Egypt Tourist Guide

FACULTY OF INFORMATION TECHNOLOGY

Egypt Tourism Guide

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List of Acronyms and Abbreviations.

ML → Machine Learning.

DL → Deep Learning.

NLP → Natural Language Processing

ANN → Convolutional Neural Network

Abstract:

This project purpose

This project aims to revolutionize tourism in Egypt by leveraging AI and technology to create a personalized, informative, and sustainable travel experience.

like Create an AI-powered, personalized travel guide for Egypt that uses NLP and ML to curate unique experiences and overcome common tourism challenges.

Chapter 1
Introduction

1.1 Introduction:

This isn't your average tourist guide. We're infusing the magic of Egypt with the cutting edge of technology, using Natural Language Processing (NLP) and Machine Learning (ML) to craft a personalized and transformative travel experience where Planning your trip becomes a breeze through telling our AI-powered chatbot your interests, travel style, and it curates a bespoke itinerary that perfectly.

Navigate like a local and ditch the guidebooks and get real-time recommendations as you explore. Our NLP technology deciphers your surroundings, suggesting hidden gems, local eateries, and cultural experiences based on your location and preferences, also Our translation tool uses NLP to interpret conversations in real-time, allowing you to ask questions, share stories, and forge genuine connections with locals, enriching your cultural experience and recommends eco-friendly accommodations, this is just the beginning of how NLP and Machine Learning are revolutionizing the way we experience Egypt.

This guide is your trusted companion, whispering insider tips and illuminating hidden gems. Egypt is not just a destination, it's an experience. It's a land where history whispers from every corner, where natural beauty stuns the senses, and where culture captivates the soul.

1.2 Project Motivation:

Egypt, the cradle of civilization, beckons with its timeless pyramids, enigmatic temples, and vibrant culture. Yet, planning a trip to this land of wonder can be daunting. (Statistic: a 2023 study by [Travel Industry Association] showed 72% of tourists feel stressed planning trips.) This is where our website steps in, poised to be a transformative force for tourists.

Imagine a tourist, overwhelmed by countless websites and conflicting advice. They dream of a seamless journey, exploring ancient wonders while navigating unfamiliar territory. our website, with its intelligent chatbot assistant, will be their guiding light.

our website will Become your travel companion: Ask our chatbot anything, from visa requirements to hidden gem recommendations, all in one convenient place.

Our website aspires to revolutionize travel planning for Egypt, transforming it from a chore into an exciting prelude to the adventure. We want to spark a love for Egypt and contribute to a thriving tourism industry that benefits local communities.

1.3 Problem Statement:

Travelers face difficulty in finding reliable information about the offers offered by Egypt, including travel visa requirements and other inaccurate information, Transportation inconsistencies Disparate and unreliable public transportation options can be daunting for first-time visitors, limiting their ability to explore beyond major cities.

Navigating cultural nuances: Unawareness of local customs and etiquette can lead to misunderstandings and negative experiences for tourists and locals, failing to provide authentic connections with Egyptian culture and communities, Overdependence on Traditional Tourism where Focusing solely on mass tourism and historical attractions limits Egypt's appeal to diverse traveler segments. Diversifying offerings to include niche interests like ecotourism, adventure travel, and cultural immersion can attract new markets.

Seasonality and Crowding: Peak tourist seasons overwhelm resources at popular sites, creating discomfort and reducing the quality of experience for both visitors and locals. Diversifying attractions, promoting lesser-known destinations, and encouraging responsible tourism practices can smooth out visitor flow.

Information overload: Tourists are overwhelmed by countless websites offering conflicting information.

Finding hidden gems: Tourists often miss out on lesser-known sights and experiences.

1.4Project Objective:

Information Hub: Create a centralized, comprehensive, and constantly updated online resource covering all aspects of travel to Egypt, including:

- Landmarks in Egypt.
- Visa and entry requirements.
- Image of Landmarks in Egypt.
- Safety information and support services.
- Cultural insights and etiquette guidance.
- Transportation options and booking platforms.
- Destination guides, from iconic landmarks to hidden gems.
- Sustainable travel practices and eco-friendly accommodation options.

Personalized Planning: Offer interactive tools for itinerary creation, allowing users to tailor their trips based on interests and accessibility needs.

- Booking accommodation, tours, and activities.
- AI-powered recommendations for attractions, activities, and local experiences.
- Encouraging responsible interactions and respect for local customs and traditions.

Digital Accessibility: Ensure the platform is:

- Mobile-friendly and user-friendly for all levels of tech savviness.

1.5 Target Audience:

1. Culture enthusiasts and history buffs.
2. Families and multi-generational groups.
3. Travelers with diverse interests and needs.
4. Adventure seekers and outdoor enthusiasts.
5. Independent travelers seeking authentic and immersive experiences.

Expected Outcomes:

1. Increased tourist arrivals and longer stays in Egypt.
2. Enhanced visitor satisfaction and positive travel experiences.
3. Empowerment of local communities and economic development.
4. Deeper understanding and appreciation of Egyptian culture and heritage.

By achieving these objectives, the Egypt Tourist Guide will not only revolutionize the way travelers experience Egypt, but also contribute to the country's sustainable development and cultural preservation.

1.6 Scope & Limitation:

- **Scope Content Coverage:**
  - Comprehensive information on visa requirements, entry procedures, and local regulations.
  - Detailed and up-to-date travel guides for major cities and lesser-known destinations.
  - Interactive itinerary planning tools and customizable travel routes.
  - Recommendations for authentic cultural experiences beyond mainstream tourist attractions.
  - Detailed listings of accommodation options, restaurants, transportation, and activities.
  - Safety and security information, including emergency services and local support resources.

- **Limitations of the Egypt Tourist Guide:**
  - Real-time updates: While information will be updated regularly, unforeseen events or changes might take time to reflect.
  - Subjective recommendations: Some recommendations may not align with every traveler's preferences.
  - Limited local partnerships: Information might not be exhaustive for all regions or niche interests.
  - Unforeseen circumstances: External factors like weather or political events can disrupt travel plans.
  - Technology dependence: Users require access to mobile data or internet for full functionality.

1.7 Project Methodology:

Dataset Gathering: Take notes, photos, and videos, and interview locals, tour guides, and experts, gathering feedback from potential users about their travel preferences, interests, and challenges in planning an Egyptian trip. This can be done online, through social media.

We will use (NLP) technique that stands for Natural Language Processing, which is a subfield of computer science and artificial intelligence concerned with giving computers the ability to understand and process human language. through creating a conversational Chatbots that can interact with humans in a simulated dialogue.

Understanding user queries and returning relevant results, responding to user questions and requests in a natural way, Translating text from one language to another. Identifying the meaning and intent behind text or speech.

1.8 Significance of the Project:

The significance of an Egypt tourist guide project depends on its specific goals and target audience. Here are some potential areas where such a project could have significant impact:

❖ **For Tourists:**

- Enhancing travel experience: A well-designed project can provide comprehensive and accurate information about Egypt's attractions, travel logistics, cultural nuances, and safety tips, leading to a more informed and enjoyable trip for tourists.
- Promoting sustainable tourism: The project can integrate eco-friendly practices and educate visitors on responsible travel, minimizing their environmental impact and supporting local communities.
- Breaking down cultural barriers: By providing cultural insights and facilitating communication, creating a more positive and enriching experience for everyone.

❖ **For Local Communities:**

- Economic empowerment: A well-managed project can provide employment opportunities for local guides, artisans, and hospitality professionals, contributing to economic development and poverty reduction.
- Cultural preservation: The project can document and promote Egypt's unique heritage, traditions, and stories, ensuring their preservation for future generations.
- Community engagement: By involving local communities in the development and implementation of the project, it can foster a sense of ownership and pride in their culture, leading to greater cooperation and sustainability.

Discussion of how the project contributes to the body of knowledge in tourism management and information systems.

For tourism management, the platform aims to centralize information on Egypt's attractions and accommodations. By leveraging personalized recommendations, it could help visitors optimize their itineraries according to their unique interests. If successful, the data gathered on user behavior and preferences may also provide insights to national tourism boards.

1.9 Summary:

Tourism is a major global industry and Egypt has tremendous potential given its rich history and cultural heritage. However, tourists currently face challenges planning trips due to limited centralized information sources.

