

**A PRELIMINARY REPORT ON**

**PUNE TOURISM WEBSITE PAYMENT PORTAL (FINTECH PROJECT)  
TY-FINTECH DIV-1(2023-24)**

SUBMITTED TO THE VISHWAKARMA INSTITUTE OF INFORMATION TECHNOLOGY,  
PUNE  
IN THE PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE AWARD OF THE DEGREE

**BACHELOR OF TECHNOLOGY (COMPUTER ENGINEERING)**

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<b>Sr. No.</b>	<b>Title of Chapter</b>	<b>Page No.</b>
<b>01</b>	<b>Introduction</b>	
1.1	Overview	
1.2	Motivation	

	1.3	Problem Definition and Objectives	
	1.4	Project Scope & Limitations	
	1.5	Methodologies of Problem solving	
	<b>02</b>	<b>Literature Survey</b>	
	<b>03</b>	<b>System Design</b>	
	3.1	System Architecture	
	<b>04</b>	<b>Project Implementation</b>	
	4.1	Overview of Project Modules	
	4.2	Tools and Technologies Used	
	4.3	Algorithm Details	
	4.3.1	Algorithm 1	
	4.3.2	Algorithm 2	
	4.3.3	...	
	<b>05</b>	<b>Results</b>	
	5.1	Outcomes	
	5.2	Screen Shots	
	5.3	Confusion Matrix, Precision ,Recall,Accuracy,Specificity ,Sensitivity All Graph	
	<b>06</b>	<b>Conclusions</b>	
	9.1	Conclusions	
	9.2	Future Work	
	9.3	Applications	
	<b>Appendix A:</b> Problem statement feasibility assessment using, satisfiability analysis and NP Hard, NP-Complete or P type using modern algebra and relevant mathematical models. <b>Appendix B:</b> Details of paper publication: name of the conference/journal, comments of reviewers, certificate, paper. <b>Appendix C:</b> Plagiarism Report of project report.		
	<b>References</b> Thomas Noltey, Hans Hanssony, Lucia Lo Belloz,"Communication Buses for Automotive Applications" In <i>Proceedings of the 3rd Information Survivability Workshop (ISW-2007)</i> , Boston, Massachusetts, USA, October 2007. IEEE Computer Society.		

## **Overview:**

We have designed the tourism website based on the Pune city .the Pune city also known as Deccan queen is situated in the heart of Maharashtra state is also the cultural capital of Maharashtra and is Historically important because of maratha empire and was the Homes of Commomder of empire The Peshwas , we have tried to explore the food ,festivals , historical sites and places of interest in the city and we have added form , so the people having interest in the tour of the pune city can contact us added some corousel so people get attracted the website by scenery and natural beauty of Lonavala and a google map at the end for reference

## **Motivation:**

We got the motivation from the places we visited during our academics in the engineering, and we love to share our experience in the from of project Embarking on a project to develop a tourism website for Pune is not merely a venture into web development; it's a journey of discovery and connection. Pune, with its rich historical tapestry, cultural diversity, and modern charm, offers a unique canvas for exploration and engagement. This project is an opportunity to showcase Pune's myriad attractions, from its iconic landmarks to hidden gems, providing a virtual gateway for travelers to experience the city's essence.

Beyond the technical aspects, this endeavor is a chance to contribute to the promotion of local businesses, foster community pride, and enhance the city's global appeal. By crafting a visually appealing and user-friendly platform, we aim to inspire wanderlust and facilitate seamless travel experiences. Let this project be a testament to our commitment to promoting sustainable tourism, celebrating Pune's heritage, and creating a digital space that encapsulates the spirit of this dynamic city. Together, let's build a tourism website that not only informs but captivates, inviting the world to discover the magic of Pune.

## **Problem Definition and Objectives:**

### **Problem Definition:**

The lack of a comprehensive and user-friendly digital platform dedicated to tourism in Pune poses a significant challenge for both local residents and potential visitors. Existing online resources may be fragmented or outdated, making it difficult for users to access relevant information about Pune's diverse attractions, accommodations, and cultural offerings. This project aims to address this gap

by developing a robust tourism website that not only consolidates accurate and up-to-date information but also provides an immersive experience, encouraging exploration and engagement.

#### Objectives:

**Information Accessibility:** Create a centralized platform that offers easy access to comprehensive and accurate information about Pune's tourist attractions, historical sites, cultural events, accommodations, and local businesses.

**User-Friendly Design:** Design an intuitive and visually appealing website interface that caters to users of varying technological proficiency. Prioritize ease of navigation, ensuring that users can effortlessly explore the website and find the information they seek.

**Multimedia Integration:** Enhance user engagement by incorporating multimedia elements such as high-quality images, videos, and interactive maps to provide a virtual preview of Pune's attractions.

**Cultural Representation:** Showcase Pune's rich cultural heritage through engaging content, narratives, and multimedia presentations, fostering a sense of pride among residents and intrigue among potential visitors.

### **Project scope and limitations:**

#### Project Scope:

The website will serve as a one-stop destination for comprehensive information about Pune, covering tourist attractions, historical sites, cultural events, accommodations, dining options, and local businesses.

Develop an intuitive and user-friendly interface to ensure that visitors can easily navigate the website, find relevant information, and plan their itineraries seamlessly.

Incorporate high-quality images, videos, and interactive maps to provide a visually rich and engaging experience for users, allowing them to virtually explore Pune's attractions.

**Sustainability and Responsible Tourism:** Integrate information on sustainable and responsible tourism practices, educating visitors about ways to minimize their environmental impact and respect local cultures.

#### Limitations:

1. **Data Accuracy:** While efforts will be made to provide accurate and up-to-date information, the dynamic nature of tourism-related data may result in occasional inaccuracies. Regular updates will be necessary.

**Language Constraints:** The website may initially be available in a specific set of languages, potentially limiting accessibility for users who prefer other languages. Translation features may be considered in future updates.

**Resource Constraints:** The project's scope may be limited by budget, time, and human resources, impacting the depth and breadth of features that can be initially implemented.

**Security Concerns:** Implementing secure data handling practices is crucial. However, unforeseen security vulnerabilities may pose risks to user data or the website's functionality.

