

"Guide-To-Go": A Cutting-Edge Approach to Building a Real-Time Travel Guide Application

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Abstract-- Tourism is one of the top three sectors disrupted by technology. Travel apps and websites are gaining attraction as a convenient and reliable source of information and guidance. The aim of the present work is to propose and develop website and an approach to an android application. The paper illustrates the methodology, features, development method, and uses of our website named "Guide-To-Go".

Index Terms-- Application; Female Empowerment; Real time guide booking; Societal benefits.

I. INTRODUCTION

TOURISM is an enriching experience that can broaden one's horizons by exposing them to new cultures, ideas, and perspectives. It involves traveling for various reasons such as sightseeing, leisure, religious, family, political, business, official, or educational purposes, usually for a limited time away from home [1]. India, the world's largest country in term of population with breathtaking natural beauty and historical landmarks, is a popular destination for tourists from different countries.

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The tourism industry in India is rapidly growing, and the number of international tourists visiting the country is increasing every year. India ranks 8th in the tourism industry of the Asia-Pacific region, with around 17 to 18 million international tourists coming every year. According to the World Travel and Tourism Council, the tourism industry in India contributes approximately 9.2% to the country's GDP and generates millions of jobs [2]. Despite the growth in the tourism industry, finding the right guide who can provide a memorable and valuable experience to travelers remains a challenge. A tourist guide is a crucial information system that helps manage a tourist's activities and makes their trip comfortable and convenient. In this context, the researcher emphasizes the importance of services and activities that would enhance a tourist's navigation, access, and comfort in India [3]. However, finding the right guide who can offer valuable insights and help tourists make the most of their trip can be a daunting task. Our goal is to simplify travel planning and make it more convenient by developing a sustainable tourist guide (Information System for Tourists) in the form of an app as well as a website. The guide will offer verified guides with expertise and excellent communication skills to travelers [4].

II. RESEARCH PROBLEM

Tourism is an important industry that attracts millions of visitors each year, but it is not without its challenges. One of the most basic problems faced by tourists is the lack of access to knowledgeable local guides. Local guides who have lived in an area for years are best suited to provide visitors with insider information about the area's history, culture, and attractions. However, finding a reliable and trustworthy guide can be a challenge.

Another common problem faced by tourists is the language barrier. Foreign visitors often prefer to communicate in English, but local guides may not have a good command of the language. This can lead to misunderstandings and a

frustrating experience for both the guide and the tourist. Moreover, Indian tourists from different regions also face language problems while visiting other states.

In addition, there is a need to promote sustainable tourism practices, which includes providing opportunities for female guides. Female guides are currently underrepresented in the tourism industry, and it is important to encourage their participation. Some female tourists may also feel more comfortable with a female guide, especially in cultures where gender roles are strictly defined. Therefore, the tourism industry needs to ensure that female guides have equal opportunities and support to participate in the industry. Furthermore, authenticity is a major concern for tourists when selecting a guide. It is essential to have a guide who is knowledgeable about the area and can provide accurate information. There is a need for proper training and certification of guides to ensure that they are qualified to provide accurate and authentic information to tourists.

III. RESEARCH METHODOLOGY: INTRODUCTION TO PROPOSED SYSTEM

Software providers have been constantly enhancing functions and upgrading the interfaces of existing apps and websites to create more user-friendly experiences. In our project, the application is intended to serve as a compass for the Tourists in India. The Google map API will be embedded in it. This enables the user to navigate easily to and around his/her place of choice. Our website aims to address this challenge by providing travelers with a platform to book verified guides who possess proper knowledge and communication skills. The website will allow travelers to search for guides based on specific criteria such as gender, language, and expertise. This will also suggest top tourist places based on the traveler's interest, and provide information about the places, such as the history, culture, and local customs. This will help the traveler make informed decisions about the places they want to visit and enhance their travel experience. Furthermore, the traveler can rate their guides on our app, and we will monitor their performance to ensure that they provide excellent service. This will also help other travelers in making an informed decision about the guide they choose. In addition to offering guides, our future plan is to expand the app to include booking options for hotels, restaurants, and cinemas. This will make travel planning easier and more convenient for travelers, as they can book all their travel-related activities through one platform only. We understand that safety is a major concern for travelers, and we take it very seriously. Our tourist guiding platform will provide safety guidelines and precautions that travelers should follow while visiting different places. We will also ensure that the guides we provide are trained in safety procedures and can handle emergency situations.