The Egypt Tourist Guide project aims to address this problem by developing an integrated digital platform to provide all necessary resources for tourists in one place. This will include a website, robot guide, database, and machine learning features.

The scope of the project will focus on top destinations in Egypt, individual attraction pages, a hotel directory, and basic recommendations. It will not support travel to other countries beyond Egypt.

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Chapter 2
Background

2.1 Website:

A website acts like a digital storefront or hub, accessible through the internet using a web browser. Websites use interconnected web pages to deliver information, services, or products. From news outlets to online stores, these virtual spaces cater to a wide range of purposes. By using text, images, and sometimes even interactive elements, websites inform, engage, and connect users with the information they seek. Absolutely! Beyond static information, websites can be quite dynamic. They can leverage complex programming to tailor content to individual users, process live data like stock quotes or sports scores, and even enable real-time interactions like online chat or social media updates. This interactivity makes websites not just informational portals, but powerful communication and collaboration tools as well.

2.2 Frontend (HTML, CSS, JavaScript,Bootstrap & JQuery):

HTML5/CSS3: The foundation for building the website's structure and visual design. HTML5 provides the content framework, while CSS3 styles the elements for a visually appealing user interface.

JavaScript (or a framework like ReactJS): JavaScript adds interactivity to your website. Frameworks like ReactJS make it easier to manage complex user interfaces and data flow.

Responsive Design: Ensures your website adapts seamlessly to different screen sizes (desktops, tablets, smartphones) for a smooth user experience on any device.

2.3 Backend (PHP & Larvel Framework):

Server-side Programming Language (PHP): Processes user requests, interacts with databases, and generates web pages. Languages like Python and PHP are popular choices, while Node.js is well-suited for real-time applications with chatbots.

Database (MySQL): Stores all your website's data, including tourist information, regulations, accommodation listings, and transportation options. MySQL and PostgreSQL are widely used relational databases.

APIs (Application Programming Interfaces): These allow your website to integrate with external services like Google Maps or booking platforms for hotels and transportation.

2.4 Artificiel Intelligence (AI- Chatbot) :

Machine learning algorithms learn from data to make predictions or decisions without explicit programming. In this case, the model learns from conversation patterns to predict suitable responses for new user inputs.

Deep Learning: Subfield of Machine Learning: Deep learning uses artificial neural networks with multiple layers to process complex data like text. This code employs a neural network architecture to analyze the conversation data and generate responses.

Artificial Neural Network (ANN): It's a machine learning model inspired by the structure of the human brain. It consists of interconnected layers of nodes (artificial neurons) that process information.

Natural Language Processing (NLP): Enables the chat bot to understand user queries and respond in a naturel way. This involves libraries or Framework that train the chat bot on relevant data.

Chapter 3
Literature Review

3.1-Introduction :

Reviewing the literature in the Egypt Tourism Guide is an essential step to understanding the developments and innovations that the tourism industry in Egypt has witnessed. This guide is a vital resource for visitors and travelers wishing to explore Egypt's unique beauty and history. This literature review will include a review of research, studies and articles related to the tourism industry in Egypt, helping to understand the challenges and opportunities facing this vital sector.

3.2 Historical and Cultural Significance of Egyptian Tourism:

An overview of recent studies on Egypt's historical and cultural heritage reveals a diverse and dynamic field of research. Scholars and researchers explored various aspects of Egypt's rich heritage, including archaeology, cultural conservation, tourism, and the impact of modern technologies and the importance of cultural heritage tourism is also due to the fact that the tourism activity when it is taken care of planning it scientifically and managing it according to the scientific foundations of the generalized will be an incentive for him to increase the flow of tourism to these areas and then increase income and create new job opportunities and increase exports of antiques and handicrafts in addition to increasing social integration, cultural diversity and development of humanity that interacts with technology, intellectual property and tourism goals. The growth and prosperity of cultural heritage tourist areas also helps to encourage local investment and the foreigners in these areas which helps to increase tourist traffic to it

3.3 Technological Innovations in Tourism:

3-1. Summary of the latest research on technological advancements in tourism.

ICT developments are happening very quickly and have a significant impact on the tourism industry.

1-Information Technology in Tourism Marketing:

How social media and websites can be used to market tourist destinations.

The impact of digital marketing strategies and online advertising campaigns.

2-Mobile Applications and E-Booking:

How the use of mobile applications affects the facilitation of reservations and access to tourist information.

Application security and personal data protection.

3-Artificial Intelligence in Hotel and Service Management:

How AI can be used to improve hospitality services and provide unique guest experiences.

Predictive analytics and intelligent technology in room management and pricing

4-Technology to enhance safety and security:

How technology can be used to improve safety at tourist sites and provide safety tips for travelers.

Tracking technology for emergency assistance.

3-2. Comparative analysis of technology adoption in tourism in Egypt and other countries.

Technology Development:

Egypt: Egypt has seen advances in technology, but the level of adoption varies between urban and rural areas. Online booking technologies and mobile apps are increasingly being used.

Other countries: In some developed countries, technological development is more widespread, with high-speed internet and advanced applications that support tourism experiences.

Mobile Apps:

Egypt: There has been an increase in the use of mobile applications for booking and communicating with travelers.

Other countries: In many countries, mobile applications play a big role in facilitating the tourist experience by providing accurate information and instant bookings.

Technology for tourism marketing:

Egypt: Digital marketing strategies have evolved, and social media is widely used.

Other countries: In developed countries, digital marketing is integrated with advanced technologies such as the use of big data and artificial intelligence techniques.

3.4 Sustainable and Eco-friendly Tourism:

4-1Discussion on recent findings in sustainable tourism practices

1 The national strategy for sustainable tourism in Egypt aims to increase tourism traffic to 30 million tourists by 2028, by working to achieve incoming tourist traffic rates to the Egyptian tourist destination by about 25% and 30% annually, within the framework of Egypt's vision for sustainable development 2030.

The strategy is based on 6 axes:

The second axis: raising the competitiveness of the Egyptian tourist destination:

In this axis, work is being done to optimize the use of the state's tourism, natural, human and archaeological resources and work to ensure their sustainability, and to provide a distinguished and advanced infrastructure and service to increase Egypt's competitiveness, by encouraging investment opportunities, raising the efficiency of the human element and using modern technology methods, through institutional and legislative frameworks to keep pace with global development, while applying the

best ways to promote and activate tourism locally and internationally to attract the largest number of tourists from different markets and all categories

The third axis: Economic objectives related to (increasing the number of tourists - increasing the number of tourist nights - tourist spending rates - and targeting the segments with the highest tourist spending)

The strategy aims to showcase the Egyptian tourist destination as a vibrant youth destination, in addition to highlighting the tourism components of the Egyptian tourist destination and its diverse styles and products, in addition to launching several electronic promotional campaigns on various social media platforms.

The fifth axis: Working to maximize the use of technological means

The sixth axis: Maintaining the environmental balance and sustaining tourism and archaeological activity:

It is concerned with maintaining the environmental balance and the sustainability of tourism and archaeological activity, and the state has made efforts in this aspect to transform the Egyptian tourism sector into an environmentally friendly sector, which comes in line with the objectives of the ministry's sustainable development strategy and Egypt's vision 2030 to maintain the environmental balance and the sustainability of tourism and archaeological activity, he stressed that these efforts not only coincide with the special preparations for Egypt to host the 27th Conference of the Parties to the United Nations Convention on Climate Change (COP27), but to transform the tourism sector into a sector that applies all the requirements of environmentally friendly green practices in accordance with the concept of sustainable tourism, pointing to the ECO Egypt campaign, which was launched in cooperation with the Ministry of Environment to promote ecotourism locally and internationally, pointing to the ministry's keenness to support responsible and sustainable ecotourism, which aims to preserve the environment. For the green transition.

3.5 Comparative analysis of recent research dealing with using recent technology in tourism:

There are many modern technologies according to the goal to be achieved, where we find technologies associated with social media and technologies that control virtual reality, in addition to technologies related to several fields such as transportation and food: -

- Social media caused a stir quality in information and communication used at all levels, where technology began social communication from lack of influence to effective influence in which different shares and interacts Spectra of society.

