A

MINI-PROJECT REPORT

ON

" A WEB APPLICATION FOR EFFORTLESS MUSEUM EXPLORATION THROUGH E-TICKET SYSTEM "

Computer Science and Engineering
Punyashlok Ahilyadevi Holkar Solapur University

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SOLAPUR - 413006

(2022-2023)

CERTIFICATE

This is to certify that the Mini-Project entitled

"A WEB APPLICATION FOR EFFORTLESS MUSEUM EXPLORATION THROUGH E-TICKET SYSTEM"

Is

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Abstract

In our modern digital era, the concept of paperless transactions has gained immense popularity, primarily driven by the need to reduce the use of paper. An e-ticket, or electronic ticket, is a prime example of this. It is an electronic document that serves as a ticket, eliminating the need for physical tickets.
We can significantly reduce the consumption of paper in the ticketing process. This not only aligns with environmental goals but also contributes to the overall efficiency and convenience of the ticketing experience.

Introduction

Our mini-project is a web application for E-Ticketing at a specific museum. The application offers users a streamlined experience to explore and book tickets for the designated museum. The main page showcases the museum's image and presents essential details about the museum's offerings.

Upon selecting the museum, users are directed to a dedicated page that provides comprehensive information about the museum, including instructions for visitors, key highlights, available timeslots, and a registration button.

Clicking the registration button opens an input form where users can input their details, such as the number of visitors and guide booking requirements if necessary. After submitting the form, users are redirected to a secure payment gateway to finalize their ticket purchase.

A confirmation pop-up or page is displayed to indicate the successful registration and payment.

For visitors who arrive directly at the museum, a QR code scanner is available to expedite the registration process. Scanning the QR code guides the visitor to the registration form, pre-filled with relevant details for a seamless experience.

On the admin side, museum authorities have access to an intuitive dashboard that provides valuable insights for crowd management and revenue analysis.

Problem Statement and Objectives

Develop a QR-based e-ticketing system for museums to enhance visitor experience and crowd management. The objective is to reduce expenses, improve record-keeping, and increase sales by providing a convenient, paperless ticketing solution available 24/7.

Objectives:

- Reduce Booking Expenses
- Visitor Record-Keeping & Analysis
- 24/7 Ticketing Convenience
- Optimize Crowd Management
- Cost Reduction and Sustainability
- Increases Sales & Revenue

Background

In recent years, there has been a growing trend towards digitizing ticketing systems for museums and cultural institutions. Traditional paper-based ticketing systems have limitations in terms of efficiency, convenience, and visitor experience. As a result, many museums have transitioned to digital platforms to offer online ticketing services.

Existing systems for E-Ticketing in museums often provide features such as online ticket purchasing, reservation management, and integration with payment gateways. These systems allow users to browse museum information, select preferred timeslots, and make bookings from any location with internet access. Furthermore, modern E-Ticketing systems may incorporate additional functionalities such as personalized visitor profiles, membership programs, and dynamic pricing strategies. They also often include features for managing visitor capacity, ensuring crowd control, and providing real-time analytics and reporting for museum administrators.

Technologies Used

- **HTML (Hypertext Markup Language):** It defines the structure and content of web pages.
- **CSS (Cascading Style Sheets):** It styles and formats the appearance of web pages.
- **JS (JavaScript):** It adds interactivity and dynamic functionality to web pages.
- **MySQL:** It stores and manages structured data for your web application.
- **Power BI:** It provides data visualization and analytics for crowd management and revenue insights.
- **Web Server:** It hosts and serves your web application to users.
- **QR Scanner:** It enables quick on-site visitor registration by scanning QR codes.

These technologies work together to create a functional, visually appealing, and user-friendly E-Ticketing web application for your museum.

Description and Working of Project

Project Description: The project is a web application that focuses on E-Ticketing for a specific museum. It allows users to browse, book tickets, and register for museum visits online. The application provides detailed information about the museum, available timeslots, and a seamless registration process. Additionally, it offers administrative features for crowd management and revenue analysis.

Working of the Project:

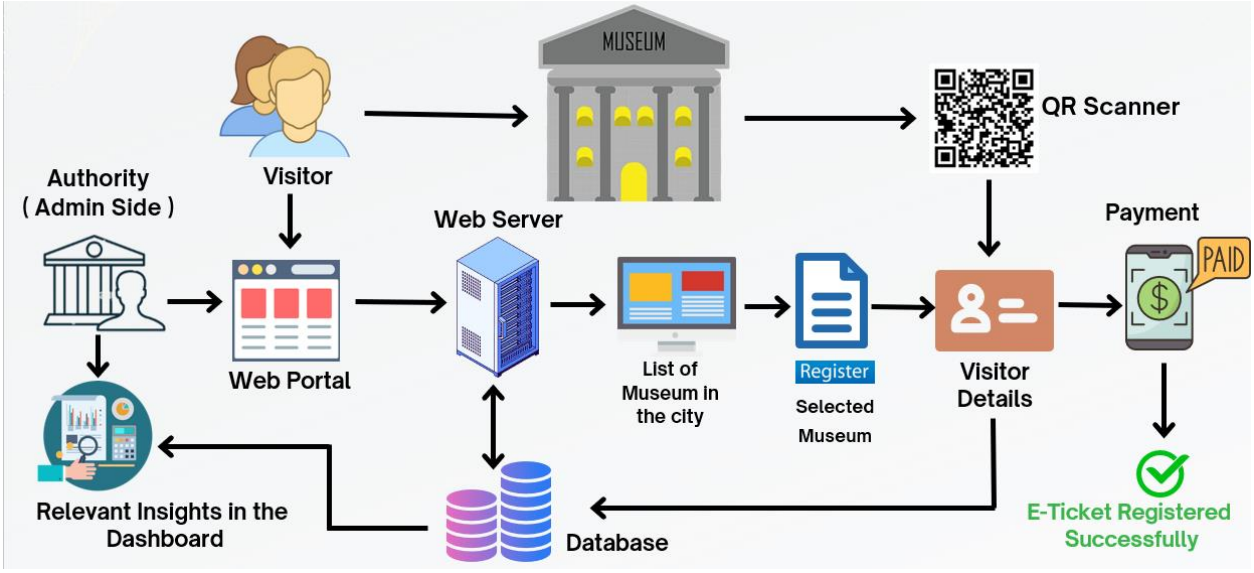
1. User Interface: The web application's user interface is built using HTML, CSS, and JavaScript. It consists of pages displaying museum information, images, and a list of available timeslots.
2. Museum Details Page: When a user selects the museum, they are directed to a dedicated page displaying detailed information, instructions, and key highlights. This page also features a registration button.
3. Registration Process: Clicking the registration button opens an input form where users provide visitor details such as the number of visitors and guide booking requirements. After submitting the form, users are redirected to a secure payment gateway.
4. Payment Integration: The payment gateway securely handles the transaction process, allowing users to pay for their tickets online.
5. Confirmation and QR Code: Once payment is successful, a confirmation pop-up is displayed, indicating the successful registration. Visitors receive a unique QR code that they can either print or save on their mobile devices.
6. Admin Dashboard: The web application includes an admin dashboard that provides museum authorities with insights for crowd management and revenue analysis. This dashboard utilizes Power BI to visualize and analyze data.
7. On-Site Visitor Registration: For visitors who arrive directly at the museum, a QR code scanner is available. Scanning the QR code navigates them to the registration form, where they can complete the necessary details and complete the registration process.