## **Methodologies of Problem solving:**

Creating a project report for a tourism website focusing on Pune requires a structured approach to problem-solving. Here's a methodology you can follow:

### **Define the Problem**

- Clearly articulate the issues or challenges faced in developing a successful tourism website for Pune. Identify the key objectives and goals of the project.

### **Research and Analysis**

- Conduct comprehensive research on Pune as a tourist destination. Gather data on popular attractions, historical sites, cultural events, demographics of visitors, tourism trends, and competitor analysis.
- Analyze the existing tourism websites focusing on Pune to understand their strengths, weaknesses, opportunities, and threats (SWOT analysis).

### **Identify Target Audience**

- Define the target audience for the website. Consider demographics such as age, gender, nationality, interests, and travel preferences. Understanding the audience will help tailor the website's content and features to meet their needs.

### **Set Objectives**

- Establish clear and achievable objectives for the tourism website. Objectives may include increasing tourist engagement, promoting lesser-known attractions, boosting visitor numbers, or enhancing user experience.

### **Develop Strategies**

- Based on the research findings and objectives, devise strategies to address the identified problems and achieve the project goals. This may involve content strategies, marketing strategies, user experience (UX) strategies, and technological strategies.

### **Design and Development**

- Create a detailed plan for website design and development. This includes selecting the appropriate platform, designing the user interface (UI), creating engaging content, optimizing for search engines (SEO), and ensuring mobile responsiveness.

### **Implementation**

- Execute the plan by building the website according to the design and development specifications. This involves coding, content creation, integration of features such as maps and booking systems, and testing for functionality and usability.

#### Monitoring and Evaluation

- Implement tools for monitoring website performance, such as web analytics software. Regularly track key metrics such as website traffic, user engagement, bounce rates, and conversion rates.

- Evaluate the effectiveness of the website in achieving its objectives. Identify areas of improvement and make necessary adjustments based on user feedback and analytics data.

#### Continuous Improvement

- Adopt a mindset of continuous improvement by staying updated on tourism trends, technological advancements, and user preferences. Regularly update the website with fresh content, new features, and enhancements to ensure its relevance and competitiveness in the market.

### **Literature Survey:**

A literature survey for a project on a tourism website for Pune city involves exploring existing research, articles, and resources related to tourism websites, destination marketing, and the unique characteristics of Pune. Here is an overview:

#### Tourism Website Development:

- Explore literature on best practices and methodologies for developing tourism websites. Consider studies that discuss user experience, interface design, and the integration of multimedia elements to enhance engagement.

#### Destination Marketing and Promotion:

- Review literature on effective destination marketing strategies. Analyze case studies of successful tourism campaigns for cities or regions and identify key elements that contribute to their success.

#### User Experience in Tourism Websites:

- Investigate research on user behavior and preferences when using tourism websites. Understand how users interact with online platforms to plan their trips and how features such as reviews, interactive maps, and personalized recommendations impact user satisfaction.

Certainly, here are a few more aspects you might consider for your literature survey on a tourism website project for Pune city:

#### Social Media and Tourism Promotion:

- Examine studies on the role of social media in destination marketing and tourism promotion. Understand how social media platforms can be leveraged to amplify the reach of the tourism website and engage with a wider audience.

#### Global Best Practices in Tourism Websites

- Look into case studies and research that highlight successful tourism websites globally. Identify common features and strategies that contribute to the effectiveness of these platforms, and consider how they can be adapted to the context of Pune.

#### Adaptation to Changing Travel Trends

- Explore research on evolving travel trends and how tourism websites can adapt to changing consumer behaviors. Consider studies that discuss the impact of factors such as the sharing economy, sustainable travel, and experiential tourism.

#### Tourism Crisis Management:

- Examine studies on crisis management in the tourism industry. Understand how tourism websites can play a role in disseminating accurate information during crises and contribute to the resilience of the local tourism sector.

## System Design

**System Architecture:** the website is design in various pages , we did not decide to make it one page application starting with the homepage(testhome6.html), the homepage is made with the navbar containing the three buttons they are home , trip planning and contact us , home button containing the webpage (ryt3.html) which contain 4 buttons about festival , food , places and historical places about Pune which contain their separate webpage such as index.html , festivals.html these files contain their own CSS and JavaScript files such style.css , style1.css and app.js while the homepage has style CSS and JavaScript in its html file only the homepage consist of then carousel with three pictures and a slider

Then it contains some information about the Pune city and its historical heritage into the two blocks and at last it contains the google map Api which was added from the Api google map website which helps the users

to understand the places they are going to visit and the footer contain a bar which tells about the social media and the contact details

Then it contains the index.html page contain which contain the fixed photo and then container of the cards describing the various food in Pune with its picture it has a container block with the image on the left side and information on the right side

Then we have a form on the navbar of the trip planning button which contain the files of form1.html and its CSS style sheet of formj.css Which contains form input and words and a submit button and at last the contact us button contain the page, which is nothing but a thanks giving page with some photos and beautiful effect of zoom and shrink applied with the help of CSS

## **Project Implementation:**

### **Overview of Project Modules:**

#### **Nodejs:**

For the project report module, Node.js serves as the backend technology, providing a robust and scalable environment for handling server-side operations. It facilitates seamless communication between the frontend and backend components, ensuring efficient data transfer and processing.

#### **Razorpay X:**

Razorpay integration with React enables secure and convenient payment processing within the tourism website. By leveraging Razorpay's payment gateway APIs, users can make transactions for booking tours, purchasing tickets, or paying for services seamlessly. Reacts component-based architecture simplifies the integration process, allowing for the creation of dynamic and interactive payment interfaces.

#### **Google Maps Api:**

Additionally, the integration of Google Maps API enhances the user experience by providing interactive maps and location-based services. Leveraging Google Maps, users can explore tourist attractions, plan routes, and view real-time information about points of interest in Pune. The API's extensive features, such as geocoding, routing, and street view, enrich the website's functionality and help users navigate the city with ease.



Combining these technologies—Node.js for backend operations, Razorpay for payment processing in React, and Google Maps API for interactive mapping—creates a comprehensive and user-friendly tourism website for Pune. The project report will detail the seamless integration of these modules, highlighting their respective functionalities and contributions to the overall success of the website.