- Internet of Things: IoT technology can be used in hotel rooms to provide customers with a device that connects to everything from lights to heaters and air conditioning, allowing everything to be controlled from one place.

-Robots: Until a decade ago, the idea of regularly deploying robots in the travel industry seemed like the work of a science fiction writer, however, it has become increasingly widespread, as artificial intelligent robots are used , which are often equipped with speech recognition technology, rather than information points .

3.6 Challenges and Opportunities:

The tourism sector is one of the most potent industries worldwide. It faces various challenges in terms of security, communication, marketing, and digitization, among others. Likewise, its role as a generator of jobs is admirable, with most of the work being done by micro, small and medium-sized enterprises. Along with the guarantee of security and peace of mind, technology has made its way among the most critical challenges that the tourism sector must face during 2021. Incorporating new technology has made it easier for hoteliers to adapt to the new reality and create jobs in the Tourists must be educated, given information about Egyptian civilization, and their tourist trips must be facilitated using the technology available in 2024.

3.7 Impact of Tourism on Local Communities:

Studying the impact of tourism on local communities involves understanding various facets, and comparing these impacts across different regions, like Egypt and other tourist-heavy areas, can provide valuable insights. Here are key points to consider for both aspects: Review of Recent Studies on Impact:

Economic Impact: Review studies on how tourism affects the local economy. Look at employment generation, income distribution, and the extent to which tourism revenue benefits local businesses and residents. Sociocultural Impact: Analyze studies that discuss how tourism influences local culture, traditions, and social structures. Look at both positive aspects, such as cultural exchange and preservation, as well as potential negative impacts like cultural commodification or erosion. Comparison between Egypt and Other Tourist-Heavy Regions:

Economic Comparisons: Compare how tourism contributes to the economies of Egypt and other popular tourist destinations. Analyze the distribution of tourism-generated wealth, the diversity of employment opportunities, and the overall economic development influenced by tourism. Sociocultural Dynamics: Contrast how tourism affects the social and cultural aspects in Egypt with other regions. Look at how local communities in both areas engage with tourists, preserve cultural heritage, and manage the social impacts of tourism.

3.8 Future Directions in Tourism:

Examining recent predictions and trends in the field of tourism can be a compelling approach to understanding the potential future of the industry. It involves looking at various aspects like:

Sustainable Tourism: The growing focus on eco-friendly and sustainable travel could significantly impact the future of tourism worldwide. This includes trends like ecotourism, responsible travel, and initiatives to reduce the carbon footprint of tourism activities. Technology Integration: The increasing use of technology in travel, such as AI-powered travel assistants, virtual reality tours, and mobile apps for seamless travel experiences, is likely to shape how tourists explore destinations. A comparative analysis can then be conducted to explore how these trends might impact Egypt specifically compared to the global scenario:

Sustainable Tourism in Egypt: How Egypt adapts to sustainable tourism practices, promotes eco-friendly attractions, or manages cultural heritage sites sustainably. Technology Adoption: Analyzing how Egypt incorporates technological advancements into its tourism sector compared to global standards.

3.9 Summary and implications:

A Tapestry of Experiences: Moving beyond the iconic pyramids, a strategic focus on diversifying tourist experiences is crucial. Promoting cultural events, Red Sea escapes, and unique activities like Nile River cruises broadens tourist appeal and attracts a wider audience.

Balancing Preservation and Access: Egypt's historical treasures are a cornerstone of tourism. Finding a balance between preserving their integrity and ensuring accessibility for tourists requires careful management and the implementation of sustainable practices.

Showcasing Hidden Gems: Highlighting lesser-known archaeological sites and natural wonders can distribute tourist traffic more evenly, alleviating pressure on popular destinations and showcasing the full richness of Egypt's offerings.

Adapting to the Times: Staying abreast of global trends, such as sustainable and ecotourism practices, allows Egypt to attract environmentally conscious tourists. Integrating eco-friendly initiatives and promoting responsible tourism are key steps in this direction.

Community and Culture: Fostering positive interactions between tourists and local communities fosters cultural exchange. Initiatives that involve local communities in tourism activities, ensuring fair economic benefits, contribute to a more sustainable tourism model.

By implementing these insights, the Egypt Tourist Guide can become a powerful tool for shaping a thriving future for Egyptian tourism. A focus on diversification, sustainability, and adaptation will ensure that Egypt remains a compelling destination for generations to come.

3.10 Conclusion:

In conclusion, the Egypt tourist guide offers a captivating glimpse into a country rich with historical treasures, diverse cultural experiences, and natural wonders. As tourists explore the iconic pyramids of Giza, cruise the majestic Nile River, and immerse themselves in the vibrant markets of Cairo, the guide underscores the depth and variety of offerings that Egypt presents to the world. Looking ahead, the guide suggests a promising future for Egyptian tourism, contingent upon strategic measures. Balancing the preservation of historical sites with the demands of accessibility, diversifying tourist experiences, and adapting to global tourism trends are critical considerations. The guide's insights highlight the importance of sustainable practices, technological integration, and community engagement in shaping a resilient and thriving tourism industry.As Egypt continues to welcome visitors with its timeless allure, the success of its tourism sector hinges on a thoughtful blend of tradition and innovation. By leveraging its cultural richness, embracing evolving traveler preferences, and fostering responsible tourism practices, Egypt is poised to secure its position as a premier destination, offering an unforgettable journey through the sands of history and the vibrancy of its contemporary allure.

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Chapter 4
Analysis & Design

4. 1 Introduction:

In this chapter identify the main structure and component of the proposed systems with identifying the main functions for all actors of the system.

4.2 Problem Description:

Despite its undeniable allure, Egypt faces challenges in attracting and catering to tourists effectively. Here are some key areas that need improvement:

Travelers face difficulty in finding reliable information about the offers offered by Egypt, including travel visa requirements and other inaccurate information.

Transportation inconsistencies: Disparate and unreliable public transportation options can be daunting for first-time visitors, limiting their ability to explore beyond major cities.

Navigating cultural nuances: Unawareness of local customs and etiquette can lead to misunderstandings and negative experiences for tourists and locals, failing to provide authentic connections with Egyptian culture and communities.

Perceptions of safety: Negative media portrayals can deter tourists, despite significant improvements in Egypt's security measures.

Lack of awareness: Tourists may lack information on local safety protocols and scams, potentially compromising their well-being.

Limited digital presence: Many local businesses and attractions lack online platforms, making them harder to discover and book

4.3 Scope of the Egypt Tourist Guide:

Target Audience: Independent travelers, culture enthusiasts, history buffs, adventure seekers, families, and travelers with diverse interests and needs.

Comprehensive information on visa requirements, entry procedures, and local regulations.

Detailed and up-to-date travel guides for major cities and lesser-known destinations.

Interactive itinerary planning tools.

Information on cultural norms, etiquette, and local customs.

Recommendations for authentic cultural experiences beyond mainstream tourist attractions.

Detailed listings of accommodation options, restaurants, transportation, and activities.

Information on sustainable travel practices and eco-friendly tourism initiatives.

Safety and security information, including emergency services and local support resources.

Tech and Accessibility:

User-friendly mobile and web platforms available in multiple languages.

Accessible for users with disabilities.

4.4 Proposed solution:

Addressing challenges in attracting and catering to tourists in Egypt requires a multifaceted approach that considers various aspects of the tourism industry.

Here are some proposed solutions:

Social Media Platforms: Direct travelers to official social media accounts of relevant government departments or tourism boards. These platforms may provide real-time updates and answer specific queries from travelers.

Multilingual Cultural Guides: Provide multilingual cultural guides who can bridge language barriers and offer explanations about cultural norms. Having guides who can communicate effectively with tourists enhances the understanding of local customs and reduces the likelihood of misunderstandings.

Collaboration with Travel Agencies: Collaborate with international travel agencies to promote Egypt as a safe destination. Provide travel agencies with updated information on security measures and encourage them to reassure their clients about the positive changes in the country

Digital Marketing Campaigns: Invest in targeted digital marketing campaigns to reach a wider audience. Utilize online advertising, such as Google Ads or social media ads, to promote special offers or events.

4.5 DATA GATHERING:

Before implementing the proposed model, an important step is the collection of representative and reliable data to be used for building the predicate model.