Objectives and Goals:

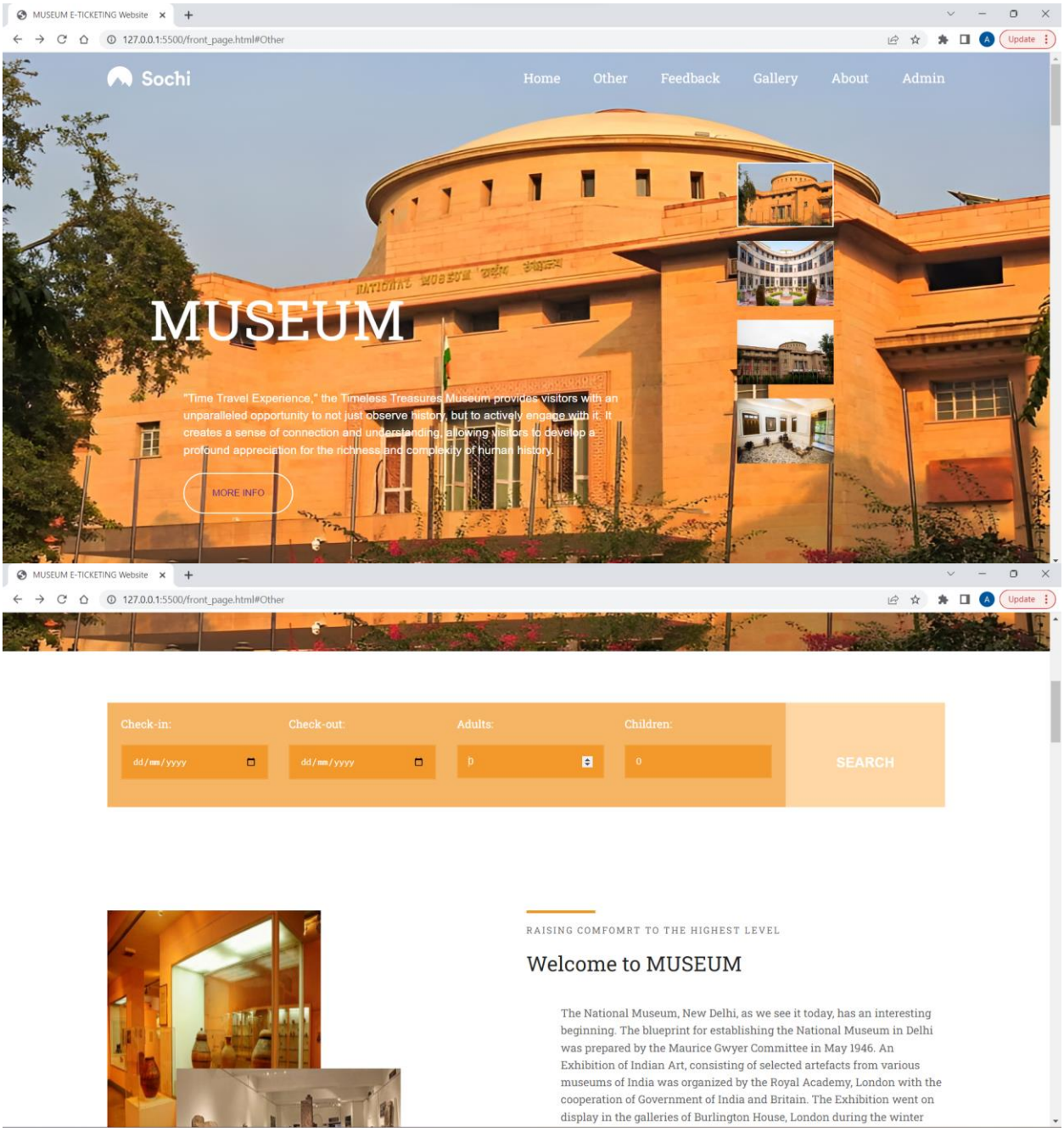
The project successfully achieves the following objectives and goals:

