# <u>"Safar"</u> <u>Second year Mini Project Report</u>

Submitted in partial fulfillment of the requirements of the degree

# BACHELOR OF ENGINEERING IN COMPUTER ENGINEERING

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# **CERTIFICATE**

This is to certify that the Mini Project entitled "Safar" is a bonafide work of Parul Wanode(66), Madhura Anerao(06), Riya Firke(23), Pranita Bannore(08), Tarunkumar Gatla(71) submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of "Bachelor of Engineering" in "Computer Engineering".

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# **Mini Project Approval**

This Mini Project entitled " <u>Safar</u> " by Parul Wanode(66), Madhura Anerao(06), Riya Firke(23), Pranita Bannore(08), Tarunkumar Gatla(71) is approved for the degree of Bachelor of Engineering in Computer Engineering.			
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#### 1. Introduction

#### 1.1 Introduction

Welcome to "Safar," your gateway to a world of cultural richness and heritage exploration. Safar is not just a mobile application; it's a journey through time and tradition, designed to connect travelers with the historical and cultural treasures of the world. Whether you are a history enthusiast, an adventurous traveler, or someone looking to explore your own heritage, Safar is your perfect companion. Unearth the stories of the past, explore the cultural tapestry of the world, and embark on an unforgettable journey with Safar, the heritage tourism app that turns your travels into enriching historical adventures. Start your Safar today and embark on a heritage voyage like no other.

#### 1.2 Motivation

The project idea for "Safar" holds immense potential and importance in addressing critical issues in heritage tourism. Here are some motivational points to support the endeavor: Preservation of Cultural Heritage: Heritage sites worldwide are at risk due to over-tourism, neglect, and erosion of cultural authenticity. Safar can contribute significantly to preserving these invaluable cultural legacies for future generations.

Empowerment of Local Communities: By involving local communities in tourism and revenue-sharing models, Safar can positively impact the economic well-being of these communities. This empowerment can lead to increased pride, a stronger sense of identity, and better preservation of cultural traditions.

Cultural Exchange: Safar has the potential to create meaningful cultural exchanges between tourists and local communities. These interactions can lead to a deeper understanding of diverse cultures and the breaking down of stereotypes.

Economic Growth: Heritage tourism, when managed responsibly, can boost local economies. The success of Safar can lead to economic growth in heritage-rich areas and contribute to poverty reduction.

Global Cultural Appreciation: By providing access to the world's cultural heritage, Safar can promote a sense of global cultural appreciation and understanding, fostering a more interconnected and peaceful world.

#### 1.3 Problem Statement & Objectives

The problem that "Safar" Heritage Tourism App aims to address is the diminishing appreciation of global heritage and the need to preserve and celebrate the diverse historical and cultural landmarks around the world. Many heritage sites face various challenges, including neglect, degradation, or a lack of attention from travelers. The app seeks to reignite interest in heritage exploration, educate users about the significance of these sites, and contribute to their conservation

#### Objectives:

<u>Promote Cultural Preservation:</u> The primary objective of Safar is to promote the preservation and conservation of historical and cultural heritage sites globally. This includes supporting restoration efforts and raising awareness about the importance of these sites.

<u>Educate and Inform:</u> Safar aims to educate and inform users about the historical, architectural, and cultural significance of heritage sites. The app provides detailed information, historical narratives, and interactive content to enhance users' understanding.

<u>Foster Responsible Tourism:</u> The app encourages responsible tourism by promoting ethical travel practices that respect local customs, protect the environment, and benefit local communities.

<u>Connect Users with History:</u> Safar seeks to connect users with the stories of the past. It enables users to delve into the history and culture of a location, making their travel experiences more meaningful and educational.

<u>Enrich Travel Experiences</u>: Safar's goal is to enrich users' travel experiences by providing them with in-depth insights and personalized heritage trails that go beyond standard tourist attractions.

<u>Showcase Hidden Gems</u>: The app aims to showcase hidden heritage gems, encouraging users to explore lesser-known sites and distribute the economic benefits of tourism more evenly.

<u>Foster Cross-Cultural Understanding</u>: Safar encourages cross-cultural understanding and empathy by providing insights into diverse cultures and traditions from around the world.

<u>Use Technology for Heritage:</u> Safar utilizes technology, including augmented reality, to bring history to life and make heritage exploration more engaging and accessible.

<u>Build a Community:</u> The app strives to build a community of heritage enthusiasts, travelers, and historians who can share their experiences, ask for recommendations, and engage in discussions.

<u>Support Sustainable Heritage Tourism:</u> Safar aims to support sustainable and long-term heritage tourism. It wants to ensure that future generations can continue to explore and appreciate the world's cultural and historical treasures.