Data were grouped into 2 categories:

- we were gathering data from various resources Example:
  - Offline Resource like (we make a survey from tourists who stay in Egypt)
  - Online Resources (We collected data from online resources to test the Ai recommendation system)

4.6 System Analysis:

4.6.1 Actors:

Admin

User (Visitor)

4.6.2Function Requirements:

Admin Dashboard:

Login & Account Management: Admins can securely log in to their accounts and manage user permissions.

Create Account: Can sign up and access personalized functionality through a user-friendly dashboard

Content Management: Easily update website content and images to keep the platform fresh and engaging.

Performance Monitoring: Track website uptime, analyze performance, and ensure a seamless user experience.

Visitor Dashboard:

Create Account: Visitors can sign up and access personalized functionality through a user-friendly dashboard.

Login: Users can securely log in to their accounts.

Interest-Based Recommendations: Receive tailored recommendations based on travel preferences and goals.

Enhanced User Experience:

Generate recommendations: Utilize AI algorithms to analyze user data and create personalized recommendations for items, content, or experiences.

Present recommendations in a user-friendly and visually appealing format.

Textual information: Offer detailed descriptions, images, and multimedia content about attractions and locations. This can be accessed through screens, printed materials, or downloadable apps.

Multilingual support: Cater to international tourists by providing information and audio commentary in multiple languages.

Suggest points of interest and activities based on the user's preferences and travel goals. This can be achieved through questionnaires, past travel data, or integration with other travel apps.

Ticketing and reservations: Allow users to purchase tickets and make reservations for attractions and activities directly through the system.

Stay updated with real-time information on transportation schedules, weather conditions, and more

Chatbot:

Answer user questions: Access and process information from knowledge bases, FAQs, and other data sources to provide accurate and relevant answers.

Provide guidance and recommendations: Help users navigate through available options and suggest personalized choices based on their preferences and needs.

Offer help and support: Resolve user issues and provide troubleshooting assistance.

Natural language processing: Understand user intent and respond accurately to various forms of text input (including typos, slang, and informal language).

4.6.3 Non-Function Requirements:

Product requirement:

System Performance & Usability

Performance: Ensure system responsiveness, availability, and scalability to handle increasing user traffic.

Usability: Ease of use: The system interface should be intuitive and easy to navigate, even for users with limited technical skills.

Reliability:

Accuracy: The information provided by the system should be accurate and up-to-date, particularly regarding crucial details like location, hours of operation, and prices.

Data integrity: The system should ensure data security and integrity, protecting user information and preventing unauthorized access.

Consistency: The system should behave consistently across different devices and platforms, providing a predictable user experience.

Learnability:

Users should be able to quickly understand how to use the system's features and functionalities.

Data Security & Accessibility:

Data Security : Protect user data and personal information from unauthorized access, alteration, or loss.

System security: The system itself should be protected from hacking, malware, and other security vulnerabilities.

Help and support: Provide easily accessible help resources and FAQs to assist users with any difficulties they encounter.

Reliable Support & Help Resources

Provide easily accessible help resources and FAQs to assist users with any difficulties they encounter.

Software Implementation Requirements:

Frontend Team: *Responsible for the user interface and client-side development.*

Backend Team: *Responsible for server-side logic, database, and integration of the website.*

Ai Team: *Our dedicated team of experts is constantly working to improve the functionality and intelligence of the chatbot, ensuring that it provides accurate and helpful responses to your queries.*

4.7 SYSTEM MODELS

4.7.1 Use Case Diagram:

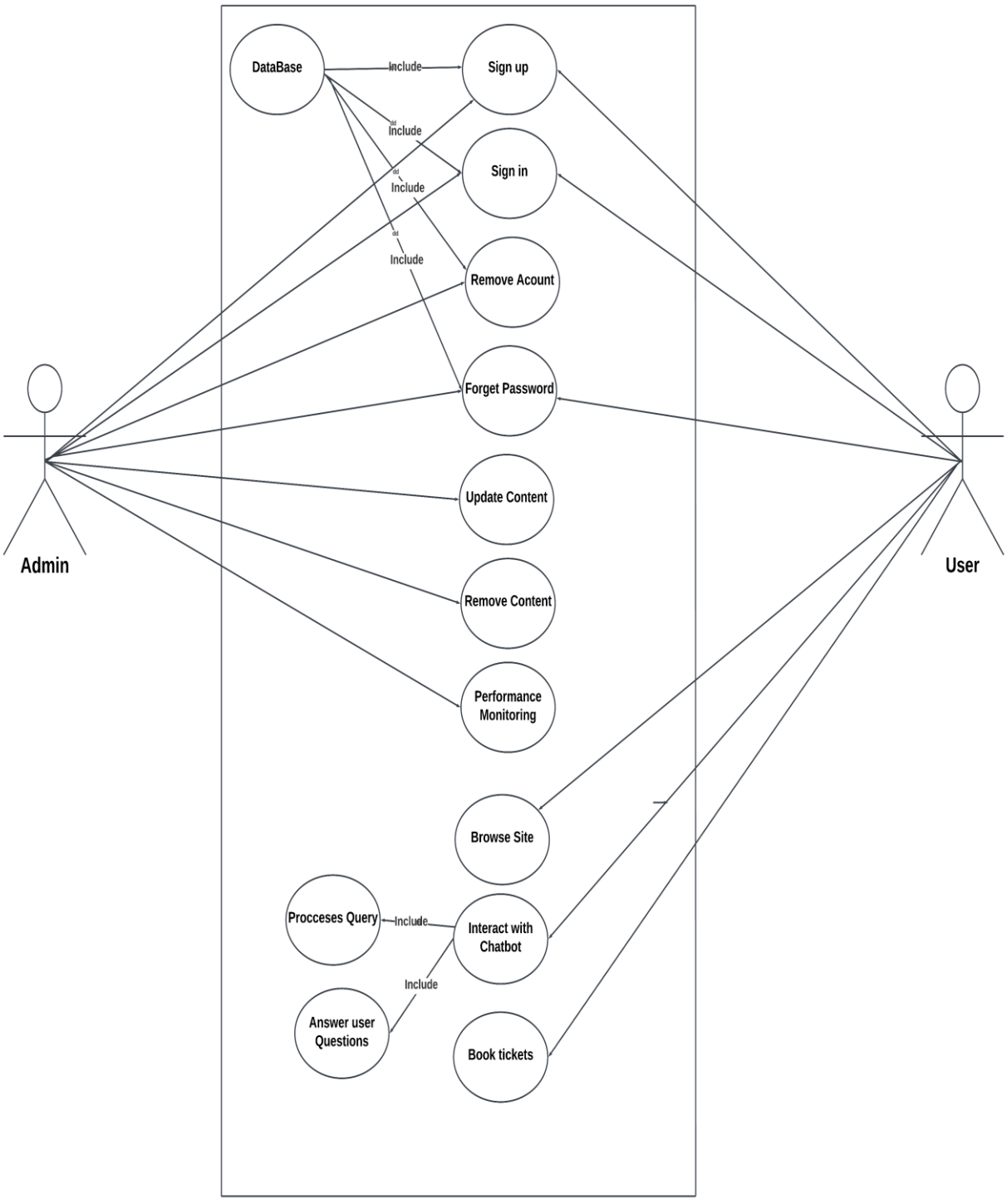


Figure 4.1: Use case Diagram.

