

[

"origin" => $origin,

"destination" => $destination,

"date" => $date

]

],

"passengers" => (int)$passengers,

"cabinClass" => $cabinClass

]);

$ch = curl\_init();

curl\_setopt($ch, *CURLOPT\_URL*, $apiUrl);

curl\_setopt($ch, *CURLOPT\_RETURNTRANSFER*, true);

curl\_setopt($ch, *CURLOPT\_HTTPHEADER*, $apiHeaders);

curl\_setopt($ch, *CURLOPT\_POST*, true);

curl\_setopt($ch, *CURLOPT\_POSTFIELDS*, $requestBody);

$response = curl\_exec($ch);

$httpCode = curl\_getinfo($ch, *CURLINFO\_HTTP\_CODE*);

$curlError = curl\_error($ch);

curl\_close($ch);

if ($httpCode === 200 && $response) {

$flights = json\_decode($response, true);

// Insert flights into the database

if (!empty($flights['data'])) {

foreach ($flights['data'] as $flight) {

$departure = $conn->real\_escape\_string($flight['origin']['name']);

$arrival = $conn->real\_escape\_string($flight['destination']['name']);

$airline = $conn->real\_escape\_string($flight['airline']);

$price = $conn->real\_escape\_string($flight['price']);

$sql = "INSERT INTO flights (departure, arrival, airline, price, passengers) VALUES ('$departure', '$arrival', '$airline', '$price', $passengers)";

$conn->query($sql);

}

}

echo json\_encode(["flights" => $flights['data']]);

} else {

echo json\_encode(["error" => "Unable to fetch flight information. HTTP Status: $httpCode. Curl error: $curlError"]);

}

$conn->close();

?>

Sql server code

*-- Create the database*

CREATE DATABASE IF NOT EXISTS flights\_db;

USE flights\_db;

*-- Drop the table if it exists to ensure clean slate*

DROP TABLE IF EXISTS flights;

*-- Create table for flight data with additional fields*

CREATE TABLE flights (

id INT AUTO\_INCREMENT PRIMARY KEY,

departure VARCHAR(100),

arrival VARCHAR(100),

airline VARCHAR(100),

price VARCHAR(50),

passengers INT,

flight\_date DATE

);

*-- Optional: Add some sample data*

INSERT INTO flights (departure, arrival, airline, price, passengers, flight\_date) VALUES

('JFK', 'LAX', 'Delta', '350.00', 1, CURDATE()),

('LAX', 'JFK', 'United', '375.50', 2, CURDATE()),

('ORD', 'ATL', 'American', '280.75', 1, CURDATE());