# Front-End UI/UX Mini

# **Project**

# Holiday Planner

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**Course:** UI/UX Design Fundamentals

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Date of Submission: 26/09/2025

#### **Abstract**

This project is a modern, interactive holiday planner web application designed to help users effortlessly explore, plan, and budget vacations. The main goal is to provide an all-in-one platform where users can search destinations by interest, manage itineraries, and keep track of expenses with real-time updates. Core technologies used include HTML5 for structured content, CSS3 for responsive and attractive design, JavaScript (with jQuery) for dynamic interactivity, and Bootstrap for a seamless and modern user experience. The final outcome is a practical and visually appealing tool that simplifies trip planning, empowering users to make informed travel decisions and create memorable journeys efficiently.

# **Objectives**

- Design an intuitive, engaging user interface that allows users to explore diverse travel interests easily and supports dynamic trip planning.
- Develop a fully responsive layout using HTML5 and CSS3, ensuring the site adapts well to different devices from desktops to mobiles.
- Use semantic HTML5 elements such as <header>, <nav>, <main>, <section>, and <footer> to organize content clearly and enhance SEO and accessibility.
- Apply consistent CSS branding with gradients, shadows, and palette colors to reflect a
  cohesive and modern visual identity, using techniques like Flexbox and Grid for
  layout flexibility.
- Implement interactive JavaScript (with jQuery and Bootstrap) components for features like destination searching, itinerary updating, and budget calculations, delivering a smooth user experience.
- Ensure accessibility and readability by maintaining appropriate color contrast, font sizes, and responsive typography for easy use across all platforms and by various user groups.

### **Scope of the Project**

- The project focuses exclusively on the front-end design and user interface aspects of a holiday planner web application.
- It does not include any back-end server-side programming or JavaScript
  frameworks/libraries beyond basic interactive scripting (such as jQuery and Bootstrap
  scripts already utilized).
- The website is fully intended for desktop, tablet, and mobile viewports, ensuring a
  responsive design that adapts seamlessly across devices using HTML5 and CSS3
  techniques like media queries and flexible layouts.
- Only open-source tools and pure code are used (HTML, CSS, JavaScript, Bootstrap, iQuery), with no proprietary or paid libraries integrated.
- The main deliverables include structured semantic HTML, styled and responsive layouts, interactive destination searches, itinerary and budget updating done on the client side.
- Boundaries exclude server-side processing, database management, and advanced backend API integrations, focusing purely on client-side user interactions.

# **Tools and Technology used**

Tool/Technology	Purpose
HTML5	Markup and content structure
CSS3	Styling and responsive layout
JavaScript	Interactive features and logic
Bootstrap	Responsive UI components

Tool/Technology	Purpose
jQuery	DOM manipulation and event handling
VS Code	Code editing and development
Chrome DevTools	Testing and debugging

## **HTML Structure Overview**

- The site uses semantic HTML5 tags to structure content clearly:
  - <header> for the site branding and top navigation bar.
  - <nav> containing a navigation menu presented with lists and anchor links (<a href="#section">) that enable smooth scrolling to different page sections.
  - <main> to hold the primary content of the webpage.
  - Multiple <section> elements each representing reusable parts of the site like
     About, Projects, and Contact.
  - <footer> for closing information or credits.
- Navigation menu is implemented as a list () with anchor tags pointing to internal sections for smooth scrolling experiences, aligning with accessibility and usability best practices.
- This semantic approach improves structure, SEO, and accessibility while supporting clean, maintainable code organization. Based on your website's index.html file, here is an overview of the HTML structure:
- Your HTML uses semantic tags such as <header>, <nav>, <main>, <section>,
   and <footer> to define the layout and improve accessibility and SEO.
- The site content is organized into reusable sections under <section> tags, including About, Projects, and Contact, each with their own unique IDs.

- Navigation is implemented using an unordered list 

   with anchor links <a</li>
   href="#sectionID"> that enable smooth scrolling to different page sections within the same document.
- This structure supports a clear, accessible user interface that is easy to maintain and enhances user navigation and experience.