IV. EXISTING WORK

The creation of a website design is a crucial step towards establishing an online presence for our business. While the initial design has been completed, it is important to continue improving it to ensure that it meets the needs of our users and enhances their experience. The website's design should be user-friendly and intuitive, with a clear layout and navigation to guide users to the information they need.

In addition to the website, we have also created a sample design for our application, which outlines the steps required for a user to book a guide. The user experience should be seamless, with a simple and easy-to-use interface that allows users to browse available guides and book them with ease. It should also provide users with information about the guide's qualifications, experience, and reviews from previous customers.

V. PROPOSED SYSTEM

The proposed application includes three important models for distinct activities: User Module, Admin Module, and Database Module. Each of these modules serves a specific purpose:

A. User Module

In the User Module, users can create an account in the application and access information about the place or the latest updates. This module is designed to provide a user-friendly experience to users, allowing them to easily find the information they need. Users can access the information they need without having to go through an administrator or wait for an update.

B. Admin Module

In the Admin Module, the administrator can access all the information that is accessed by the user and can make changes and updates to the application at any time to make it more user-friendly. This module is designed to provide a centralized location for administrators to manage the application's content and ensure that the user experience is consistent and up-to-date. Additionally, administrators can access user feedback and use this feedback to improve the application.

C. Database Module

The Database Module contains all the data accessed by the user for registration and feedback, among other things. This module is designed to ensure that all data is stored securely and can be accessed easily by the user and administrator modules. Additionally, the database module allows for updates to the information in the user account,

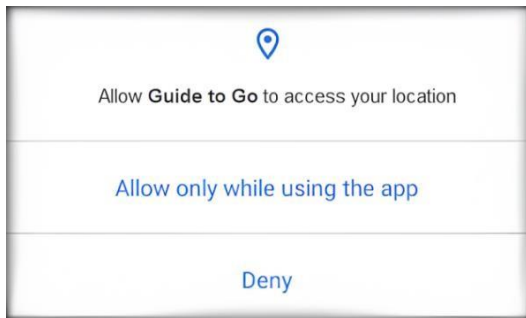
ensuring that all data is up-to-date.

VI. SYSTEM DESIGN

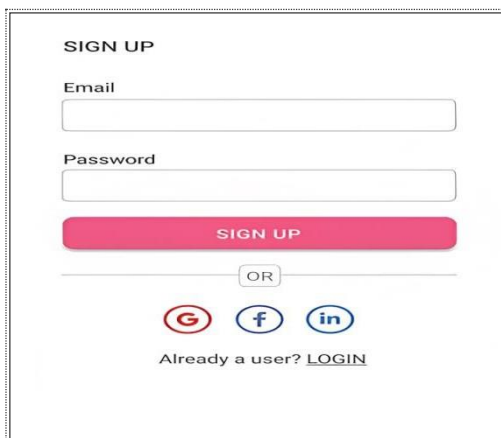
A. The Proposed System: Fidelity Prototype of our application

The pictures provided showcase the interfaces and steps involved in the system. They serve as visual aids to help users understand how the system works and navigate through it. By presenting the system's interfaces and steps in a clear and concise manner, users can easily comprehend the system's functionality and accomplish their tasks efficiently.

Firstly, the user has to provide their location:

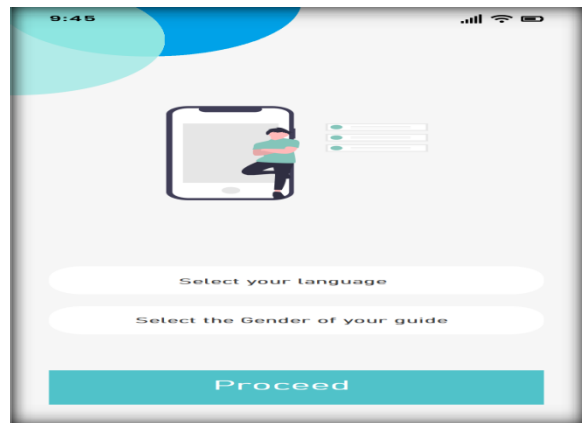
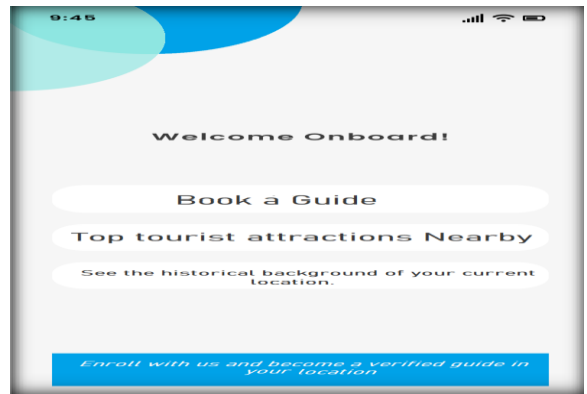