4.7.2 Class Diagram:

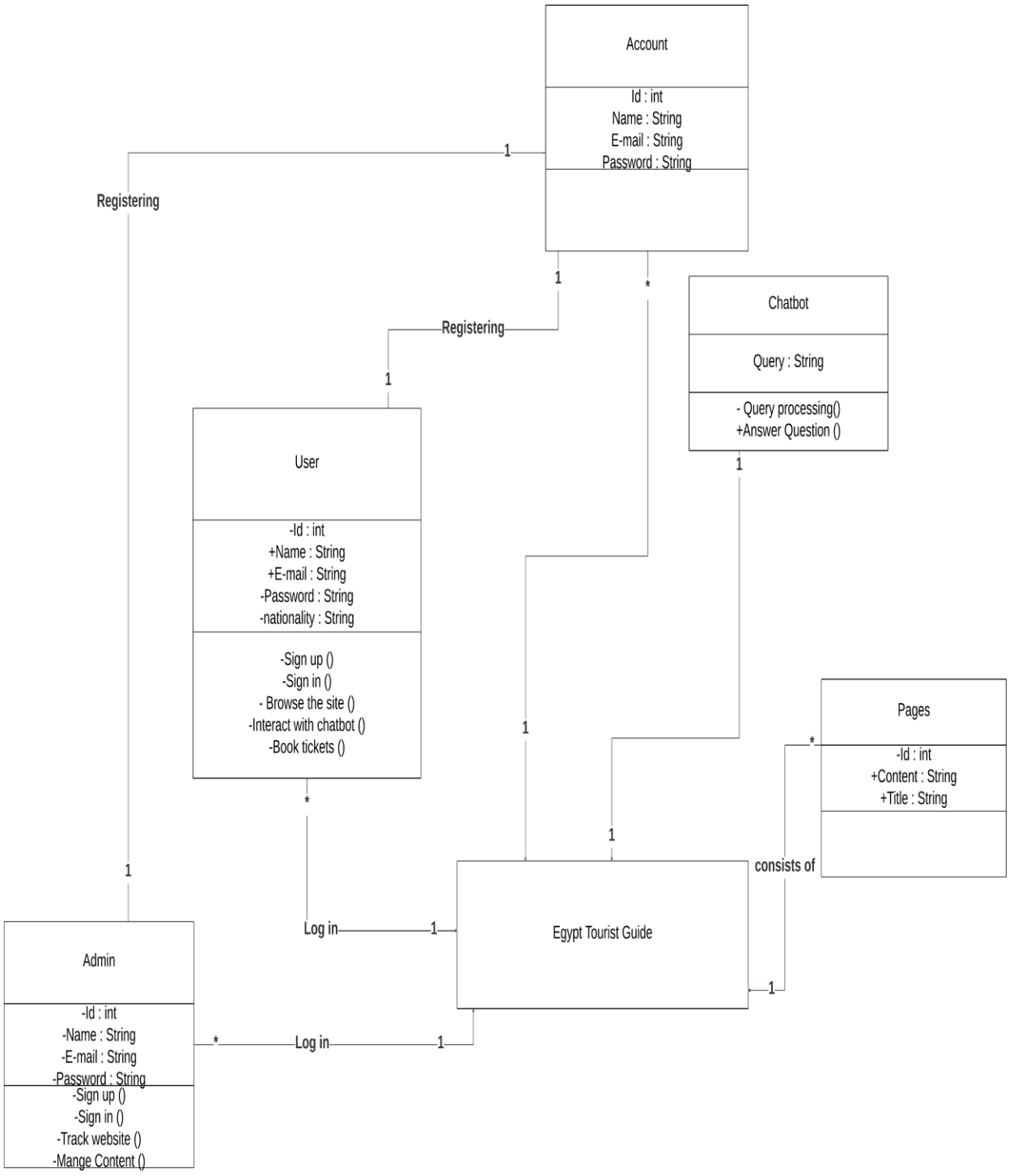


Figure 4.2: Class Diagram.

4.7.3. Data Flow Diagram:

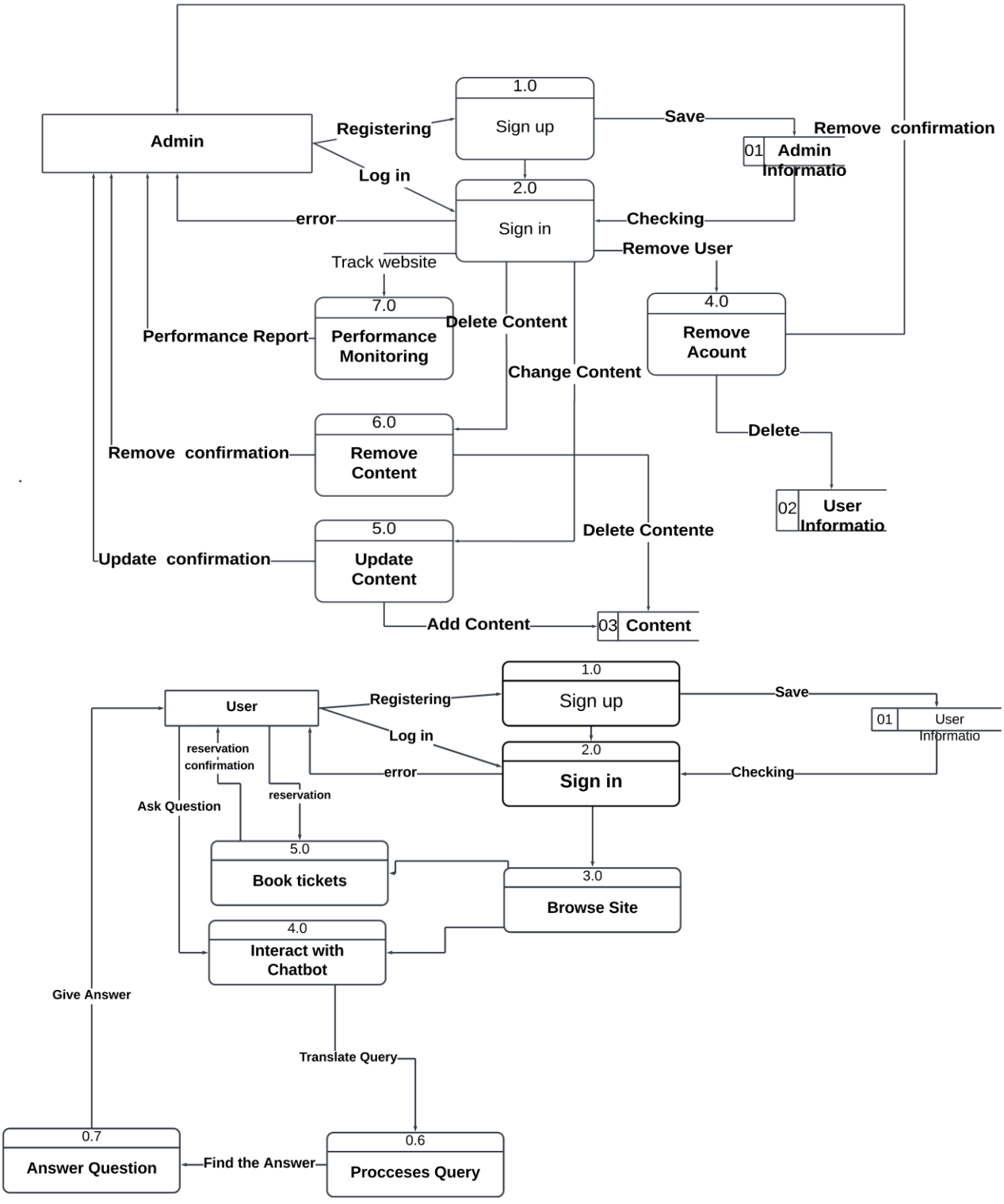


Figure 4.3: Data Flow Diagram.

