Project Summary: Goa Explorer – Interactive Frontend Website

# 1. Purpose & Audience

Purpose:  
To promote Goa tourism by providing an interactive and engaging platform for travelers to discover beaches, heritage sites, food, and natural wonders.

Target Audience:  
- Tourists planning to visit Goa  
- Students researching Goa for academic purposes  
- Travel enthusiasts looking for inspiration and trip planning help

# 2. Key Features & Functionalities

• Hero Section with Video: Captivating background video and a CTA button

• Sticky Navigation Bar: Responsive and scroll-activated sticky header

• Attractions Grid with Filters: Interactive cards with categories (🏖️ Beach, 🏰 History, 🍛 Food, 🌿 Nature)

• Itinerary Planner: Users can select trip duration and interests to generate a dynamic travel plan

• Gallery with Lightbox: Clickable photo gallery with animated hover and popup view

• Testimonials Section: User reviews showcasing positive travel experiences

• FAQ Section: Expandable Q&A format for common questions

• Contact Form with Validation: Accessible form with input validation and feedback messages

• Tourist Statistics (Chart.js): Monthly tourist data visualized using bar charts

• Back to Top Button: Smooth-scroll circular button appears on scroll

• Responsive Design: Fully mobile-friendly layout using flex/grid and media queries

• Modern Visual Design: Blurred glass effects, hover transitions, emojis, and icons enhance UI

# 3. Approach to Design & Development

Languages Used: HTML5, CSS3, JavaScript (Vanilla)  
Design Focus: User-friendly, aesthetic, and informative  
Development Tools: VS Code, Google Fonts, Unsplash (images), Chart.js  
Structure:  
- Reusable components (like attraction cards)  
- Semantic HTML for accessibility  
- Mobile-first responsive layout

# 4. Challenges Faced & Solutions

• Scroll restoration issue: Used window.onbeforeunload to reset scroll to top

• Dynamic filtering & toggling descriptions: Used JavaScript event listeners and class toggling (.hidden)

• Responsive card layouts: Implemented CSS Grid and media queries

• Gallery image hover text: Used ::before with data-title and CSS transitions

• Form validation: Custom validation using JavaScript and feedback messaging

# 5. Future Improvements

• Multilingual Support

• Interactive Map Integration using Google Maps API

• Live Weather or Flight Info Widgets

• Backend for storing contact form submissions

• User Login / Profile Planner

• Progressive Web App (PWA) Support

• Live Events or Festivals Calendar in Goa