And made using HTML, CSS, & JavaScript.

**Form submission:**

There is a form to submit the details for the people who are interested in the visiting such places, there are details such as name, phone number etc.

**Google map:**

There is a google map used for locating the places in the Pune city for the users

**Social media pages:**

There are link to the social media handle at the footer of the pages for contacting

**Tools and Technologies Used:**

**Social media pages:**

For managing the social media presence of the tourism website, tools like Hootsuite or Buffer can be employed. These platforms allow scheduling and publishing posts across various social media channels such as Facebook, Instagram, Twitter, and LinkedIn. Additionally, they provide analytics tools to track engagement metrics, monitor mentions, and analyze the performance of social media campaigns, enabling the optimization of content strategy and audience engagement.

**Form submission:**

To integrate a form for tour bookings or inquiries on the website, tools like Google Forms or Type form can be utilized. These platforms offer easy-to-use form builders with customizable fields, allowing businesses to create tailored forms for collecting information from users interested in booking tours or seeking more information about available services. Integration options with the website's backend, such as API or webhook support, ensure seamless data capture and management, streamlining the booking process and enhancing user experience.

**Nodejs:**

In the development of the tourism website for Pune, Node.js serves as the backend technology, providing a powerful runtime environment for executing server-side operations. Its non-blocking, event-driven architecture enables efficient handling of

asynchronous tasks, ensuring optimal performance and scalability for handling user requests and data processing.

### **React:**

React, a JavaScript library, powers the frontend of the website, offering a component-based approach to building user interfaces. Its declarative and efficient nature simplifies the creation of dynamic and interactive UI components, enhancing the user experience. With React, developers can efficiently manage state, handle user interactions, and update the UI in response to changes, resulting in a seamless and responsive website.

### **RazorpayX:**

RazorpayX integration facilitates secure and hassle-free payment processing within the website. Leveraging RazorpayX's payment gateway APIs, users can make transactions for booking tours, purchasing tickets, or paying for services seamlessly. Its robust features, including PCI-DSS compliance, fraud detection, and seamless integration, ensure a smooth payment experience for both users and administrators.

### **Google Maps API:**

The Google Maps API enriches the website with interactive maps and location-based services, enhancing the user experience and providing valuable features for exploring Pune's tourist attractions. Through the API's extensive functionalities, such as geocoding, routing, and street view, users can easily navigate the city, find points of interest, and plan their itinerary with confidence.

### **Bootstrap:**

Bootstrap, a popular CSS framework, is utilized to streamline the website's design and development process. Its comprehensive set of pre-designed components, responsive layout grid, and custom CSS classes enable developers to create visually appealing and mobile-friendly interfaces with minimal effort. By leveraging Bootstrap's robust toolkit, the website achieves consistency in design, accessibility, and responsiveness across various devices and screen sizes.

### **Algorithm:**

**Step 1: Sign Up and Get API Keys**

**Step 2: Install Dependencies**

`npm install razorpay`

**Step 3: Initialize Razorpay Instance**

```
const Razorpay = require('razorpay');
const razorpay = new Razorpay({
  key_id: 'YOUR_TEST_KEY_ID',
  key_secret: 'YOUR_TEST_KEY_SECRET',
  Set to true for test mode
  test: true
});
```

#### **Step 4: Create an Order**

```
const orderOptions = {
  amount: 50000, // amount in the smallest currency unit (e.g., paise for INR)
  currency: 'INR',
  receipt: 'order_rcptid_11',
  payment_capture: 1
};
razorpay.orders.create(orderOptions, function(err, order) {
  if(err) {
    console.error(err);
    return;
  }
  console.log(order);
});
```

#### **Step 5: Handle Payment Callback**

```
app.post('/payment/callback', function(req, res) {
  const data = req.body;
  const signature = req.headers['x-razorpay-signature'];

  // Verify the signature
  const isValidSignature =
    razorpay.webhooks.verifySignature(JSON.stringify(data), signature,
    'YOUR_TEST_WEBHOOK_SECRET');

  if (isValidSignature) {
    // Payment is successful, handle it
    console.log('Payment successful:', data);
    // Your code to handle the successful payment
  } else {
    // Invalid signature
    console.error('Invalid signature');
  }
});
```

```
res.json({ status: 'ok' });  
});
```

### **Step 6: Integrate Razorpay Checkout in Frontend**

Include Razorpay's JavaScript SDK in your HTML

Open the Razorpay Checkout form when the user clicks on your payment button

### **Step 7: Test Your Integration**

Use test card details provided by Razorpay for testing different scenarios.

### **Step 8: Go Live**

## **Result:**

## **Outcome:**

The outcome of the project is a dynamic and user-friendly tourism website for Pune, leveraging a stack of modern web technologies including HTML, CSS, JavaScript, React, and Node.js. The integration of RazorpayX facilitates secure and seamless payment transactions on the website, ensuring a convenient booking experience for users.

The website serves as a comprehensive guide for tourists visiting Pune, offering detailed information on various aspects of the city's culture, cuisine, festivals, and attractions. Users can explore a wide range of content, including:

#### **Food Exploration:**

- The website features a curated list of popular restaurants, street food vendors, and culinary experiences in Pune. Users can discover diverse cuisines, local delicacies, and hidden gems recommended by locals and food enthusiasts.

#### **Festival Highlights**

- Visitors can learn about the vibrant festival culture of Pune, including major cultural and religious celebrations throughout the year. Detailed descriptions, event schedules, and insights into traditional customs and rituals provide an immersive experience for users interested in exploring Pune's festive spirit.

#### **Places to Explore**

- The website showcases a variety of tourist attractions and landmarks in Pune, ranging from historical monuments and architectural marvels to natural landscapes and recreational spots. Interactive maps, photo galleries, and descriptive articles help users plan their itinerary and discover the rich heritage and beauty of Pune.

In the development of the tourism website for Pune, each technology plays a crucial role in ensuring the website's functionality, user experience, and security.

HTML (HyperText Markup Language) and CSS (Cascading Style Sheets):\*\*

HTML and CSS are the foundational technologies used for structuring and styling the website's content. HTML provides the structure, defining the layout and organization of the various elements on each webpage, while CSS controls the presentation, including colors, fonts, and spacing.

