Final Project

Project Overview

The goal of this project is to create a simple airline ticket reservation page using HTML, CSS, JavaScript, and Node.js. The project will consist of three main parts:

1. Design a simple HTML page with a form to allow users to input their email address and flight date and reserve a ticket.

2. Use JavaScript to add functionality to the form to allow users to select a round-trip flight and enter a return date.

3. Write an Express app to serve the HTML, CSS, and JavaScript files created in parts 1 and 2 and create an endpoint to handle the submission of the reservation ticket.

Part 1: Designing the HTML Page

In this part of the project, you will create a simple HTML page with a form to allow users to input their email address and flight date and reserve a ticket, and style it using CSS. The page should consist of the following elements:

1. A header image related to airlines

2. A header title "Airline Ticket Reservation"

3. A form with the following inputs:

1.

   o Email address input (type: email)

   o Flight date input (type: date)

   o Reserve ticket button (type: submit)

4. The header and the form should be centered on the page and the form should have a border around it.

The CSS should be in a separate file from the HTML and JavaScript.

Part 2: Adding Functionality with JavaScript

In this part of the project, you will use JavaScript to add functionality to the form to allow users to select a round-trip flight and enter a return date if needed. Additional to the current form fields, the form should consist of the following elements:

- A checkbox labeled "Round-Trip"

- An input for return flight date (type: date)

When the user checks the Round-Trip checkbox, the return flight date input should appear.

When the user unchecks the checkbox, the return flight date input should disappear.

Part 3: Creating the Express App

In this part of the project, you will create an Express app to serve the HTML, CSS, and JavaScript files created in parts 1 and 2 and create an endpoint to handle the submission of the reservation ticket. The app should consist of the following elements:

1. An endpoint that serves the HTML, CSS, and JavaScript files created in parts 1 and 2 on the root endpoint path.

2. An endpoint that handles the submission of the reservation ticket.

3. The form submission endpoint should validate that the flight date and the return flight date (if provided) are in the future, and if it's not it should respond with a simple HTML page that informs the user that the ticket reservation isn't successful due to invalid dates.

4. If the form data is valid:

    a. The endpoint should send a confirmation email to the email address provided by the user. The email should contain a brief message thanking the user for their reservation. **Hint: Refer to week 8 for sending emails.**

    b. The endpoint should respond with a simple thank you HTML page

5. Modify the HTML form to submit the user input to the form submission endpoint you created.

Additional Requirements

1. The HTML, CSS, and JavaScript should be separated into their respective files.

2. The form should have some basic client-side validation to ensure that the email address is valid.

Deliverables

Upon completion of the project, you should provide the following deliverables:

*   A compressed file containing the Express app folder for Part 3, which serves the HTML, CSS, and JavaScript files from Parts 1 and 2. The Express app folder should include all the necessary HTML, CSS, and JavaScript files created in Parts 1 and 2.

*   A README file describing the project and how to run the Express app locally, including any dependencies that need to be installed.