#### **CSS Styling Strategy**

- The site uses an external stylesheet styles.css linked from the HTML to separate presentation from content.
- The CSS is well-organized with comments dividing sections such as root variables, typography, navbar, cards, buttons, footer, and responsive rules.
- CSS Variables define primary colors (#218A98, #6CB27C, #FBC25C), gradients, shadows, and border radius to maintain consistent branding and allow easy theme changes.
- Flexbox is used for alignment and layout in navigation bars (.navbar), project cards, budget tables, and form controls.
- CSS Grid is present for arranging card grids and other multi-column layouts elegantly.
- Media Queries control responsive breakpoints, adjusting padding, margins, font sizes, flex-direction, and grid layouts for mobile, tablet, and desktop views.
- Interactive elements feature hover effects and smooth transitions (e.g., button backgrounds, card shadows) for enhanced UX.
- The design follows a mobile-first approach, with styles for small screens first, then enhanced rules for larger viewports via min-width media queries.
- Consistent use of modern CSS3 properties results in a clean, visually appealing, user-friendly design aligned with your brand.

# **Key Features**

Feature	Description
Responsive Design	Layout adapts seamlessly to all screen sizes using Flexbox, Grid, and media queries for consistency across devices.
Smooth Navigation	Fixed top navigation bar uses anchor links ( <a href="#section">) for smooth, in-page scrolling.</a>
Project Cards	Destinations and projects are displayed using Flexbox-based card layouts with visually engaging hover effects and transitions.
Contact Form (non-functional)	Form structure is present with input fields and a button for user inquiries, styled for clarity but with no backend processing.
Accessible Fonts & Colors	Uses high contrast color variables and readable typography, ensuring legibility and accessibility for all users.

# **Challenges Faced and Solutions**

Challenge	Solution
Overlapping elements on small screens	Used CSS media queries to stack elements vertically and adjust padding/margins for clean mobile layouts.
Difficulty aligning items using float	Shifted layout techniques from old CSS floats to modern Flexbox and CSS Grid, simplifying alignment, spacing, and responsiveness.

	Adopted relative units (em/rem) in CSS for font sizes and spacing, delivering
Typography scaling issue	consistent scaling and readability across devices

#### **Outcome**

- Achieved a clean, consistent, and visually engaging front-end layout that presents travel planning content clearly and attractively.
- All key user interface components including destination search, itinerary planner, budget tracker, and navigation function as intended using a combination of HTML, CSS, and client-side JavaScript.
- Gained deeper understanding and practical experience in building responsive layouts using Flexbox and Grid, and maintaining UI hierarchy for optimal user experience across devices.
- Improved skills in CSS theming using variables, media queries for responsiveness, and interactive effects like hover transitions, ensuring user engagement and accessibility.

# **Future Enhancements**

- Add JavaScript interactivity: Implement form validation for the contact and budget forms to ensure user input correctness before submission; dynamically update content such as itinerary summaries and expense totals without requiring page reloads.
- Integrate animations and transitions: Enhance user engagement by adding smooth animated effects on buttons, cards, and page transitions to make the UI feel more responsive and polished.
- Backend integration for form submission: Connect contact and booking forms to a
  backend server or third-party service for storing inquiries and managing bookings,
  enabling real data handling and communication.
- Theme toggler (light/dark mode): Implement a user toggle to switch between light and dark themes, leveraging CSS variables and JavaScript to improve accessibility and user comfort in varying lighting conditions.

## **Sample Code:**

```
data-bs-target="#heroCarousel"
  data-bs-slide-to="0"
 aria-label="Slide 1"
 type="button"
 data-bs-target="#heroCarousel"
 data-bs-slide-to="1"
 aria-label="Slide 2"
 type="button"
 data-bs-target="#heroCarousel"
 data-bs-slide-to="2"
 aria-label="Slide 3"
<div class="carousel-item active">
   class="d-block w-100"
   alt="Beautiful Destination"
   <h2 class="display-5 fw-bold">Plan Your Perfect Holiday</h2>
    Discover amazing destinations and create unforgettable memories
```