Together, HTML and CSS create visually appealing and consistent web pages that are responsive across different devices and screen sizes, enhancing the user experience

JavaScript is a key component for adding interactivity and dynamic functionality to the website. Through JavaScript, developers can implement features such as interactive maps, image sliders, form validation,

React, a JavaScript library for building user interfaces, offers a component-based architecture that simplifies the development of complex web applications. By breaking down the user interface into reusable components,

Node.js serves as the backend technology for the tourism website, providing a runtime environment for executing server-side JavaScript code. With Node.js, developers can build scalable and high-performance web applications, handle incoming HTTP requests, and interact with databases and external services

RazorpayX integration facilitates secure and convenient payment processing within the website. Leveraging RazorpayX's payment gateway APIs, users can make transactions for booking tours, purchasing tickets, or paying for services seamlessly. RazorpayX ensures the security of financial transactions through PCI-DSS compliance,.

In summary, the combination of HTML, CSS, JavaScript, React, Node.js, and RazorpayX forms a comprehensive and robust technology stack that powers the tourism website for Pune. Each technology contributes unique capabilities and functionalities, working together to create a seamless, interactive, and secure platform for promoting tourism and enhancing the user experience.

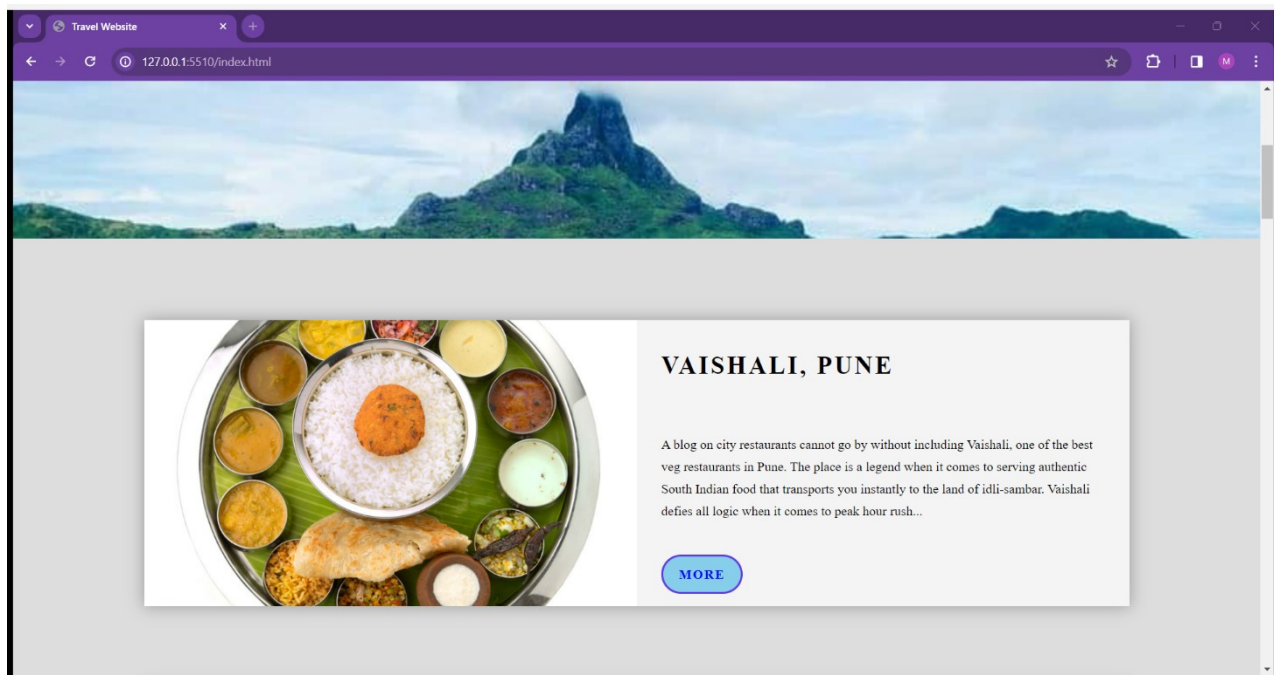
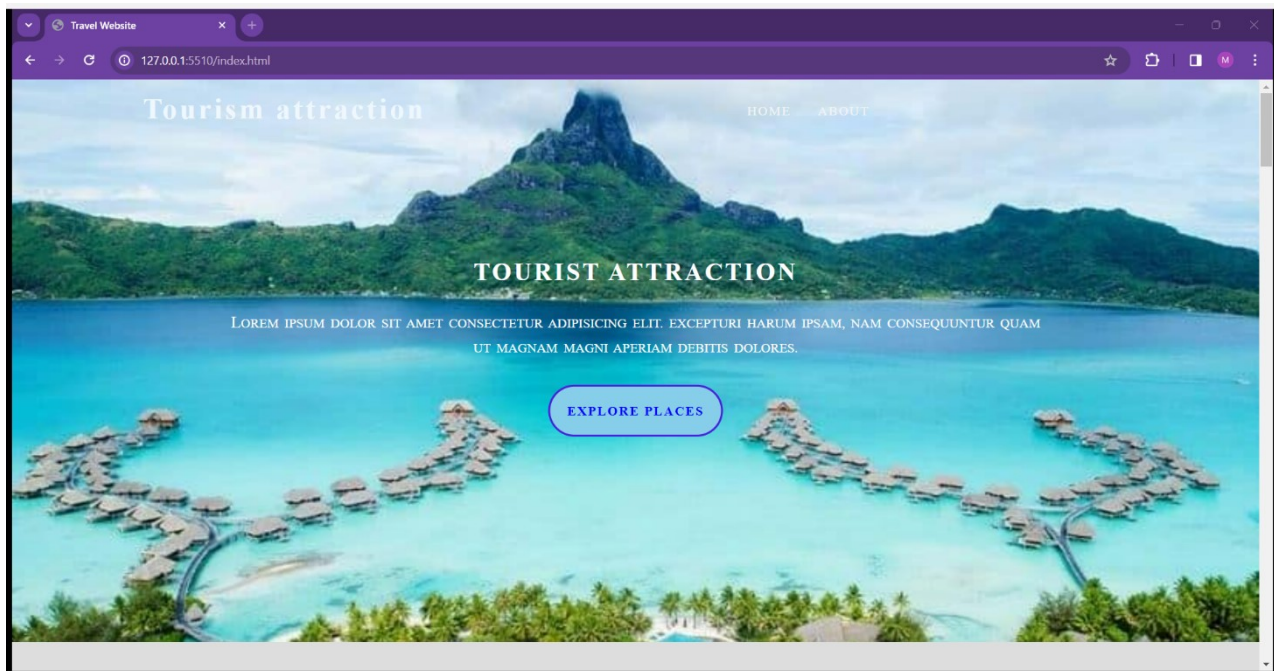
Through the seamless integration of content and functionality, the tourism website offers a valuable resource for travelers seeking information, inspiration, and assistance in experiencing the best of Pune's culture, cuisine, and attractions. With its intuitive interface, informative content, and convenient booking features, the website aims to enhance the overall tourism experience and promote Pune as a premier destination for travelers from around the world.