4.7.4. Context Diagram:

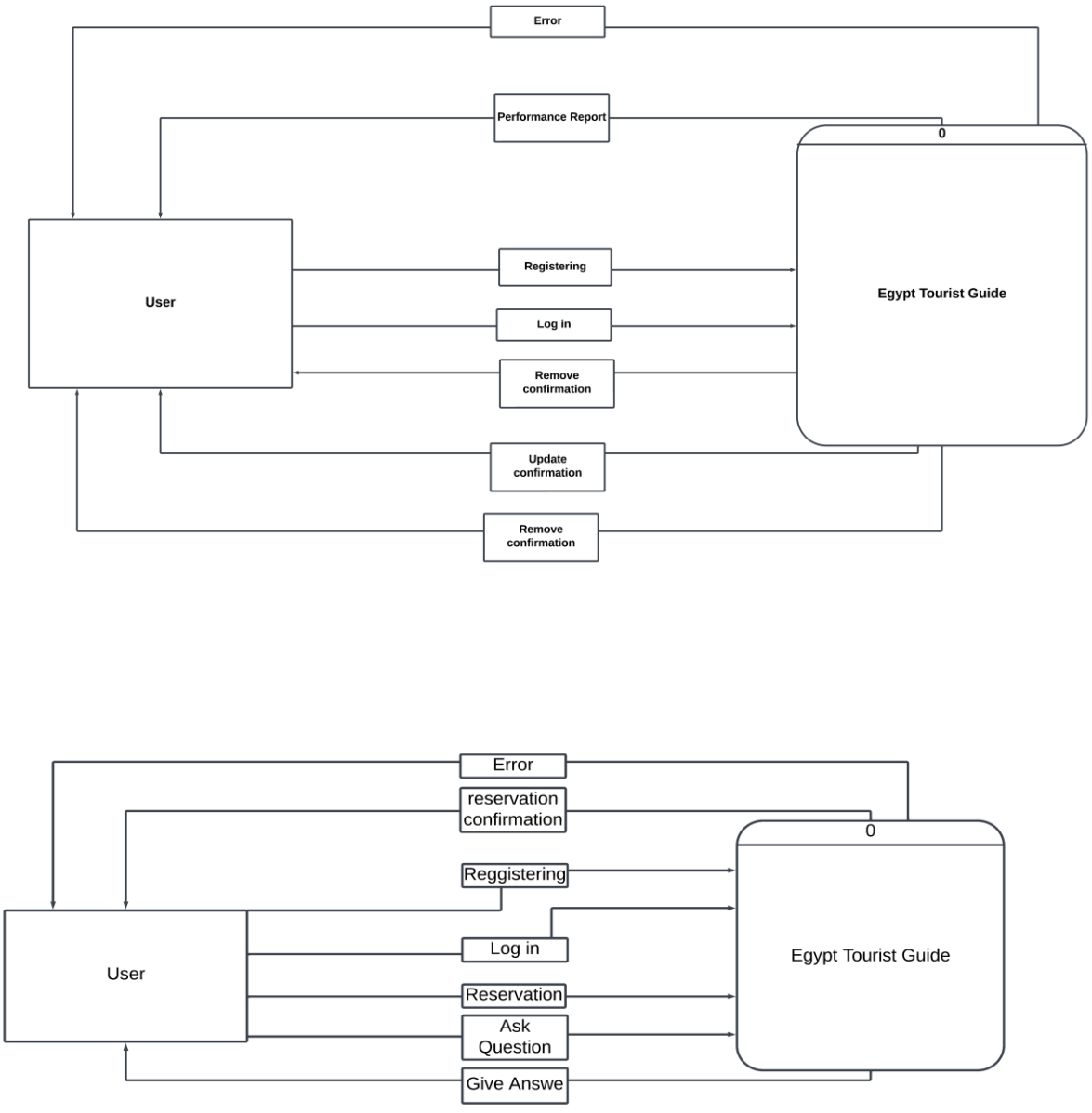


Figure 4.4: Context Diagram.

4.7.5 ERD:

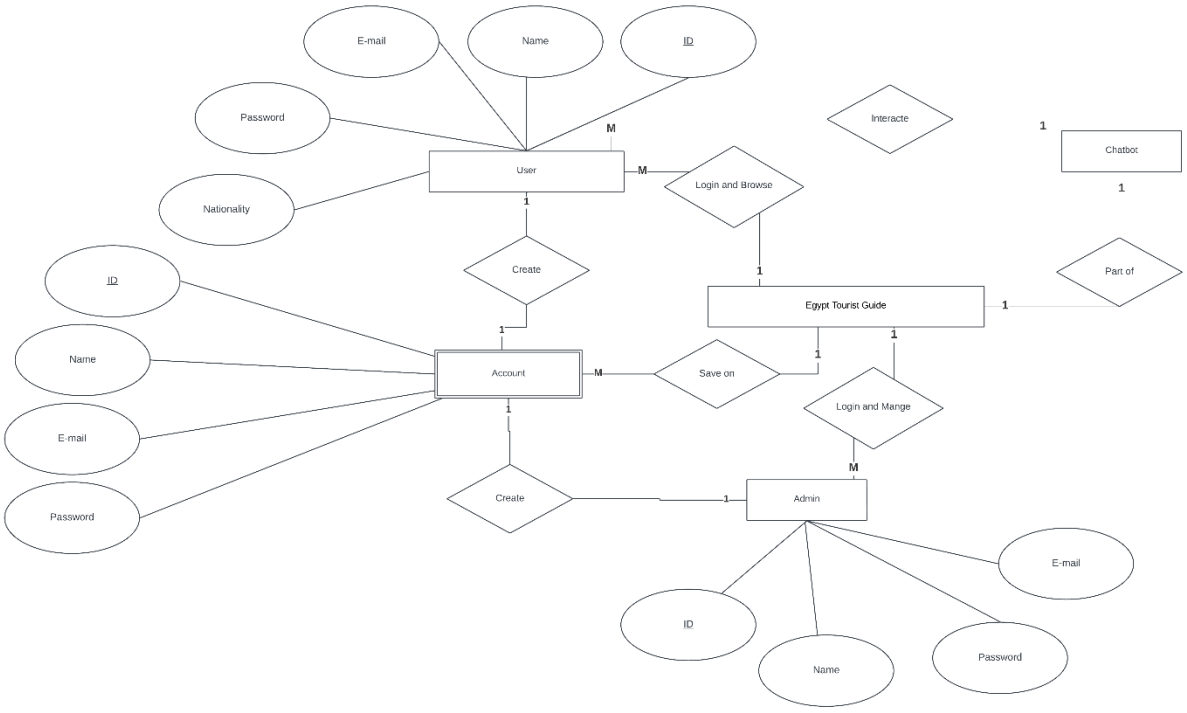


Figure 4.5: ERD Diagram.

4.7.6. Use Case Table:

Use case name	Sign up
Number	1
Actors	User, Admin
Preconditions	Enter the new correct information
Flow of event	After opening the site for the first time, choose Register, then enter real information, such as name e-mail password age nationality gender
Postcondition	Sign in
Exception	If you enter incorrect data in the data fields

Use case name	Sign in
Number	2
Actors	User, Admin
Preconditions	Sign up
Flow of event	Enter your username and password, then click Submit or Sign in
Postcondition	Browse site
Exception	If the user or administrator enters the wrong user or password

Use case name	Forget Password
Number	4
Actors	User, Admin
Preconditions	Already signed up
Flow of event	During login, if you forget your password, choose the Forgot password option, then enter your email to receive a confirmation code to change your password.
Postcondition	Enter new password and login
Exception	If you enter the wrong email, you will not receive a confirmation code to change your password

Use case name	Update Content
Number	5
Actors	Admin
Preconditions	Register as an administrator, choose the content you want to add or change
Flow of event	After logging in, open the dashboard, add or change the content you want, and save the changes
Postcondition	Confirm changes
Exception	If you do not follow the previous instructions

Use case name	Remove Content
Number	6
Actors	Admin
Preconditions	Register as an administrator, choose the content you want to remove
Flow of event	After logging in, open the dashboard, remove the content you want, and save the changes
Postcondition	Confirm changes
Exception	If you do not follow the previous instructions

Use case name	Performance Monitoring
Number	7
Actors	Admin
Preconditions	Register as an administrator
Flow of event	After logging in, open the dashboard, choose Performance Options, then website performance
Postcondition	Print performance reports
Exception	If you do not follow the previous instructions

Use case name	Browse site
Number	8
Actors	Admin, user
Preconditions	Register if this is your first time on the site or log in if you are already registered
Flow of event	Browse the site to learn about places and tourist attractions in Egypt, hotels and trips if you are a user or make modifications to the site if you are an administrator
Postcondition	As user: If you find what you are looking for, you can interact with the chatbot to learn more things. Otherwise, you can close the site As administrator: After completing the modification, save it
Exception	If you enter the wrong password

Use case name	Interact with chatbot
Number	9
Actors	User
Preconditions	Log in and browse the site
Flow of event	While browsing the site, if you have a question, you can ask it on the chatbot to learn more
Postcondition	Continue browsing
Exception	If you enter a question that does not match the site content or has incorrect syntax

Use case name	Book tickets
Number	10
Actors	User
Preconditions	Log in and browse the site
Flow of event	While browsing the site, if you find what you are looking for, you can go to the reservation section and book tickets
Postcondition	confirm the reservation
Exception	If you have not confirmed your reservation