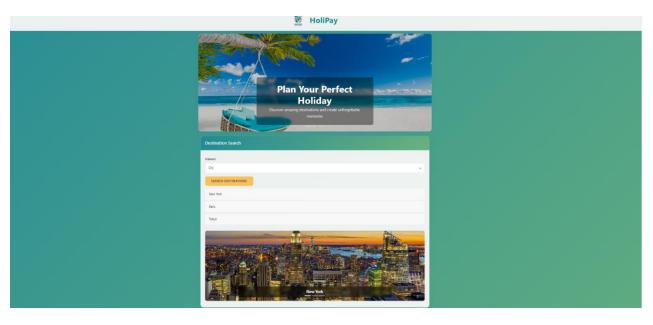
```
| Indicate | Indicate
```

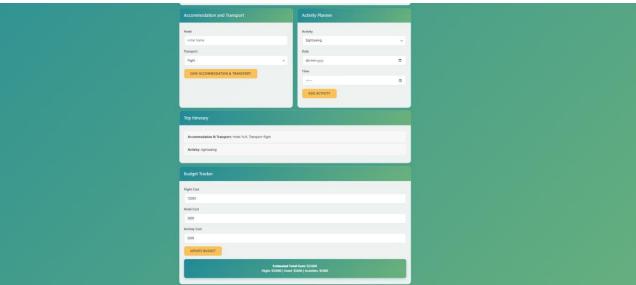
```
--primary-color: ■#218A98;
    --secondary-color: ##6627C;
--accent-color: ##FBC25C;
--light-bg: ##F7F7F7;
--dark-text: ##333333;
     --cta-color: ■#FBC25C;
    --primary-gradient: linear-gradient(135deg, #218A98 0%, #6CB27C 100%);
--secondary-gradient: linear-gradient(135deg, #6CB27C 0%, #FBC25C 100%);
--accent-gradient: linear-gradient(135deg, #218A98 0%, #6CB27C 100%);
--cta-gradient: linear-gradient(135deg, #FBC25C 0%, #218A98 100%);
     --border-radius: 15px;
     --transition: all 0.3s cubic-bezier(0.4, 0, 0.2, 1);
body {
     background:\ linear-gradient (135 deg,\ var (--primary-color)\ 0\%,\ var (--secondary-color)\ 100\%);
     background-attachment: fixed;
     font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
     margin: 0;
     padding: 0;
     background: ■rgba(247, 247, 247, 0.95) !important;
     backdrop-filter: blur(10px);
     box-shadow: 0 2px 20px □rgba(33, 138, 152, 0.15);
     padding: 0px;
.navbar-brand {
```

```
font-weight: 700;
    font-size: 2.5rem;
    color: var(--primary-color) !important;
   transition: var(--transition);
.navbar-brand:hover {
   transform: scale(1.05);
   color: var(--secondary-color) !important;
.brand-logo {
   height: 100px;
   width: auto;
   filter: drop-shadow(2px 2px 4px □rgba(0, 0, 0, 0.1));
.hero-slideshow {
  margin: 0 auto 2rem;
   max-width: 1200px;
   border-radius: var(--border-radius);
   overflow: hidden;
   box-shadow: var(--card-shadow);
.hero-slideshow .carousel-item img {
   height: 500px;
   object-fit: cover;
   filter: brightness(0.8);
.hero-slideshow .carousel-caption {
   background: ☐ rgba(0, 0, 0, 0.4);
   backdrop-filter: blur(5px);
   border-radius: 10px;
```

```
$("#destinationForm").submit(function(e){
    e.preventDefault();
    const destinations = destinationData[interest] || [];
    // Render text results
let html = "";
        html += `${dest}`;
    html += "";
    $("#destinationResults").html(html);
    renderDestinationCarousel(interest);
$("#accommodationTransportForm").submit(function(e){
    e.preventDefault();
    const hotel = $("#hotel").val();
const transport = $("#transport").val();
    itinerary.push({
        type: "Accommodation & Transport",
details: `Hotel: ${hotel || "N/A"}, Transport: ${transport}`,
        date: "",
time: ""
    updateItinerary();
$("#activityForm").submit(function(e){
    e.preventDefault():
```

# **Screenshots of Final Output**





### **Conclusion**

This holiday planner website project showcases the ability to design and develop a user-friendly, visually appealing front-end using HTML, CSS, and JavaScript. Through this mini project, I strengthened my front-end development skills, gaining practical experience with responsive layouts, semantic structuring, and dynamic interactivity. I learned valuable lessons about UI hierarchy, accessibility, and maintaining consistency in design across different devices. This hands-on implementation highlighted the importance of user-centric design principles and clean code practices, providing a solid foundation for future web development projects. The project not only demonstrates core technical skills but also reveals an understanding of creating engaging, functional user experiences.

#### References

- L&T LMS: https://learn.lntedutech.com/Landing/MyCourse
- <a href="https://www.w3schools.com/css/default.asp">https://www.w3schools.com/css/default.asp</a>
- https://www.w3schools.com//default.asp