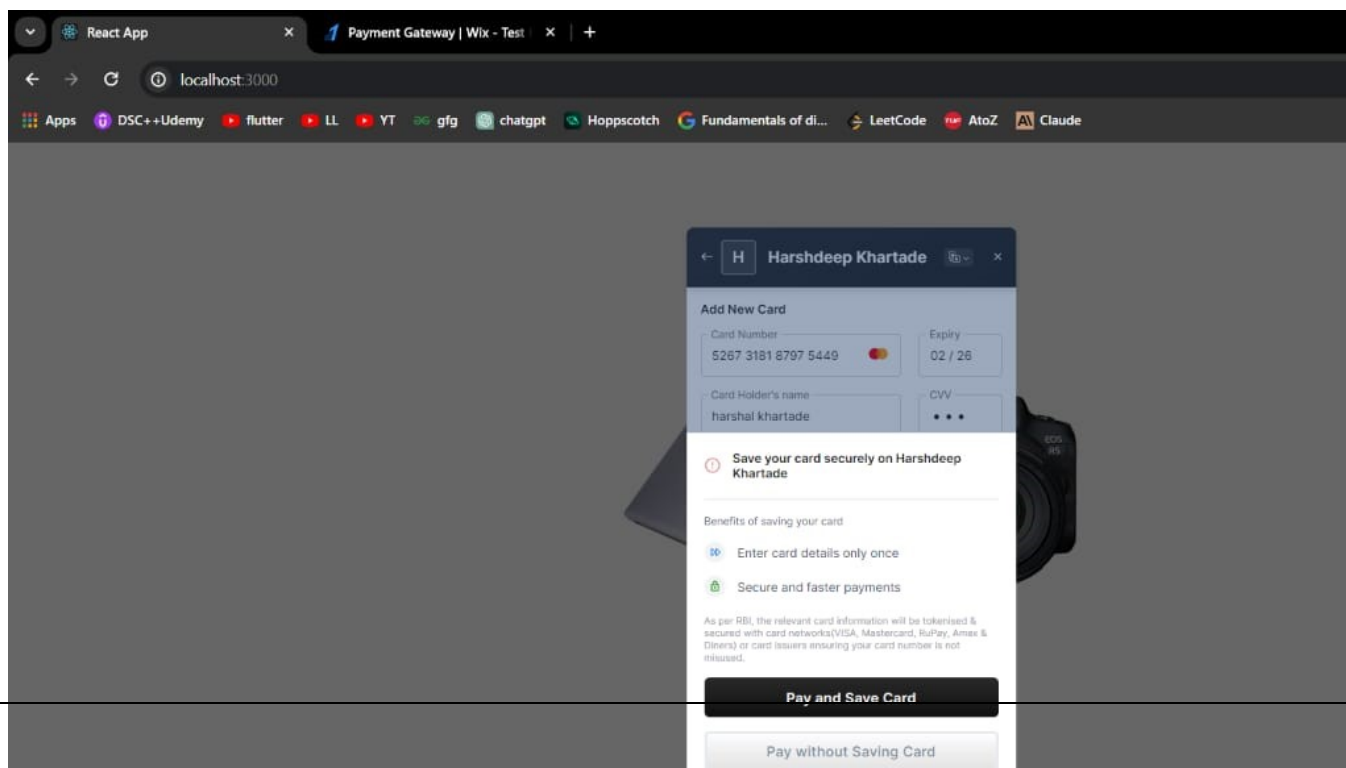
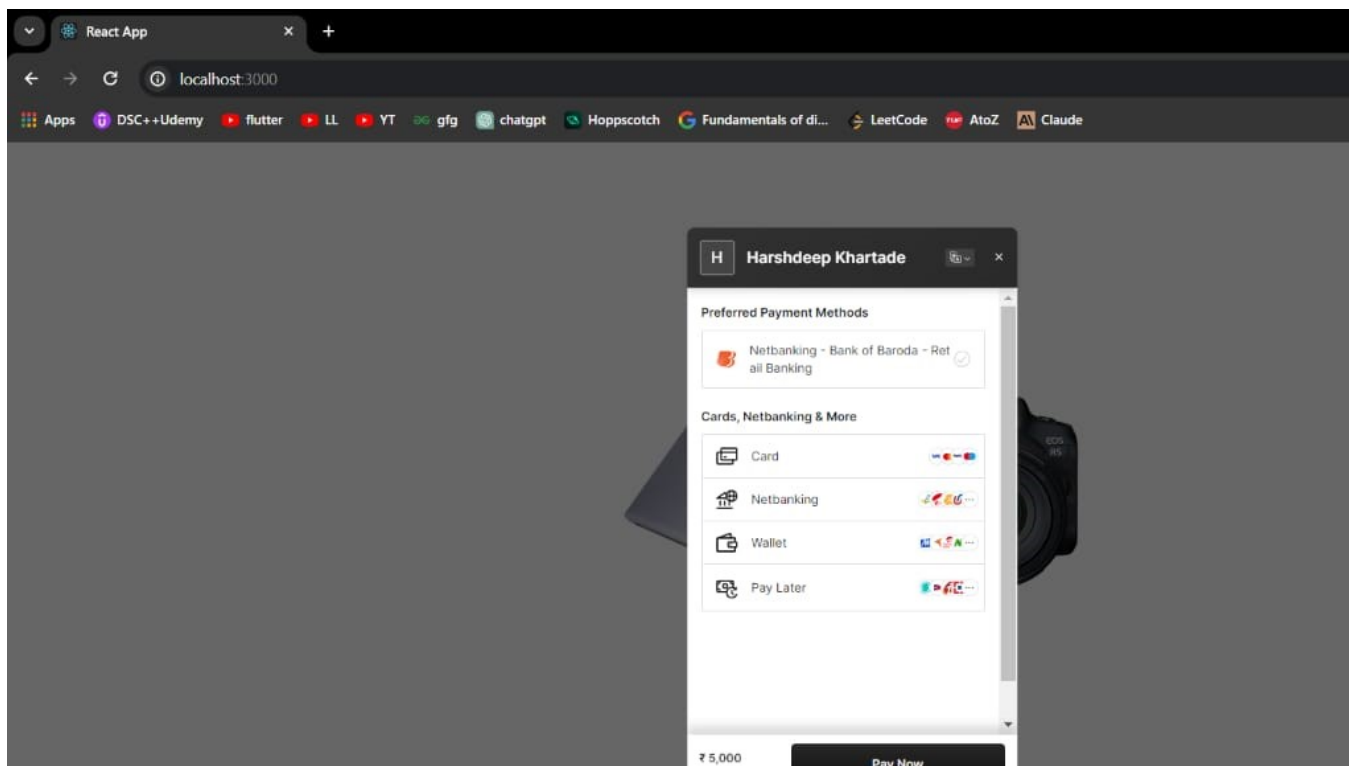
## Screenshot:



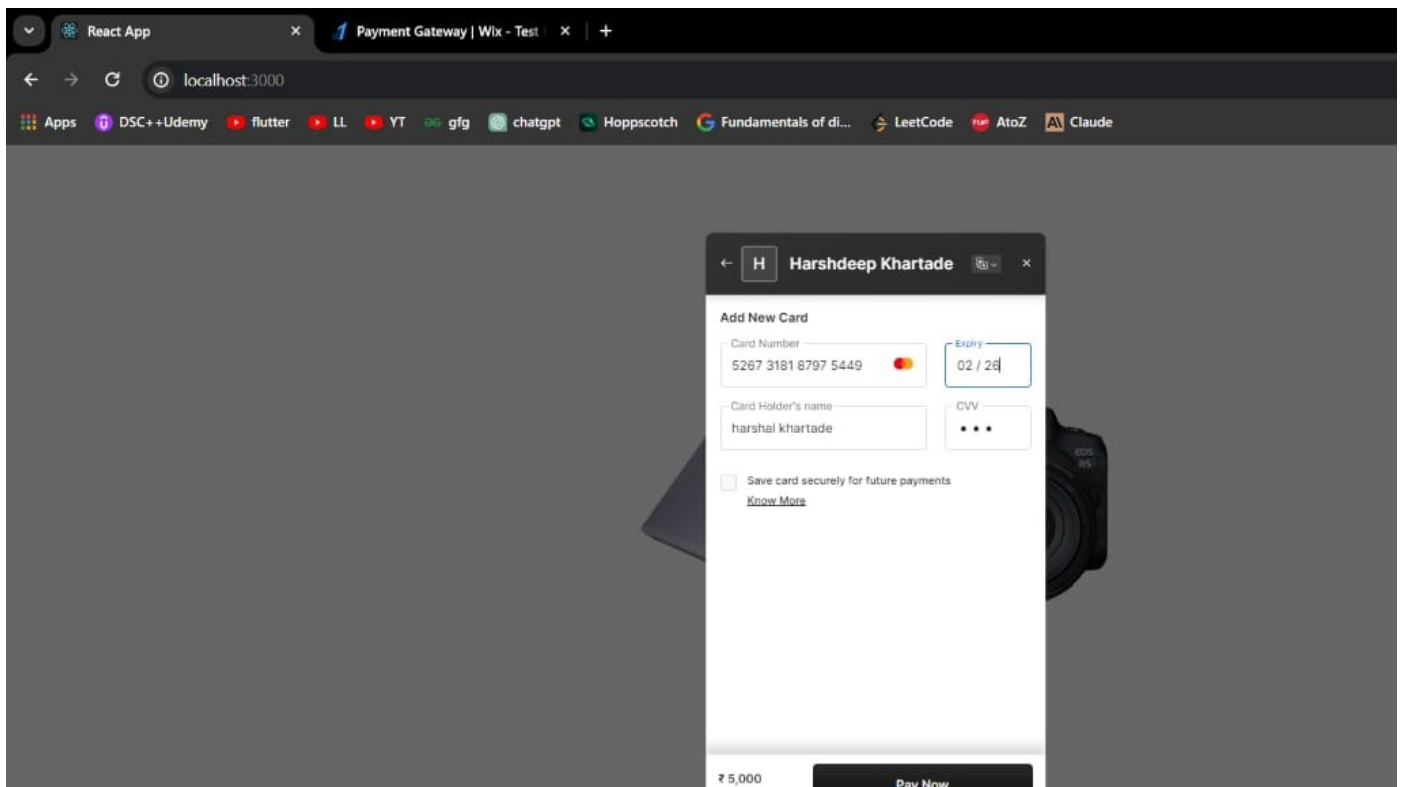


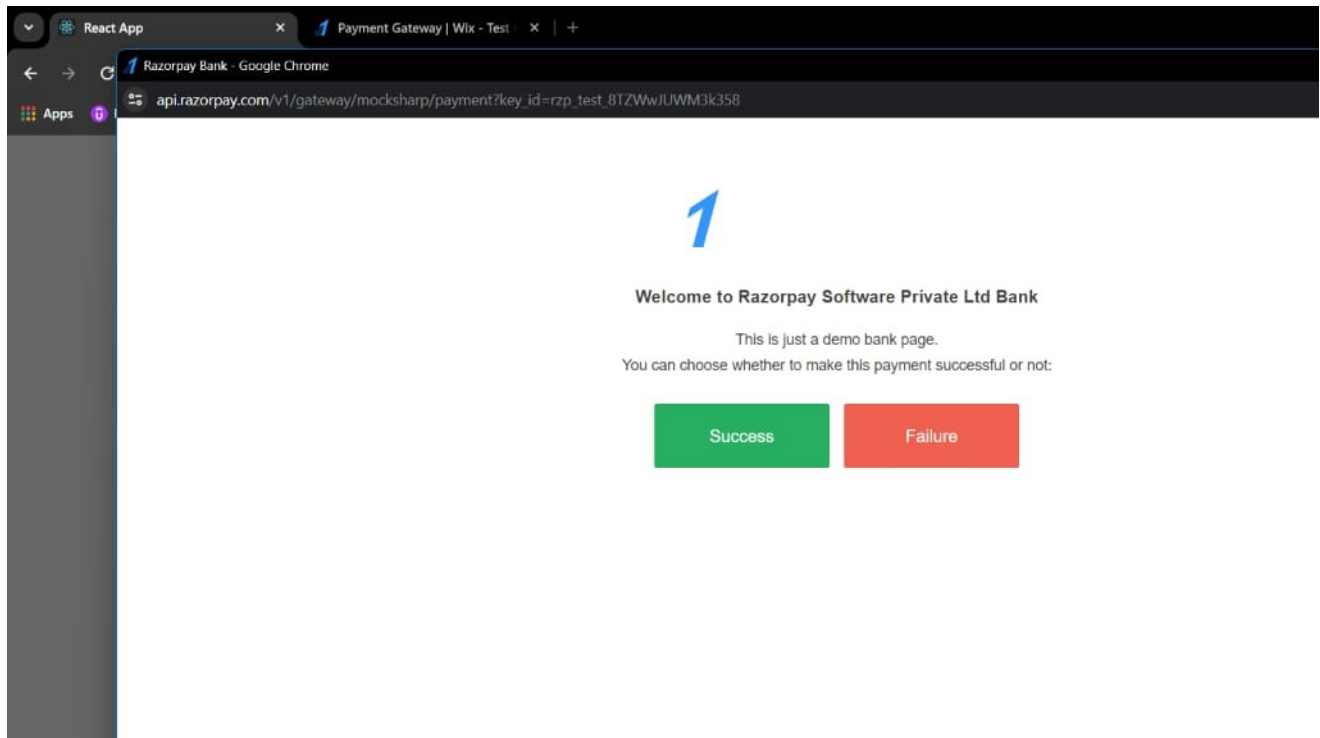