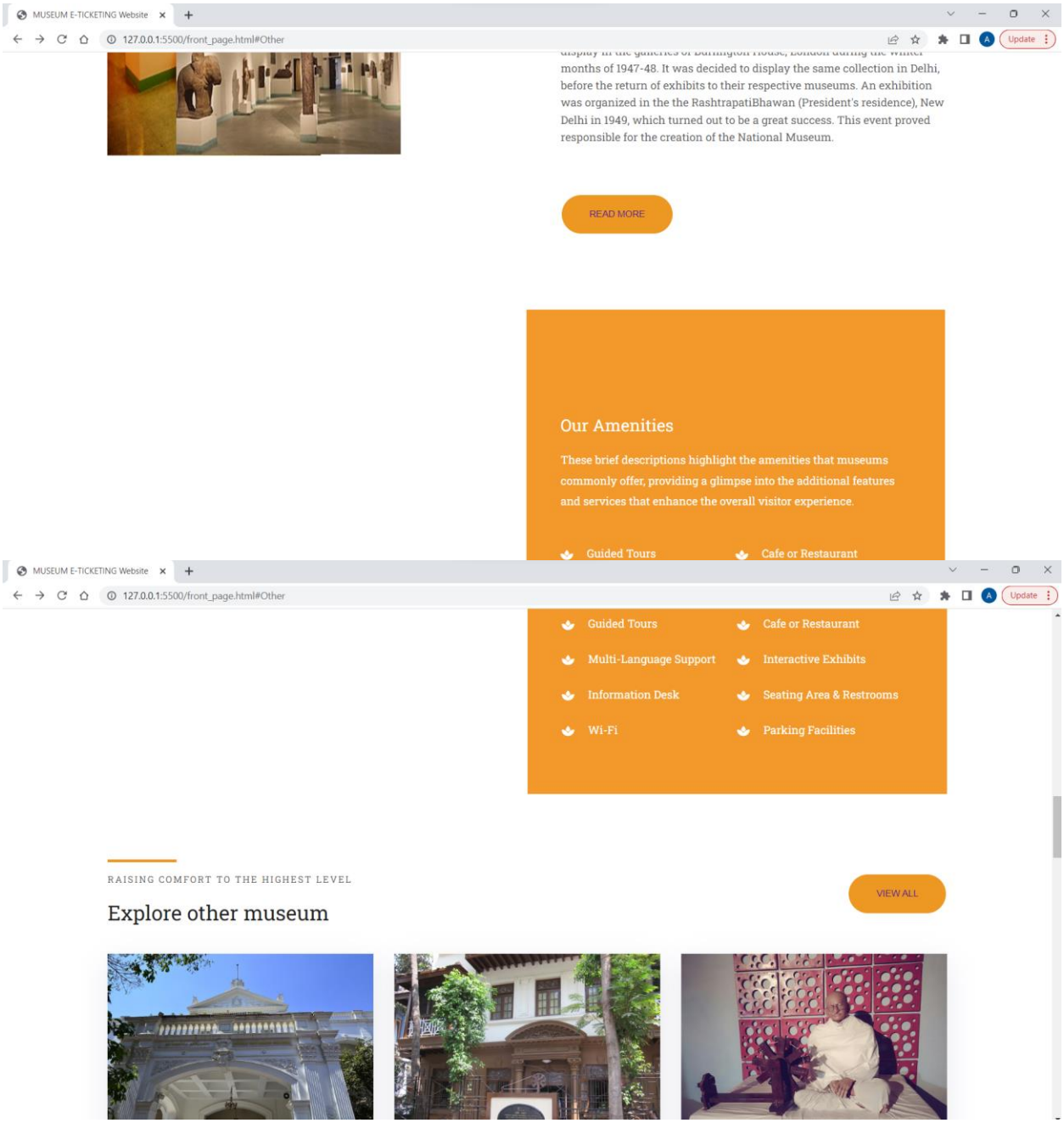
1. Seamless Ticketing: Users can easily browse and book tickets for the museum online, providing a convenient and user-friendly experience.
2. Detailed Information: The application provides comprehensive information about the museum, including instructions and key highlights, allowing visitors to make informed decisions.
3. Efficient Registration: The registration process streamlines visitor details collection, including the number of visitors and guide booking requirements, enhancing operational efficiency.
4. Secure Payments: Integration with a secure payment gateway ensures safe and reliable online transactions for ticket purchases.
5. Confirmation and QR Codes: Visitors receive confirmation of their registration and a unique QR code, simplifying check-in processes and reducing waiting times.
6. Admin Insights: The admin dashboard, powered by Power BI, offers museum authorities valuable insights into crowd management and revenue analysis, supporting informed decision-making.

