

Project Report – Favorite City Webpage (Barcelona Guide)

1. Project Overview

This project is a responsive, single-page website built using HTML5, CSS3, Bootstrap 5, and JavaScript.

The theme of the webpage is “Favorite City — Barcelona”, showcasing important aspects of the city such as attractions, restaurants, things to do, local events, and contact information.

The webpage features:

- A hero banner with background image and introduction.
- A navigation bar for smooth scrolling between sections.
- Structured sections for Intro, Attractions, Restaurants, Things to Do, Events, and Contact.
- A Google Map embed for city location visualization.
- An interactive restaurant search filter and contact form.

2. Objectives

- To design a professional-looking city guide webpage using Bootstrap 5.
- To implement responsive web design principles ensuring the page works across devices.
- To showcase the integration of media (images, maps) and interactive elements.
- To provide a real-world demo of a travel/tourism website design.

3. Expected Outcomes

- A functional, responsive webpage that introduces Barcelona and provides tourism-related information.
- Smooth navigation across sections (Intro, Attractions, Restaurants, etc.).
- A working restaurant search filter powered by JavaScript.
- A contact form that validates inputs before submission.

- Clean design, engaging content, and modern UI using Bootstrap components.

4. Design Sections

a) Navigation Bar

- Fixed at the top.
- Bootstrap-based responsive navbar.
- Links to all sections: Intro, Attractions, Restaurants, Things To Do, Events, Contact.

b) Hero / Introduction

- Background image with overlay text.
- Catchy heading, sub-heading, and a CTA button ("Explore Attractions").

c) Attractions

- Grid-based layout of cards.
- Images and short descriptions of famous landmarks (Sagrada Família, Park Güell, La Rambla).
- Interactive Google Maps embed showing Barcelona's location.

d) Restaurants & Cafés

- Search filter (JavaScript-based).
- List group format for restaurants.
- Ratings and links to Google Maps directions.

e) Things To Do

- Card-based layout with activities (Montjuïc Hill, Barceloneta Beach, Passeig de Gràcia, Camp Nou).

f) Local Events

- Event cards highlighting festivals (La Mercè, Primavera Sound, Gràcia Festival).

g) Contact & Bookings

- Tour booking and hotel info.
- A contact form with Name, Email, and Message fields.

h) Footer

- Minimal footer with copyright.

5. Code Snippets (Optional)

Example: Restaurant Search Filter (JavaScript)

```
```javascript
// Restaurant search filter

document.getElementById("searchRestaurant").addEventListener("keyup", function() {

 const query = this.value.toLowerCase();

 document.querySelectorAll("#restaurantList .list-group-item").forEach(item => {

 const name = item.getAttribute("data-name");

 const cuisine = item.getAttribute("data-cuisine");

 if (name.includes(query) || cuisine.includes(query)) {

 item.style.display = "";

 } else {

 item.style.display = "none";