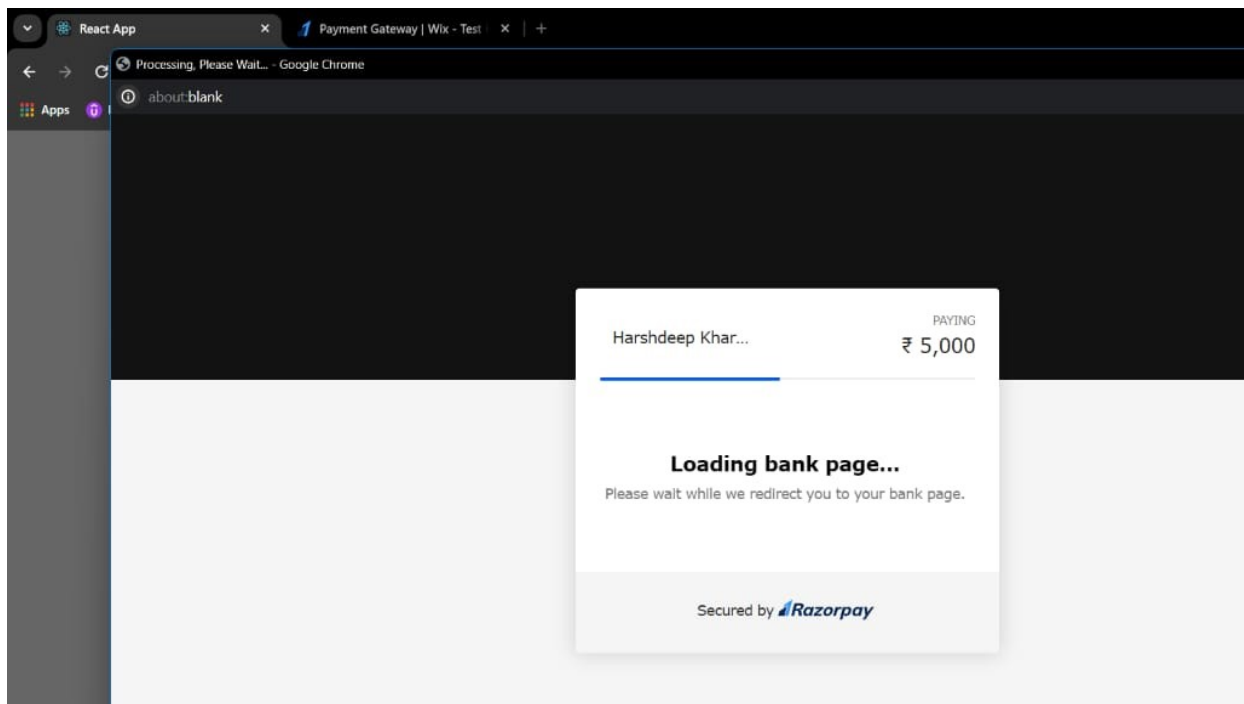