Secondly, they have to login/sign-up manually or by using the given platforms



Then they will be shown the homepage of our app.

Now if they click on “Book a Guide” option they will be asked to choose the gender of their guide they want in their service and their language as well.



And now they are good to go! They can enjoy their guide inservice.

B. The Proposed System: Fidelity Prototype of our website

The interfaces of the system describe the phrases that are commonly used. The proposed structure of the system has been described below through a fidelity prototype of the system. The basic features of the prototype contain the Home Page, Phrase, Login option, Search Transportation.



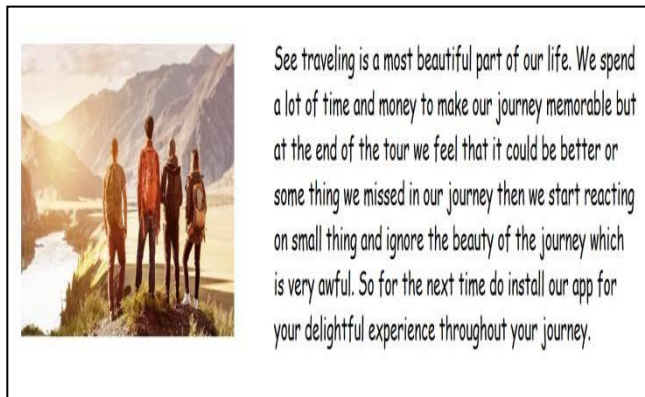
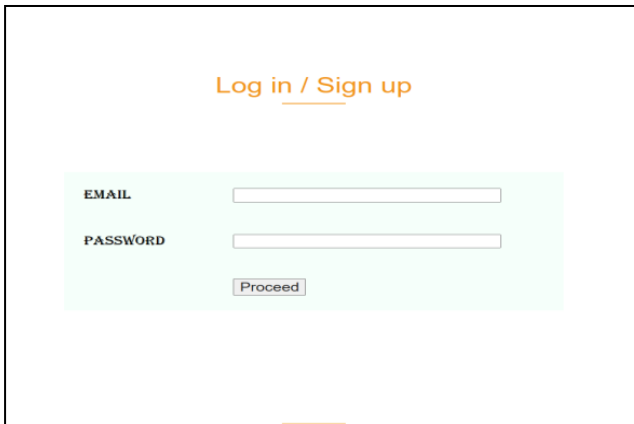
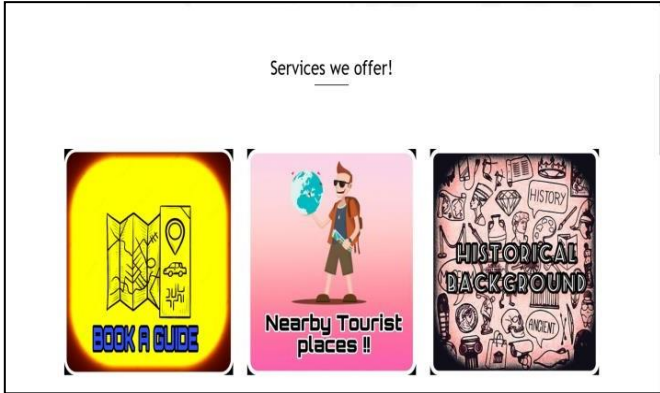


Fig. 1. Website-Based Tour Guide Sample Screens

C. Website Development Tools

Website or mobile based App is the significant platform for open-source travel guide system. It uses Windows as default operating system. Table 1 describes the development tools in Website platform.