4.7.7 Sequance diagram

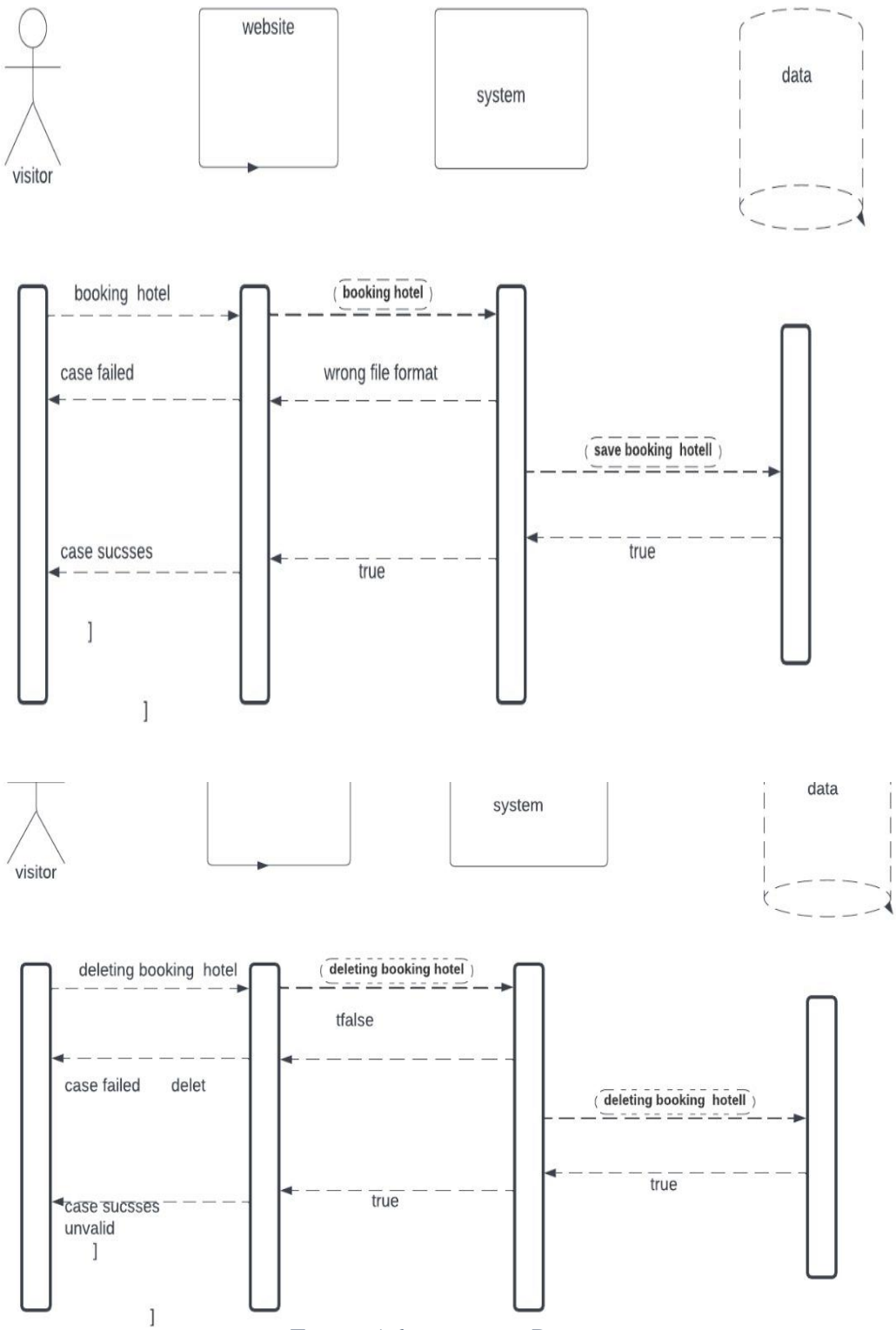
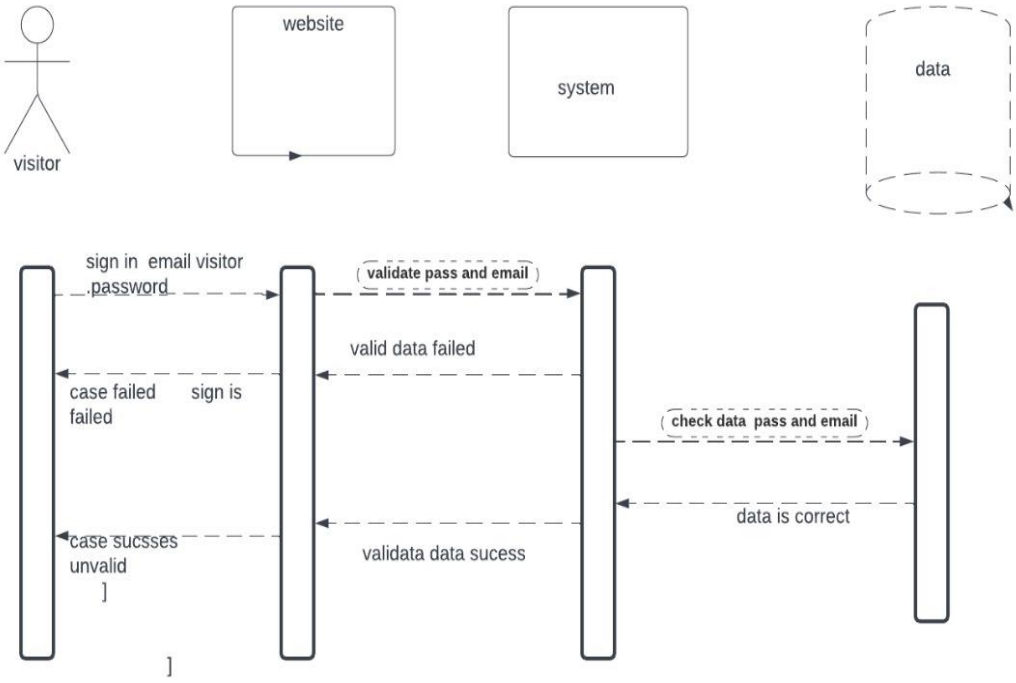
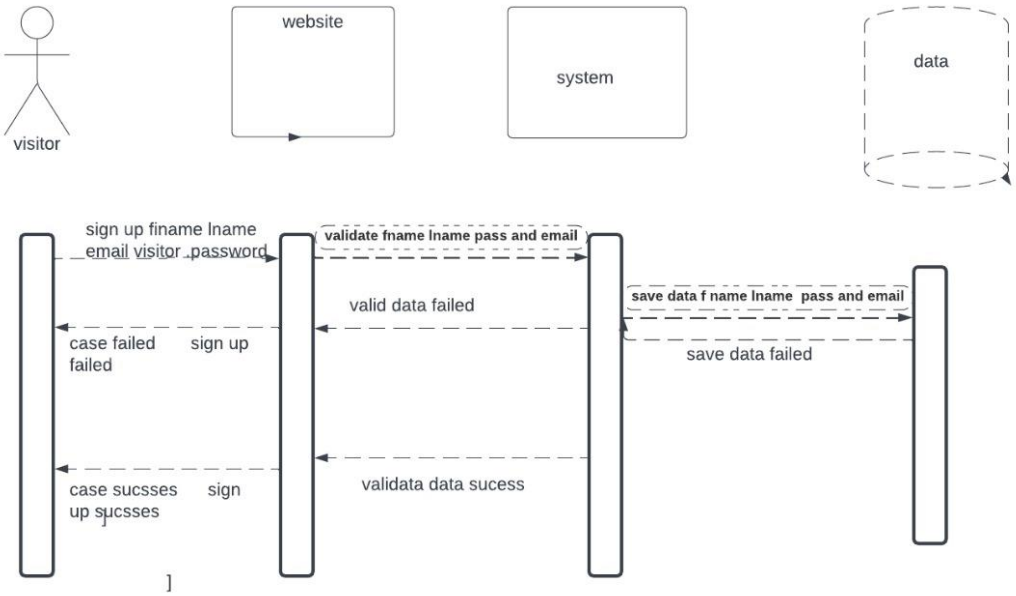
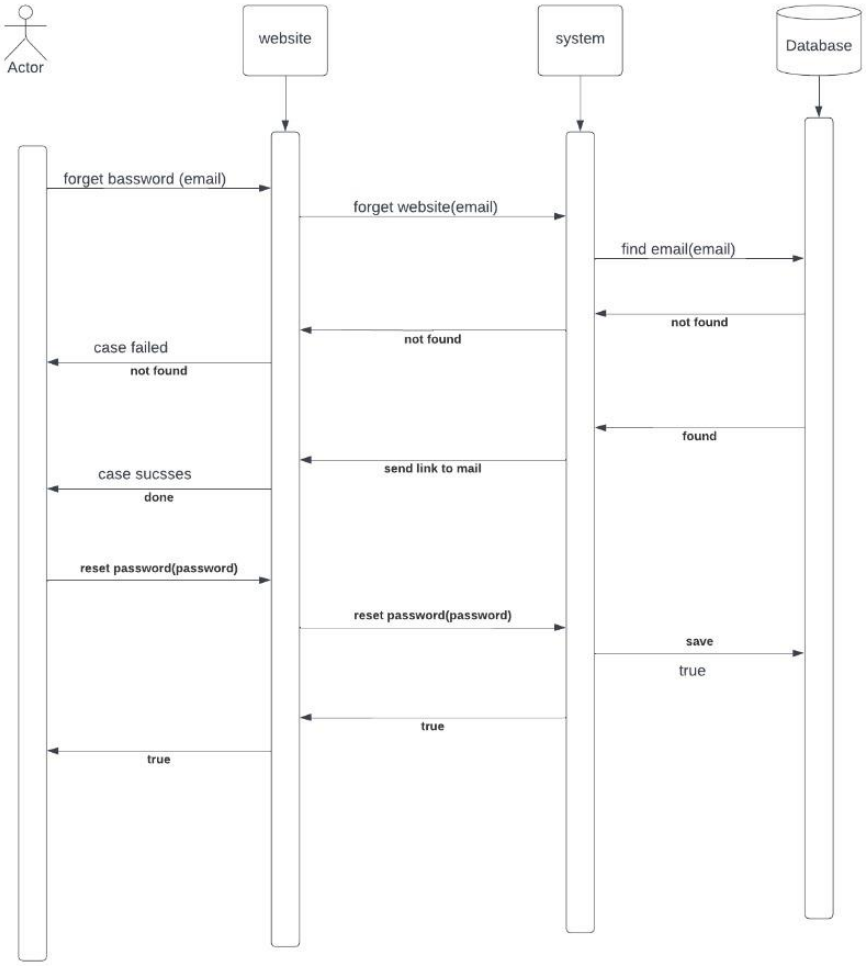
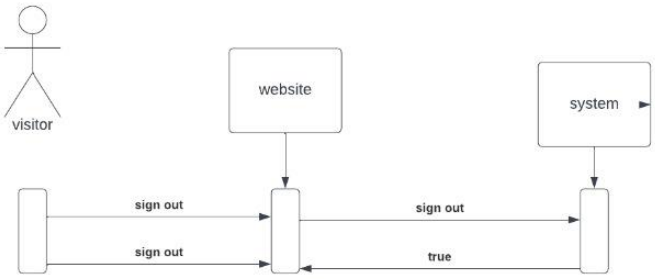