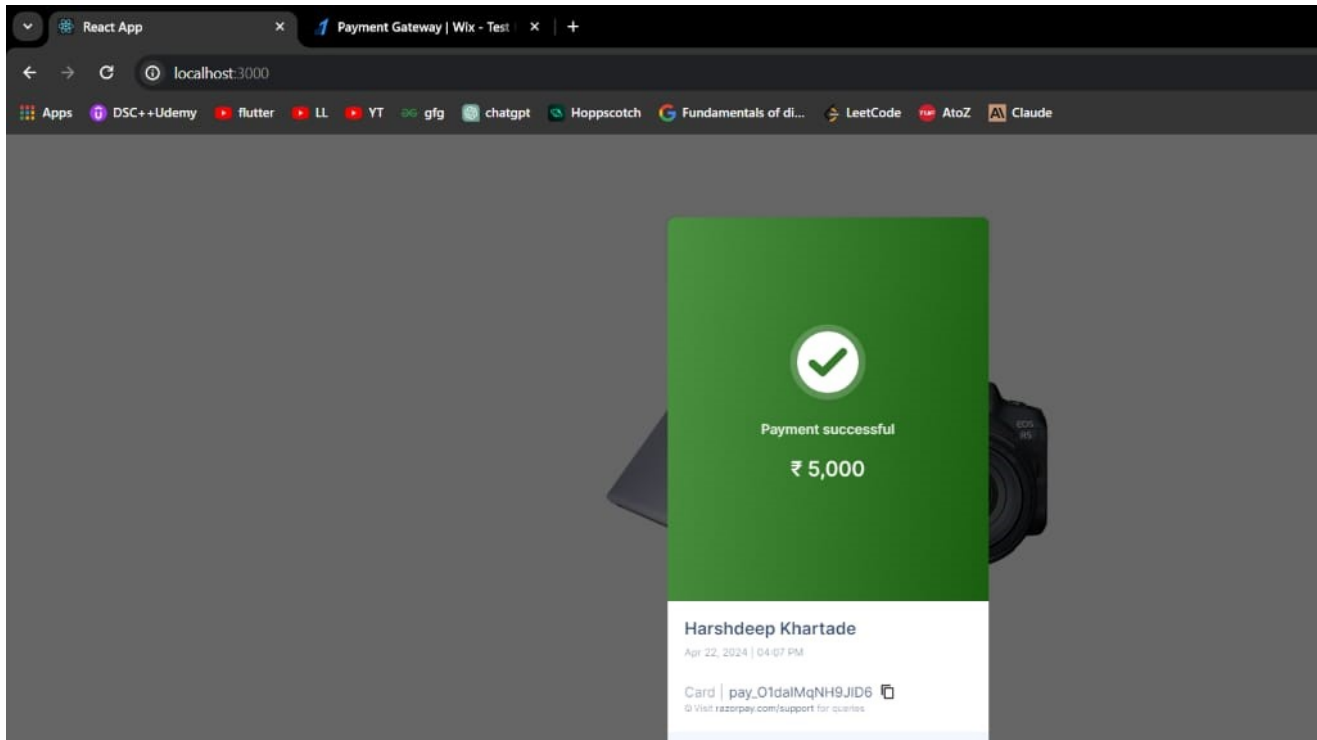












## Conclusion:

In summary, the tourism website project for Pune city encapsulates a dynamic and user-friendly platform that not only showcases the city's diverse attractions, cultural richness, and hospitality but also serves as a catalyst for promoting sustainable tourism. By offering an immersive and informative experience, the website aims to attract a wide range of visitors, fostering economic growth within the local tourism sector. The project's success lies in its ability to seamlessly connect potential tourists with the city's offerings, enhancing accessibility, and contributing to Pune's image as a vibrant and welcoming destination. Overall, the tourism website stands as a valuable asset in bolstering Pune's tourism industry, creating a positive impact on both the local economy and the overall visitor experience.

## Application

The tourism website for Pune city serves as a versatile and indispensable tool for both tourists and the local community.

Firstly, it acts as an all-encompassing guide, providing tourists with detailed information about the city's historical landmarks, cultural sites, local events, and accommodations. This not only enhances the overall visitor experience but also promotes Pune as a desirable destination. Additionally, the website facilitates efficient trip planning by offering interactive maps, itineraries, and insights into the diverse culinary and shopping experiences Pune has to offer. Beyond catering to tourists, the website functions as a promotional platform for local businesses, encouraging economic growth in the tourism sector. Furthermore, it fosters a sense of community engagement by highlighting lesser-known attractions and encouraging locals to take pride in their city's cultural heritage. Overall, the application of the tourism website on Pune city not only benefits visitors but also contributes significantly to the sustainable development and promotion of Pune as a thriving tourist destination.

### **Future Work:**

For future work on the tourism project for Pune city, several avenues can be explored to enhance the website's functionality, expand its reach, and improve the overall user experience. Here are some potential areas for future development:

- Implement AR and VR technologies to provide immersive experiences for users, allowing them to virtually explore Pune's tourist attractions, historical sites, and cultural landmarks. This innovative approach can enhance engagement and attract tech-savvy travelers seeking unique experiences.

- Develop personalized recommendations for users based on their preferences, past activities, and demographic information. Utilize machine learning algorithms to analyze user behavior and tailor content, recommendations, and offers accordingly, providing a more customized and relevant experience.

- Expand the website's content to cover a wider range of topics related to Pune's tourism, including niche attractions, off-the-beaten-path experiences, and local insights. Additionally, localize content to cater to international visitors by providing translations, cultural tips, and practical information tailored to their needs.

- Foster community engagement by encouraging user-generated content such as reviews, recommendations, and travel stories.

Implement social features that allow users to interact with each other, share experiences, and contribute to the website's content, fostering a sense of belonging and community among travelers.

- Strengthen the website's social media presence and leverage influencer marketing strategies to increase visibility, attract a larger audience, and drive engagement. Collaborate with influencers, travel bloggers, and local experts to create compelling content, showcase unique experiences, and promote Pune as a top destination.

- Ensure accessibility features are integrated into the website to accommodate users with disabilities and diverse needs.

Implement features such as screen reader compatibility, keyboard navigation, and alternative text for images to make the website more inclusive and accessible to all visitors.

- Promote sustainable tourism practices and responsible travel initiatives through the website by highlighting eco-friendly attractions, green accommodations, and community-based tourism initiatives in Pune. Educate visitors about the importance of environmental conservation, cultural preservation, and ethical tourism practices.
- Utilize data analytics tools to gather insights into user behavior, preferences, and trends. Analyze website metrics, user feedback, and booking patterns to identify areas for improvement, optimize marketing strategies, and enhance the overall user experience.

By focusing on these areas for future development, the tourism project for Pune city can continue to evolve, innovate, and offer valuable experiences to visitors while promoting sustainable tourism practices and contributing to the city's economic growth and cultural enrichment.