Table 1 Development tools requirements for Websiteplatform

SPECIFICATION	
Area of Usage	India
Hardware	Any smart device which can run a browser and having a minimum of 1Gb RAM.
Language	HTML
Operating System	Windows/Android/IOS/Linux etc.

D. Developing the layouts

To develop the layouts HTML is used to display its contents. Each tag is in HTML. Layout performs given property.

Example of *Relative Layout* statement for HTMLdocument should look like:

```

<html>
<head>
<title>
</title>
</head>
<body>
<div style="text-align:center">
<h3>Log in / Sign up</h3>
<div style="border:1px solid #ccc; padding:10px; margin:10px auto; width:fit-content">
<div style="display:flex; justify-content:space-between; align-items:center; margin-bottom:10px">
<input type="text" style="width:80%; border:none; border-bottom:1px solid #ccc; outline:none;" value="EMAIL" />
<input type="password" style="width:80%; border:none; border-bottom:1px solid #ccc; outline:none;" value="PASSWORD" />
</div>
<div style="text-align:center">
<input type="button" value="Proceed" style="border:none; border-bottom:1px solid #ccc; padding:5px 20px; cursor:pointer;" />
</div>
</div>
</body>
</html>
    
```

```

<html>
<head>
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<h3>Log in / Sign up</h3>
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<input type="text" style="width:80%; border:none; border-bottom:1px solid #ccc; outline:none;" value="EMAIL" />
<input type="password" style="width:80%; border:none; border-bottom:1px solid #ccc; outline:none;" value="PASSWORD" />
</div>
<div style="text-align:center">
<input type="button" value="Proceed" style="border:none; border-bottom:1px solid #ccc; padding:5px 20px; cursor:pointer;" />
</div>
</div>
</body>
</html>
    
```


VIII. PPROCESS OF IMPLEMENTATION

As a first-year student we don't have much knowledge about full-stack development, so we have to hire a developer for android and iOS-based app development as well as we have to hire a web developer for our website. After implementing the above we have to register our business. Then we have to take approval from ministry of tourism, then we have to integrate payment gateway in our app. And lastly and the most important and vital task is to promote our app for commonuse.

IX. CONCLUSION

The above sample screens are just a prototype which will not be implemented like-wise, this paper is only a way to convey our idea to the world and our aim is to implement it further to a full-fledged app at any cost.

We all faced those problems during traveling or during the approval from parents for traveling solo. If the idea became true then all of us will be benefited, no one will face any obstacle to explore our dream destination. Not only that but also the unemployment will get reduced a little, especially for the women's and thus the empowerment campaign can easily run in rural area also.

Keeping tourist's need in consideration and the current trend to the use of smart technology, we have developed our Travel Guide Website which may turn into an easy going mobile based App in our future research work. The application is able to meet most of the requirements of a traveler as well as potentially enhance the societal and economic status of our country.

X. ACKNOWLEDGMENT

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Mr. Riddhiman Mukhopadhyay is currently pursuing a Bachelor's degree in Computer Science (B. Tech) from the Abacus Institute of Engineering and Management. He passed his higher secondary examination from the west Bengal Board of Higher Secondary Education.



Mr. Shubhadip Atta is currently submitted his thesis at the Dept. of Physics, NIT Durgapur. Prior this, He was Asst. Professor of Physics at Gurunanak Institute of Technology, Kolkata. He has published more than ten (10) international peer reviewed (SCI indexed) journals in last five years. He has also published three (3) international conference proceedings in AIP. Mr. Atta also presented lot of research papers in different International Symposium.



Mr. Jeet Dutta is currently doing Bachelor of Technology in Computer Science & (B.Tech) from Abacus Institute of Engineering and Management. He passed his higher secondary examination from the West Bengal Board of West Bengal Board of Higher Secondary Education in 2022 from Bagati Ramgopal Ghosh High HS School.



Chandan Kumar Raul received his B.Sc. degree in Physics from Midnapore College (autonomus) under the Vidyasagar University, India in 2017 and M.Sc. degree from National Institute of Technology Durgapur, India in 2019. Presently he is pursuing his Doctoral research work at National Institute of Technology Durgapur. His research interests include materials science, fuel cell, electrocatalysts, electrolysis, hydrogen evolution reactions and electrochemical engineering. He has published 5 SCI indexed, peer reviewed International Journals.



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