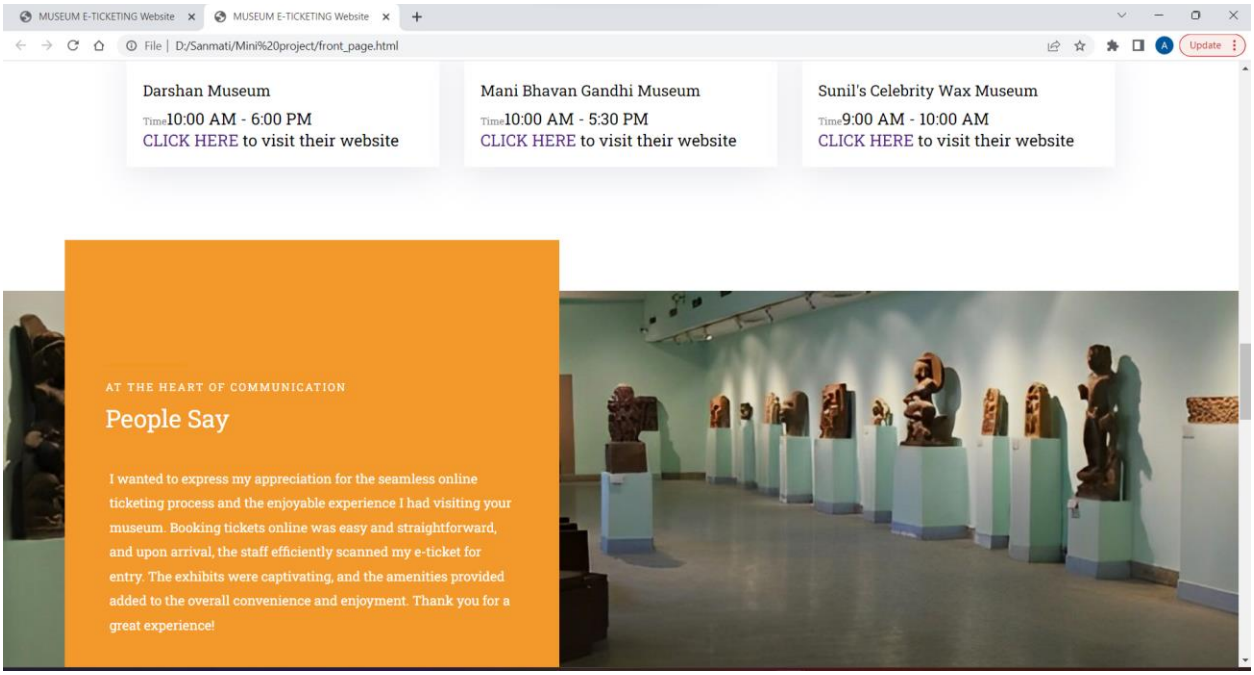
DIAGRAM

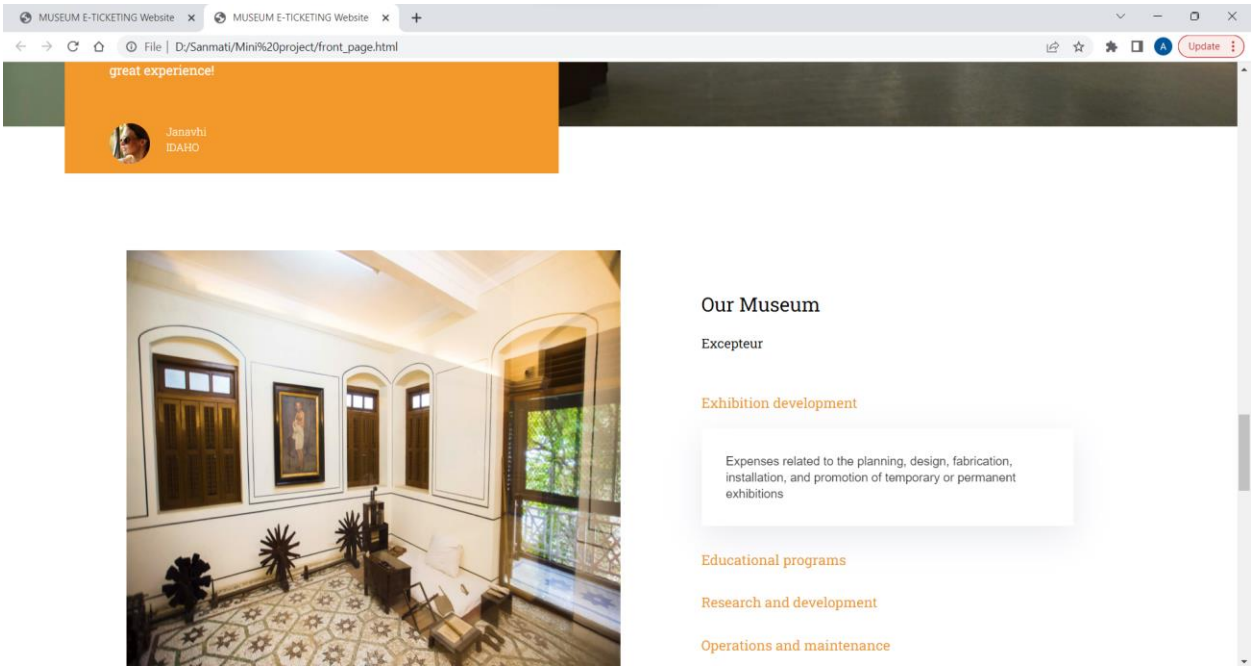


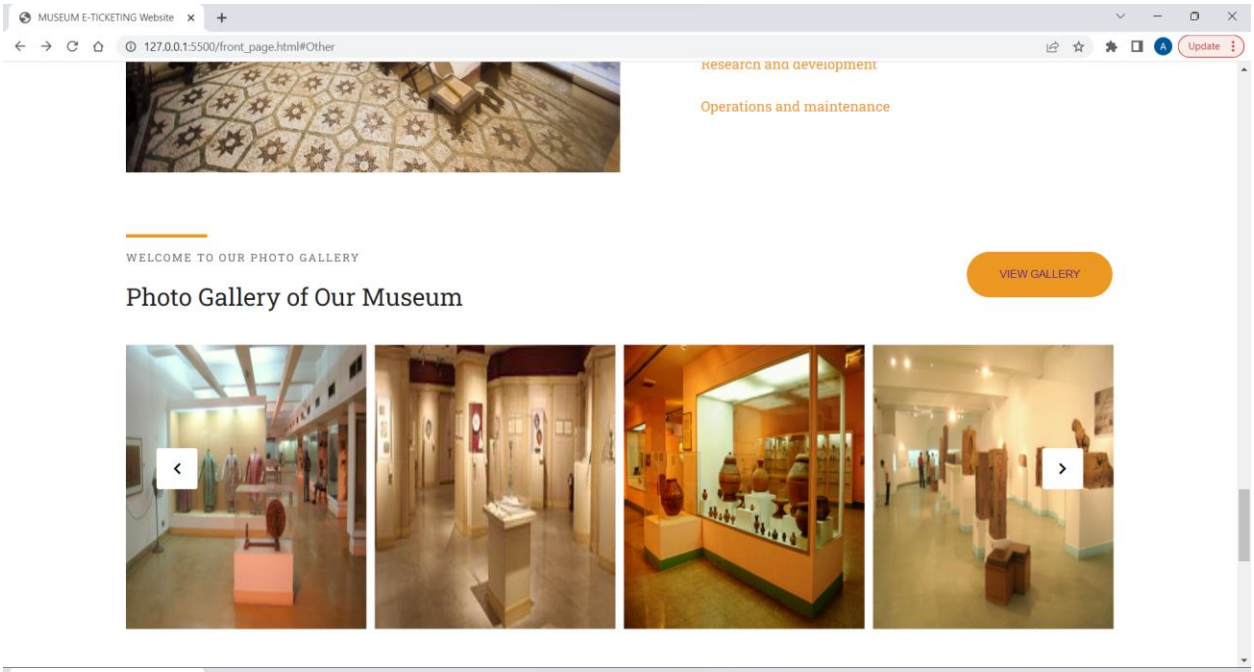
Screenshots & Results

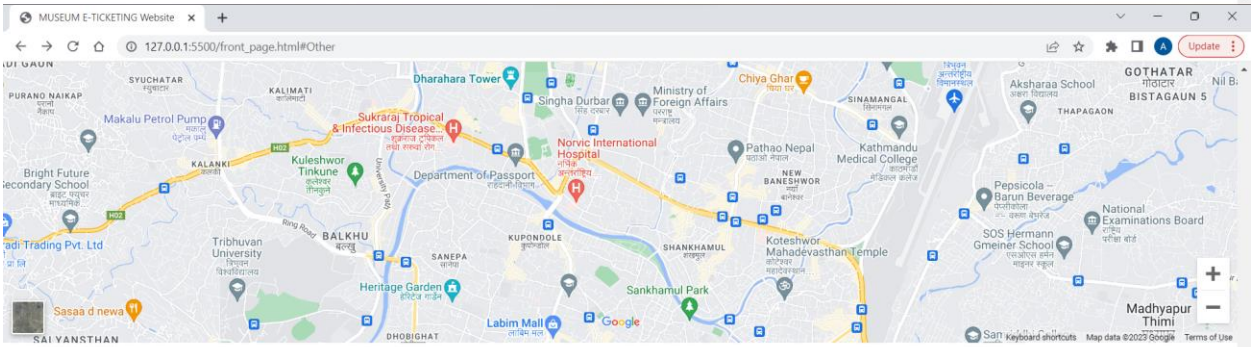



MUSEUM E-TICKETING Website
127.0.0.1:5500/front_page.html#Other
Update
months of 1947-48. It was decided to display the same collection in Delhi, before the return of exhibits to their respective museums. An exhibition was organized in the the RashtrapatiBhawan (President's residence), New Delhi in 1949, which turned out to be a great success. This event proved responsible for the creation of the National Museum.
READ MORE
Our Amenities
These brief descriptions highlight the amenities that museums commonly offer, providing a glimpse into the additional features and services that enhance the overall visitor experience.
Guided Tours
Cafe or Restaurant
Multi-Language Support
Interactive Exhibits
Information Desk
Seating Area & Restrooms
Wi-Fi
Parking Facilities
RAISING COMFORT TO THE HIGHEST LEVEL
Explore other museum
VIEW ALL


MUSEUM E-TICKETING Website
MUSEUM E-TICKETING Website
File | D:/Sanmati/Mini%20project/front_page.html
Update
Darshan Museum
Time10:00 AM - 6:00 PM
CLICK HERE to visit their website
Mani Bhavan Gandhi Museum
Time10:00 AM - 5:30 PM
CLICK HERE to visit their website
Sunil's Celebrity Wax Museum
Time9:00 AM - 10:00 AM
CLICK HERE to visit their website
AT THE HEART OF COMMUNICATION
People Say
I wanted to express my appreciation for the seamless online ticketing process and the enjoyable experience I had visiting your museum. Booking tickets online was easy and straightforward, and upon arrival, the staff efficiently scanned my e-ticket for entry. The exhibits were captivating, and the amenities provided added to the overall convenience and enjoyment. Thank you for a great experience!