<u>Raise Awareness:</u> The app intends to raise awareness about the importance of heritage preservation and the need for responsible tourism. It motivates users to become advocates for heritage conservation.

#### 1.4 Organization of the Report

The report's structure follows a logical progression, with the Introduction section (1) setting the foundation for the entire document. In Introduction (1), we provide a broad overview of the topic, followed by Motivation (1.2) that articulates the driving forces behind our research or project. Subsequently, we delve into the Problem Statement & Objectives (1.3) section, which defines the specific issue we aim to address and lays out our intended objectives. The organization of the report (1.4) is then presented to give readers a clear roadmap of the report's structure.

Transitioning into the Proposed System (3), we introduce an innovative approach or system. Within the Introduction (3.1), we offer a comprehensive overview of our proposed system. The Architecture/Framework (3.2) section provides detailed insights into the system's structure and framework, while Algorithm and Process Design (3.3) elaborate on the methodologies we've employed. Details of Hardware & Software (3.4) shed light on the technological aspects of our system. The Experiments and Results (3.5) section presents the outcomes of our research, and the Conclusion and Future Work (3.6) encapsulate the key findings and chart the course for future research directions.

Lastly, the References section serves as a comprehensive compilation of all the sources referenced throughout the report. This section allows readers to delve deeper into the works cited within the document.

#### 2. <u>Literature Survey</u>

#### 2.1 Survey of Existing System

No.	Title	Publication Year	Summary
1.	Religion and Identity in Indian heritage and Tourism	5th June 2008 By Rajan Bandyopdhyay.	To encourage the growing worth of heritage sities.
2.	Sustainable preservation and accessibility to cultural heritage in India	31th May 2022 By Gireesh Kumar	To provide a overview of the legal, governmental, academic and digital initiatives for preservation and promotion of Indian heritage
3.	Problems and prospects of heritage based city development in India.	4th March 2022 By Shipra Goswami and Ashwani Kumar.	This paper intends to understand the pressure of newer infrastructural developments on the existing heritage fabric.
4.	Developing a sustainable cultural heritage information system.	11th October 2021 By Giresh Kumar and Thekkum Kara	The purposed of this article is to emphasize the need for developing on Indian cultural heritage information system.

#### 2.2 Limitation Existing system or research gap

- 1) <u>Content Accuracy and Completeness:</u> Many heritage tourism apps rely on user-generated content, leading to inaccuracies and missing details about heritage sites.
- 2) <u>Localization and Language Barriers:</u> These apps often struggle to provide content in multiple languages or cater to specific local cultural nuances, limiting their accessibility to a global audience.
- 3) <u>Limited Coverage:</u> Not all heritage sites are included in these apps, especially lesser-known or remote locations. This can limit the utility of these apps for travellers who want to explore less touristy areas.
- 4) <u>Navigation and Wayfinding</u>: Some heritage sites are vast or maze-like, and the apps may not offer effective navigation or wayfinding features, making it easy for users to get lost.

#### 2.3 Mini Project Contribution

The "Safar" Heritage Tourism App offers several significant contributions and positive impacts to users, heritage preservation, and the broader tourism and cultural appreciation landscape:

- i. <u>Cultural Preservation:</u> Safar contributes to the preservation and conservation of historical and cultural heritage sites. By educating users about the significance of these sites, the app fosters a greater appreciation for cultural preservation efforts.
- ii. <u>Education and Awareness:</u> The app educates users about the history, architecture, and cultural significance of heritage sites, promoting a deeper understanding of our shared global heritage.
- iii. <u>Responsible Tourism:</u> Safar encourages responsible tourism by promoting ethical travel practices. It advocates for respect of local customs, protection of the environment, and support for local communities in and around heritage sites. Community Building: Safar builds a community of heritage enthusiasts, travelers, and historians. Users can share their experiences, ask for recommendations, and engage in discussions, further enriching their understanding of heritage.
- iv. <u>Support for Sustainability:</u> The app is dedicated to supporting sustainable heritage tourism. By advocating for responsible travel, Safar contributes to the long-term sustainability of heritage sites.
- v. <u>Heritage Site Restoration:</u> A portion of the app's revenue is allocated to support the restoration and conservation of heritage sites. This direct financial contribution aids in the preservation of these invaluable cultural treasures.
- vi. <u>User Advocacy:</u> Safar motivates users to become advocates for heritage conservation. By learning about the importance of cultural preservation, users are more likely to support and promote heritage protection initiatives.