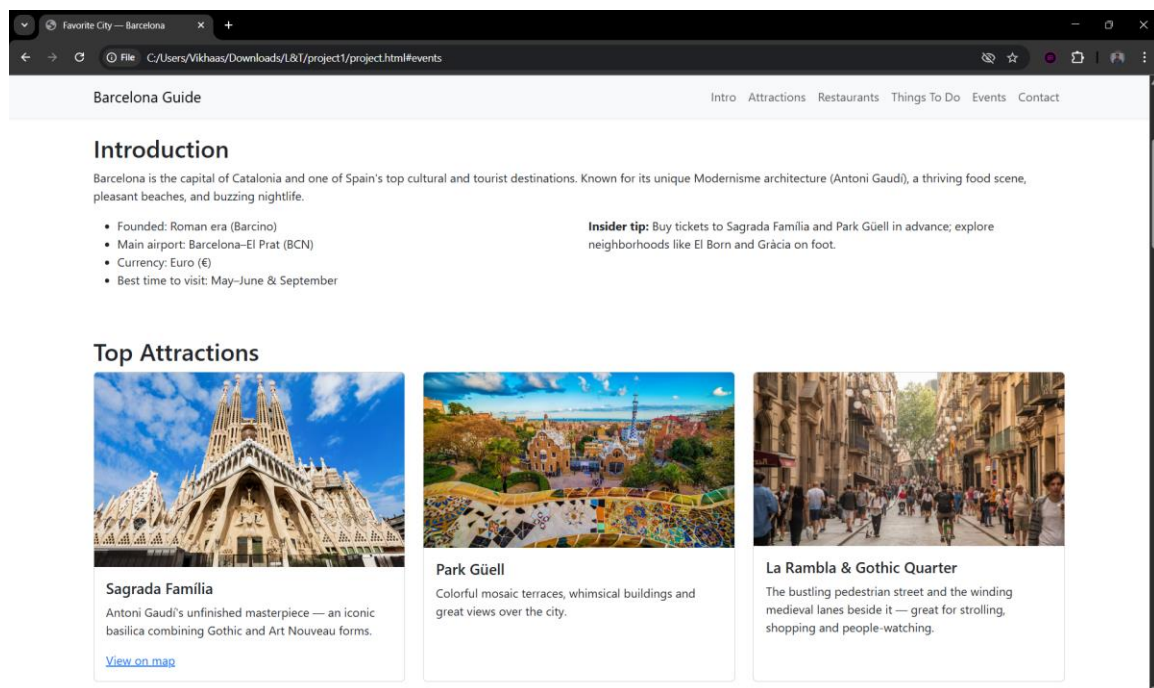
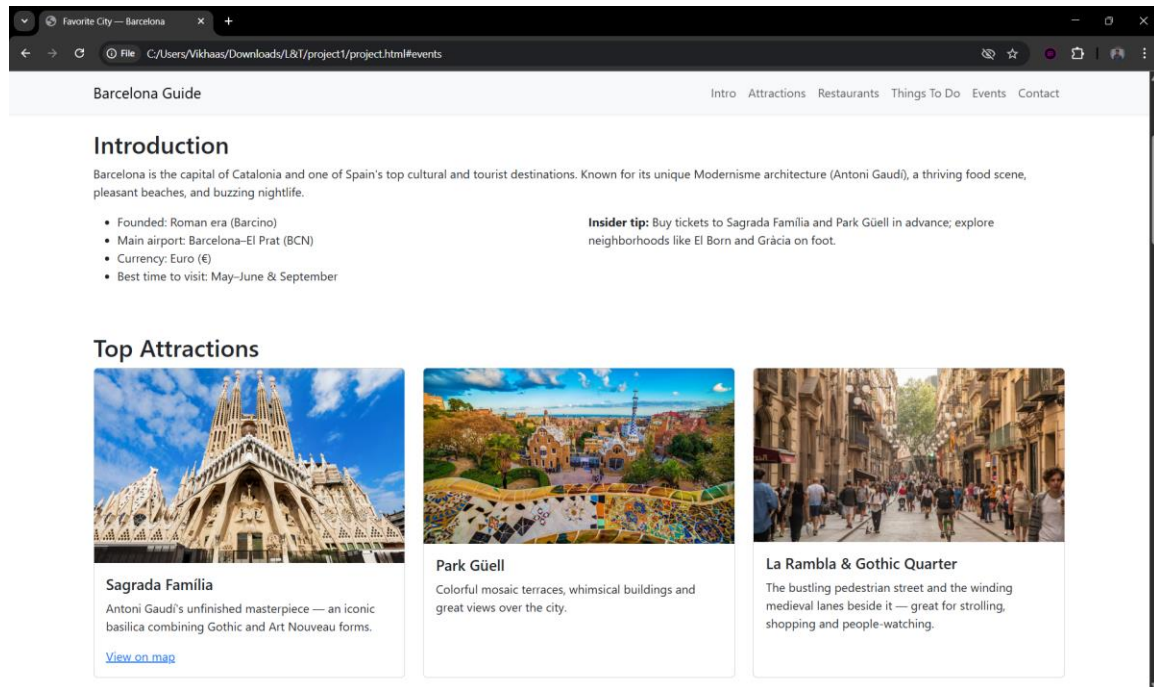
 }

 });

});

```
```

6. Screenshots of the Webpages



- Attractions section with cards and Google Map.
- Restaurants section with working search bar.
- Things to Do grid.

7. Group Member Details

| Name | Roll Number | Role in Project |
|-------------|-------------|---|
| ----- | ----- | ----- |
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