MUSEUM E-TICKETING Website
MUSEUM E-TICKETING Website
File | D:/Sanmati/Mini%20project/front_page.html
Update
great experience!
Janavhi
IDAHO
Our Museum
Excepteur
Exhibition development
Expenses related to the planning, design, fabrication, installation, and promotion of temporary or permanent exhibitions
Educational programs
Research and development
Operations and maintenance





Accepted payment methods

Recent News

- Exclusive Museum Experience
- Unveiling Ancient Artifacts
- Cultural Exchange Program
- Art Talks and Workshops
- Virtual Museum Experience

For Customers

- About Museum
- Customer Care/Help
- Corporate Accounts
- Financial Information
- Terms & Conditions

Contact Us

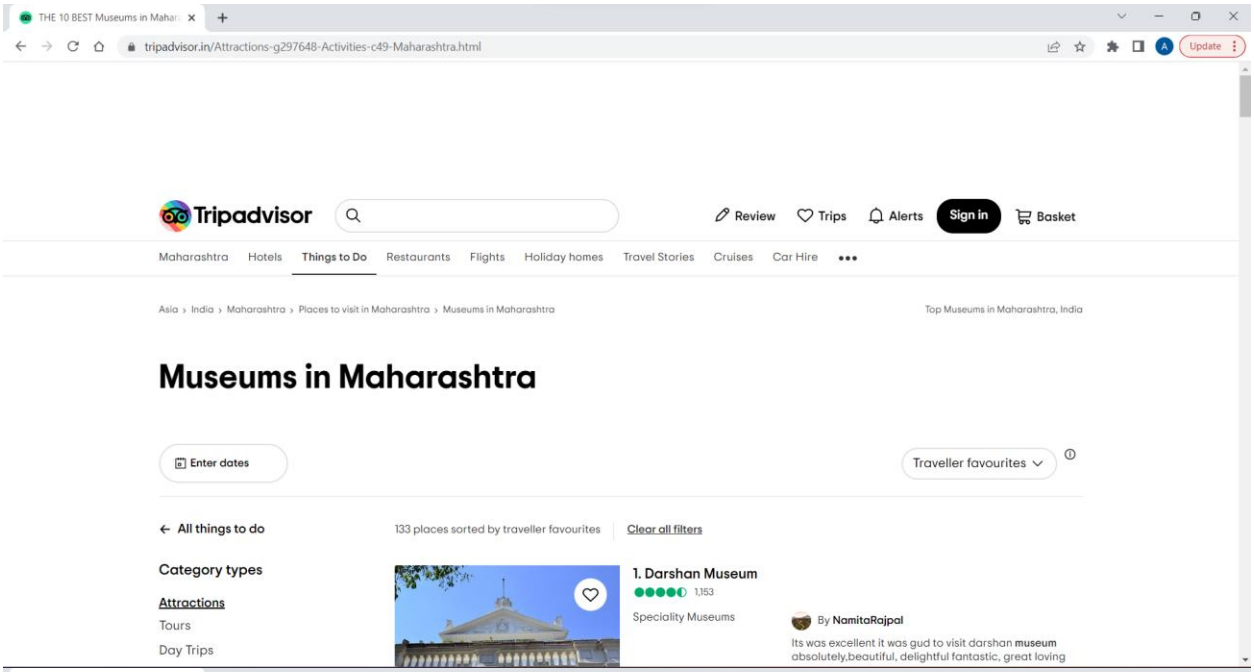
678 Grand Ave, Cocount Grove,
Merrick Way FL 123456