#### 3 PROPOSED SYSTEM:

#### 3.1 Introduction

Safar is a visionary solution poised to revolutionize the world of heritage tourism. This innovative app is designed to seamlessly unite heritage enthusiasts, travelers, local communities, and cultural organizations, fostering responsible exploration, education, and preservation of our shared cultural treasures. With a focus on authenticity, sustainability, and community empowerment, Safar offers a comprehensive suite of features that address the challenges faced by heritage tourism. The idea is to create a user-friendly app that will delve into rich narratives, informative articles, and multimedia presentations that provide in-depth knowledge about each heritage site's historical significance, architecture, and cultural context.

#### 3.2Architecture/Framework

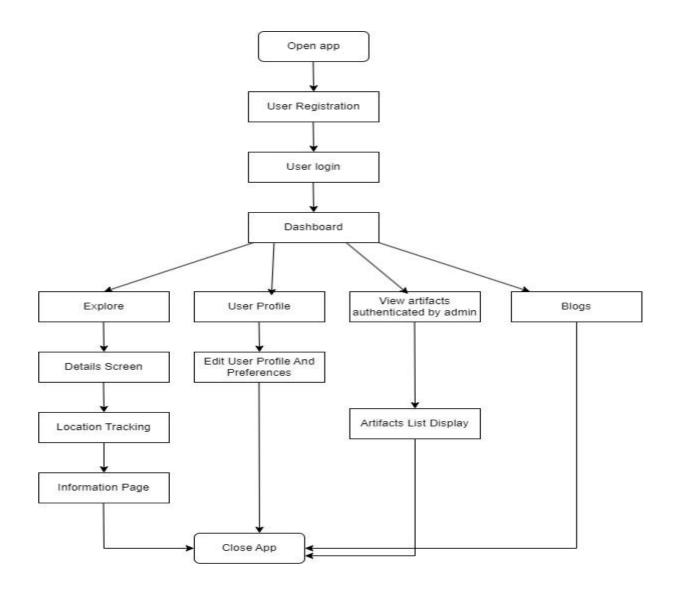


Fig 1: Flow of app.

#### 3.3 Algorithm and Process Design

To create a successful heritage app, it's important to follow a detailed process. This process can be broken down into several steps:

- 1. Research and Conceptualization.
- 2. Planning and Design.
- 3. Content Creation and Collection.
- 4. Technological Development.
- 5. Features Implementation.
- 6. User Engagement and Feedback.

#### 3.4 Details of Hardware & Software

#### **HARDWARE:**

- Smartphones and Tablets: Users will primarily access the app on smartphones and tablets. Ensure compatibility with a range of popular devices and operating systems.
- Server Infrastructure: A server infrastructure is required to host the app's backend services, databases, and content delivery systems.
- Quality Assurance Testing Devices:

Maintain a range of testing devices to ensure the app functions correctly on various screen sizes, resolutions, and operating systems.

#### **SOFTWARE:**

- Operating System (OS): Mobile app development typically targets iOS (for Apple devices) and Android (for a wide range of smartphones and tablets). You'll need development tools and simulators for both platforms.
- Programming Languages: Use languages like Swift and Objective-C for iOS development and Java and Kotlin for Android development.
- Backend Development: Implement the app's server and backend services using languages like Python, Ruby, Node.js, or Java. Frameworks such as Express, Ruby on Rails, or Django may be used.
- Database Management: Choose a suitable database management system (DBMS) like MySQL, PostgreSQL, MongoDB, or Firebase Realtime Database for storing user data and content. Cloud Services (Optional): If you use cloud hosting, consider services like Amazon Web Services (AWS), Google Cloud Platform (GCP), or Microsoft Azure for hosting your backend
- .User Interface (UI) Design Tools:Use design software like Adobe XD, Sketch, Figma, or InVision to create UI/UX designs.