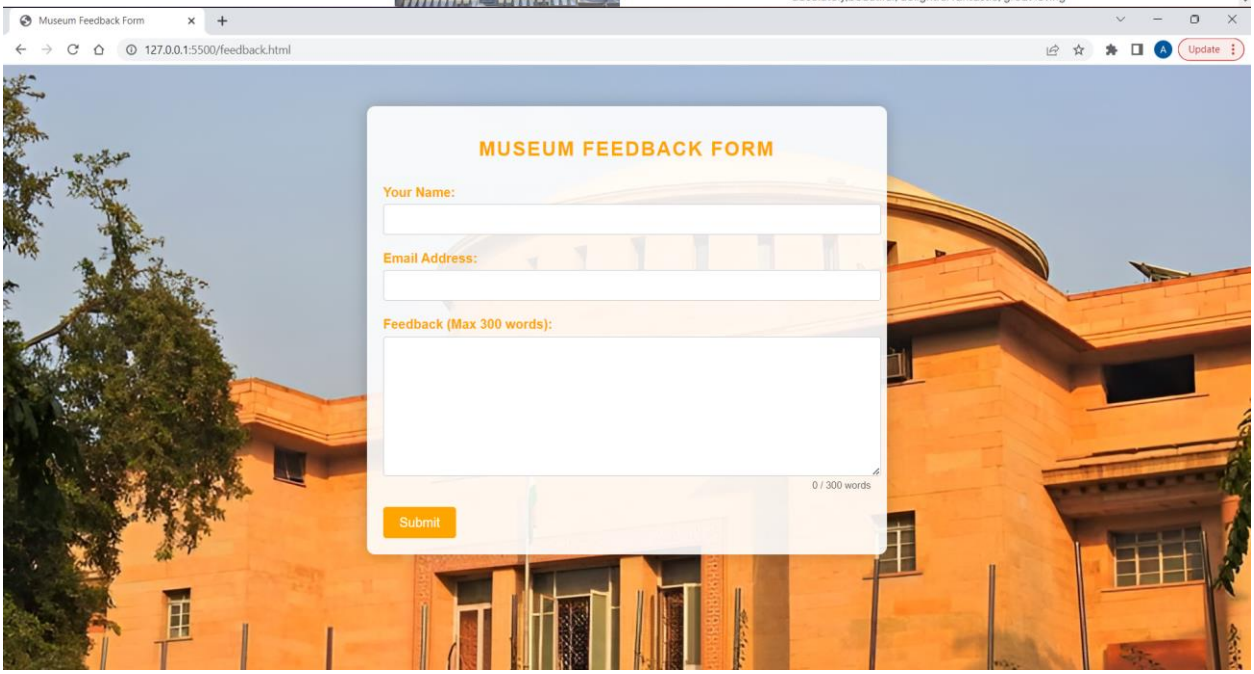
demoexample@gmail.com

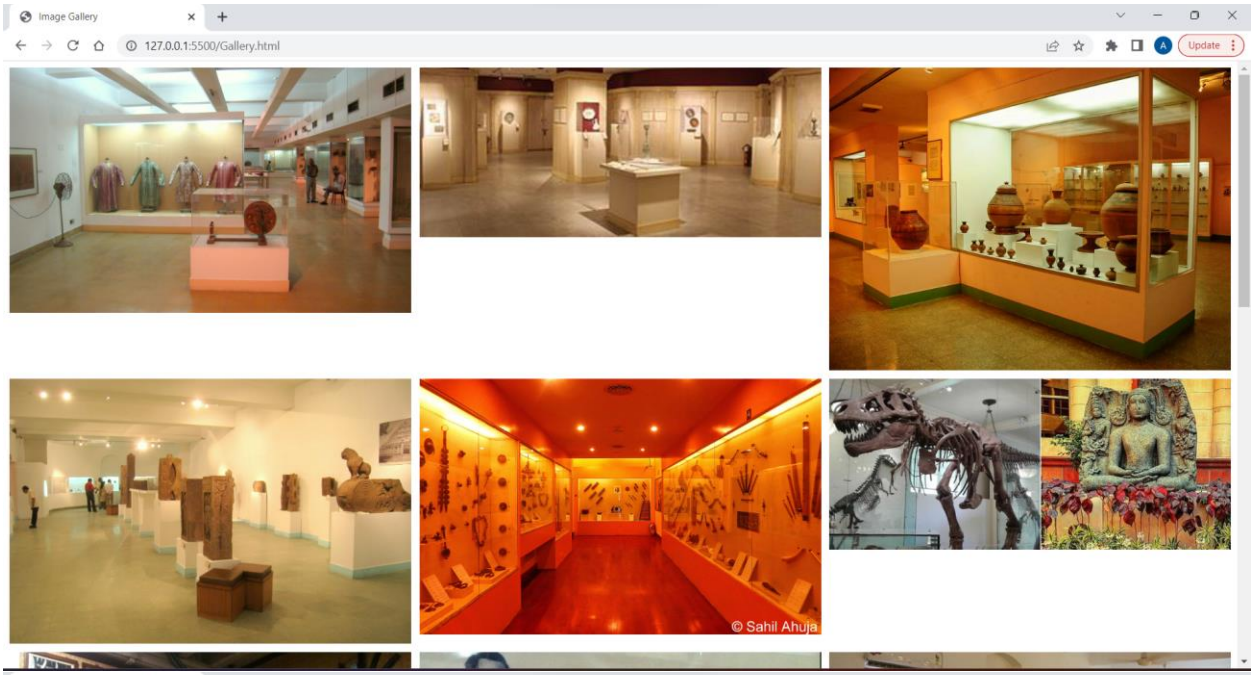
123 456 7898

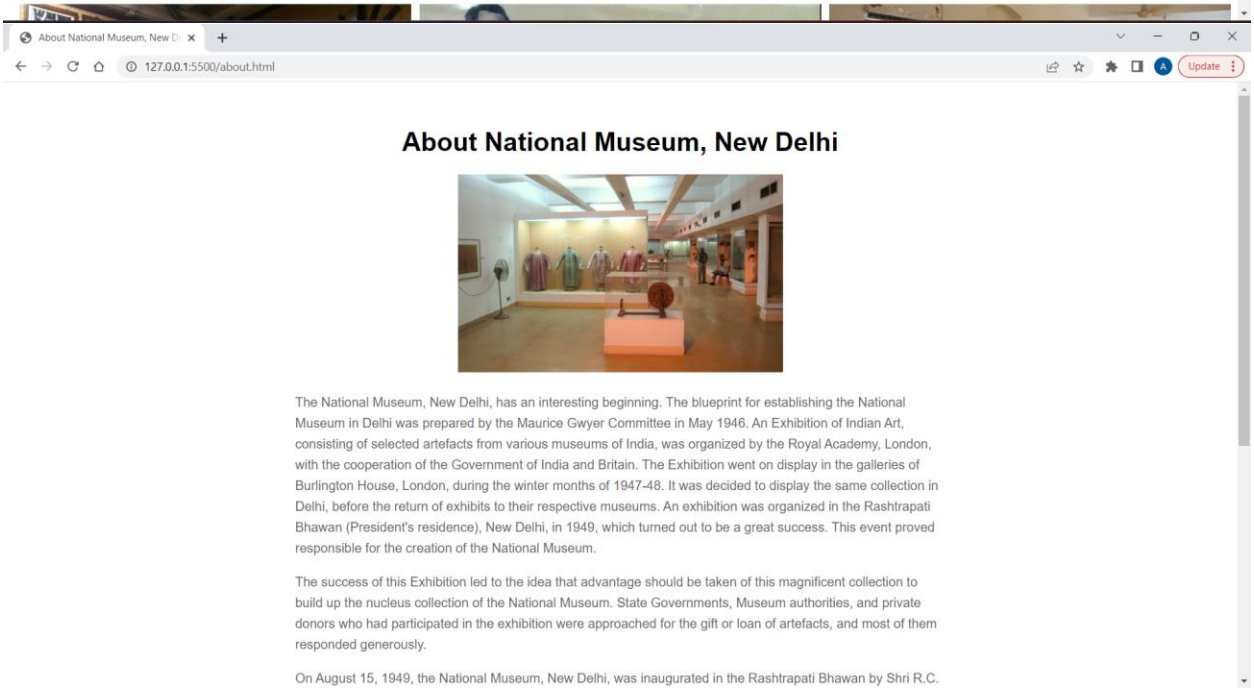
123 456 7898

24/ 7 Customer Services


THE 10 BEST Museums in Mahar
tripadvisor.in/Attractions-g297648-Activities-c49-Maharashtra.html
Update
Tripadvisor
Review
Trips
Alerts
Sign in
Basket
Maharashtra
Hotels
Things to Do
Restaurants
Flights
Holiday homes
Travel Stories
Cruises
Car Hire
Asia › India › Maharashtra › Places to visit in Maharashtra › Museums in Maharashtra
Top Museums in Maharashtra, India
Museums in Maharashtra
Enter dates
Traveller favourites
All things to do
133 places sorted by traveller favourites
Clear all filters
Category types
Attractions
Tours
Day Trips
1. Darshan Museum
1,153
Speciality Museums
By NamitaRajpal
Its was excellent it was gud to visit darshan museum absolutely,beautiful, delightful fantastic, great loving


Museum Feedback Form
127.0.0.1:5500/feedback.html
Update
MUSEUM FEEDBACK FORM
Your Name:
Email Address:
Feedback (Max 300 words):
0 / 300 words
Submit



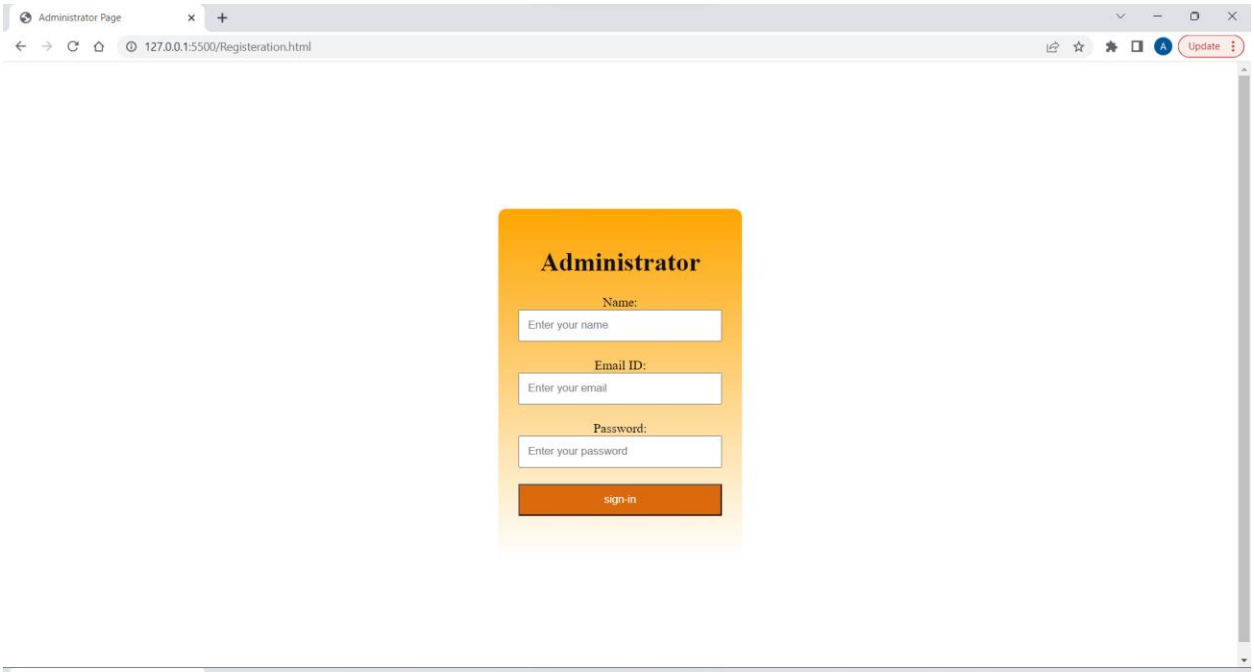


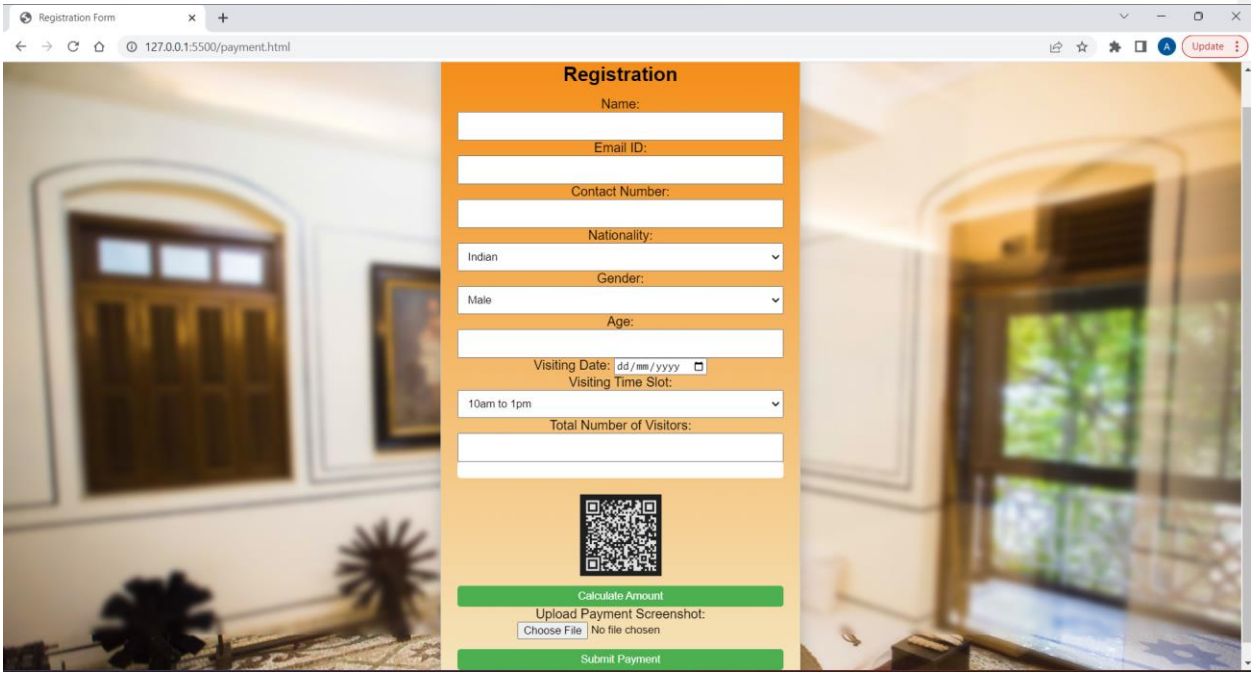
About National Museum, New Delhi

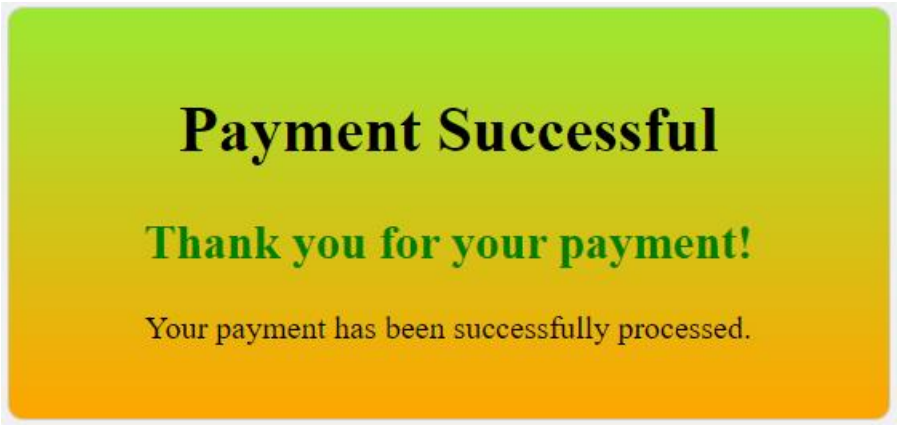
The National Museum, New Delhi, has an interesting beginning. The blueprint for establishing the National Museum in Delhi was prepared by the Maurice Gwyer Committee in May 1946. An Exhibition of Indian Art, consisting of selected artefacts from various museums of India, was organized by the Royal Academy, London, with the cooperation of the Government of India and Britain. The Exhibition went on display in the galleries of Burlington House, London, during the winter months of 1947-48. It was decided to display the same collection in Delhi, before the return of exhibits to their respective museums. An exhibition was organized in the Rashtrapati Bhawan (President's residence), New Delhi, in 1949, which turned out to be a great success. This event proved responsible for the creation of the National Museum.