### 3.5 Experiment and Results

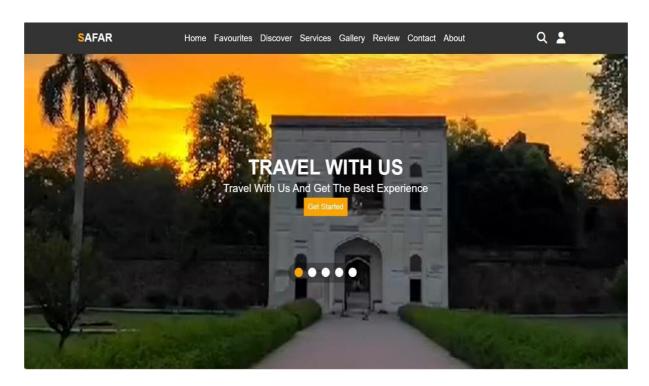


Fig 1: Homepage

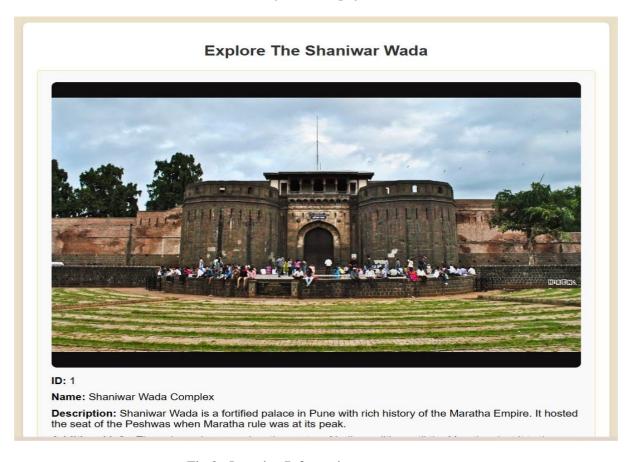


Fig 2: Location/Information page.

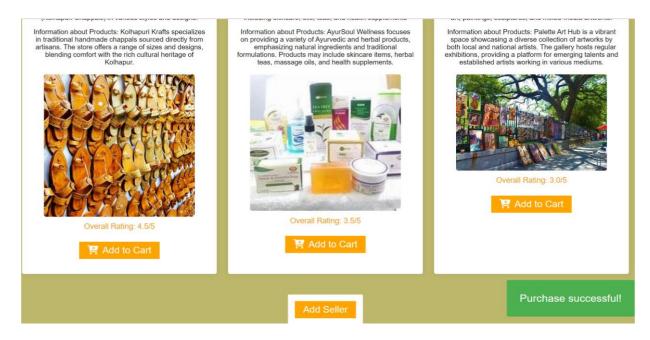


Fig 3: Artifacts Purchase page

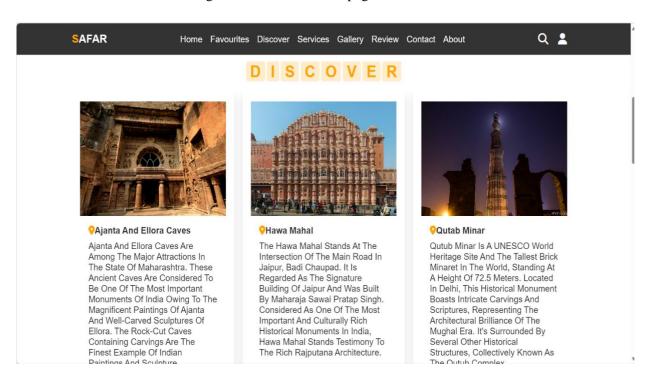


Fig 4: Blogs

#### 3.6 Conclusion and Future work.

The journey of Safar is far from complete, and several exciting avenues for future development await. The app's roadmap includes:

- i. Expanded Content: Safar will continue to expand its database of heritage sites, ensuring the inclusion of even more hidden gems and lesser-known cultural landmarks.
- ii. Enhanced AR Features: The app will further enhance its augmented reality capabilities, providing users with immersive and interactive experiences.
- iii. AI Advancements: Continued research and development in AI and NLP will lead to more sophisticated data summarization and personalization features.
- iv. Localization Efforts: Expanding multilingual support to cover a broader range of languages will make Safar accessible to an even more diverse global audience.
- v. User-Generated Content: Safar will encourage users to contribute content, stories, and insights about heritage sites, fostering a sense of community and shared knowledge.
- vi. Sustainability Initiatives: The app will intensify its support for heritage preservation and restoration efforts, with a focus on environmentally sustainable practices.
- vii. Global Reach: Safar aims to expand its reach to new regions, making heritage exploration and appreciation accessible to individuals worldwide.

#### **References:**

- 1] Impact of heritage tourism in India: S Shankar International Journal of Innovative Research in Information Security 6 (2), 59-61, 2015
- 2] Mapping heritage tourism service quality using the Kano model: a case study of Indian tourism Ashutosh Pandey, Rajendra Sahu International Journal of Services and Operations Management 37 (2), 264-283, 2020
- 3] Still on UNESCO's "Tentative List of World Heritage"? Heritage, Tourism, and Stunted Growth in Sarnath (Varanasi), India Kiran Shinde, Rana PB Singh Heritage 6 (7), 5051-5065, 2023
- 4] 11th October 2021 By Giresh Kumar and Thekkum Kara.
- 5] Incredible India (Official Website for Ministry of Tourism India | Incredible India)