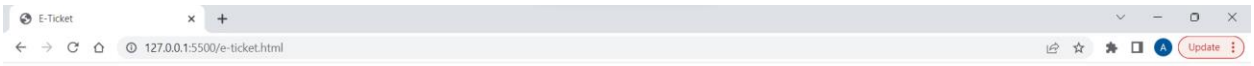
The success of this Exhibition led to the idea that advantage should be taken of this magnificent collection to build up the nucleus collection of the National Museum. State Governments, Museum authorities, and private donors who had participated in the exhibition were approached for the gift or loan of artefacts, and most of them responded generously.

On August 15, 1949, the National Museum, New Delhi, was inaugurated in the Rashtrapati Bhawan by Shri R.C.


Administrator Page
127.0.0.1:5500/Registeration.html
Update
Administrator
Name:
Enter your name
Email ID:
Enter your email
Password:
Enter your password
sign-in


Registration Form
127.0.0.1:5500/payment.html
Update
Registration
Name:
Email ID:
Contact Number:
Nationality:
Indian
Gender:
Male
Age:
Visiting Date: dd/mm/yyyy
Visiting Time Slot:
10am to 1pm
Total Number of Visitors:
Calculate Amount
Upload Payment Screenshot:
Choose File
No file chosen
Submit Payment





MUSEOMATIC

Name: John Doe
Email: john.doe@example.com
Contact Number: 123-456-7890
Nationality: USA
Gender: Male
Age: 30
Visiting Date: June 21, 2023
Visiting Time: 10:00 AM
Total Visitors: 3

Relevant Insights

Date	Visitors	Revenue
2023-05-01	150	$500
2023-05-02	200	$800
2023-05-03	180	$600
2023-05-04	220	$900

Insight: The day with the highest visitor count and revenue was 2023-05-02.

Advantages and Disadvantages or Applications

Advantages of the Mini Project:

1. **Convenience:** The web application offers a convenient way for visitors to browse and book museum tickets from anywhere, saving time and effort compared to traditional ticketing methods.
2. **Enhanced User Experience:** Users can access detailed information about the museum, including highlights and instructions, allowing them to plan their visit more effectively and make informed decisions.
3. **Streamlined Registration Process:** The registration process is simplified and streamlined, with users being able to provide visitor details and make necessary bookings easily through the online form.
4. **Improved Efficiency:** By digitizing the ticketing process, the mini project improves operational efficiency for both visitors and museum authorities, reducing manual paperwork and queuing times.
5. **Real-time Analytics:** The admin dashboard, powered by Power BI, provides real-time analytics and insights for crowd management and revenue analysis, enabling museum authorities to make data-driven decisions.

Disadvantages of the Mini Project:

1. **Digital Divide:** Some visitors may not have access to the internet or be familiar with online ticketing processes, potentially excluding them from using the web application.
2. **Technical Issues:** Like any web-based system, technical issues such as server downtime or connectivity problems can hinder the user experience or access to the application.

Possible Applications:

1. **Museums and Cultural Institutions:** The mini project is designed specifically for museums, cultural institutions, and similar attractions where E-Ticketing can enhance the visitor experience and streamline operations.
2. **Tourist Attractions:** The concept of the mini project can be applied to various tourist attractions such as historical sites, art galleries, botanical gardens, or amusement parks, providing an efficient ticketing solution for visitors.
3. **Event Ticketing:** The underlying principles of the mini project can be extended to event ticketing, allowing users to book tickets for concerts, conferences, exhibitions, or other ticketed events online.
4. **Visitor Management Systems:** The registration and management features of the mini project can be adapted for broader visitor management systems, such as in educational institutions, conferences, or corporate settings, to facilitate registration and access control.

Future scope

The future scope of the E-Ticketing mini project for museums includes:

1. Mobile Application Integration: Develop a dedicated mobile app for enhanced user experience and additional features.
2. Personalization: Implement personalized visitor profiles and recommendation systems.
3. Advanced Analytics: Incorporate advanced analytics and predictive insights for better understanding of visitor behavior and resource optimization.
4. Virtual Tours and Online Exhibitions: Integrate virtual tour capabilities and create online exhibitions for remote visitors.
5. CRM and Marketing Integration: Connect with CRM and marketing tools for improved visitor engagement and targeted campaigns.
6. Social Media Integration: Enable social media integration for user-generated content and wider promotion.
7. Accessibility Features: Include accessibility features for a more inclusive museum experience.
8. Partnerships and Collaborations: Explore partnerships with other institutions and tourism platforms for expanded ticketing options.
9. Smart Ticketing and IoT Integration: Utilize IoT technologies for seamless access control and real-time monitoring.
10. Continuous User Feedback: Gather user feedback for iterative improvements and to meet evolving visitor expectations.

Conclusion/Summary

By implementing a web application with an e-ticket system, museums can provide a seamless and engaging experience for visitors. Effortless ticketing, real-time updates, and interactive features enhance visitor exploration, while data analytics help museums make data-driven decisions for continuous improvement

References

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- "Visitor Monitoring in Cultural Heritage Sites" by M. Mekni, S. Kalogeropoulou, and D.Chrysoulakis-Available at https://www.researchgate.net/publication/278141285_Visitor_Monitoring_in_Cultural_Heritage_Sites
- "Implementing e-Ticketing Systems in Museums: Lessons from the Field" by A. Sigala and E. Vrana - Available at https://www.researchgate.net/publication/283971929_Implementing_e-Ticketing_Systems_in_Museums_Lessons_from_the_Field
- This research paper explores the implementation of e-ticketing systems in museums and provides insights and lessons learned from practical experiences. It discusses the benefits of e-ticketing systems, such as increased revenue, improved visitor management, and enhanced visitor experience.
- "The Impact of e-Ticketing on Visitor Behavior: A Case Study of a Museum in China" by X. Liu and Y. Zhou - Available at https://www.researchgate.net/publication/325932933_The_Impact_of_e-Ticketing_on_Visitor_Behavior_A_Case_Study_of_a_Museum_in_China