Figure 4.6: sequence Diagram .

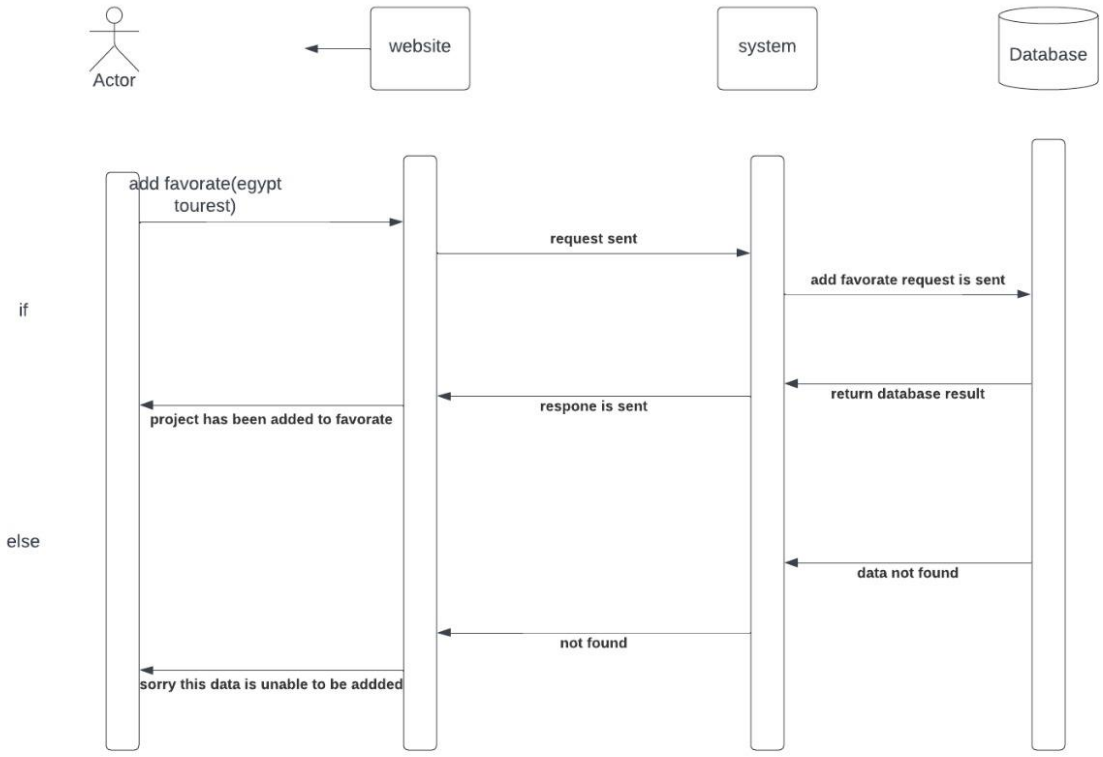

visitor
website
system
data
sign in email visitor
.password
validate pass and email
valid data failed
case failed sign is
failed
check data pass and email
data is correct
case sucsses
unvalid
validata data sucess
]
]


visitor
website
system
data
sign up finame lname
email visitor .password
validate fname lname pass and email
valid data failed
save data f name lname pass and email
case failed sign up
failed
save data failed
case sucsses sign
up sucsses
validata data sucess
]

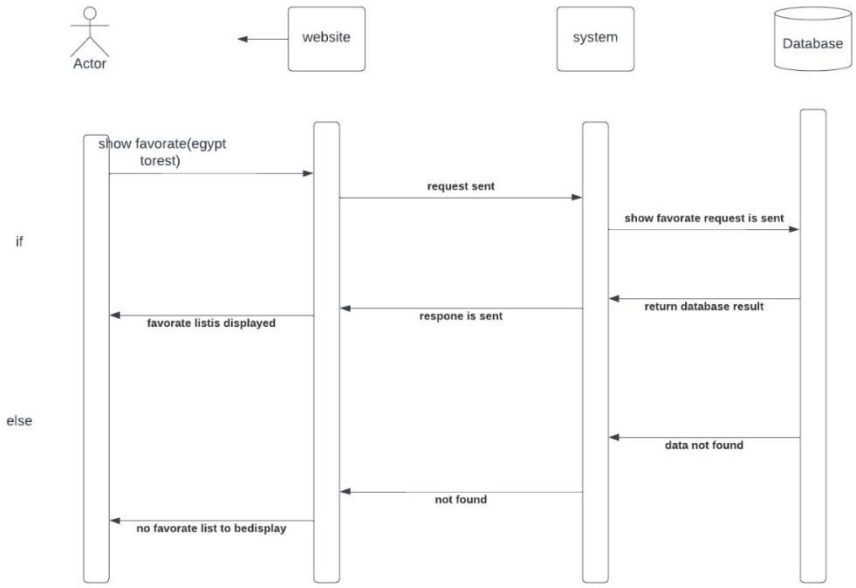

Actor
website
system
Database
forget bassword (email)
forget website(email)
find email(email)
not found
not found
case failed
not found
found
send link to mail
case sucsses
done
reset password(password)
reset password(password)
save
true
true
true


visitor
website
system
sign out
sign out
sign out
true

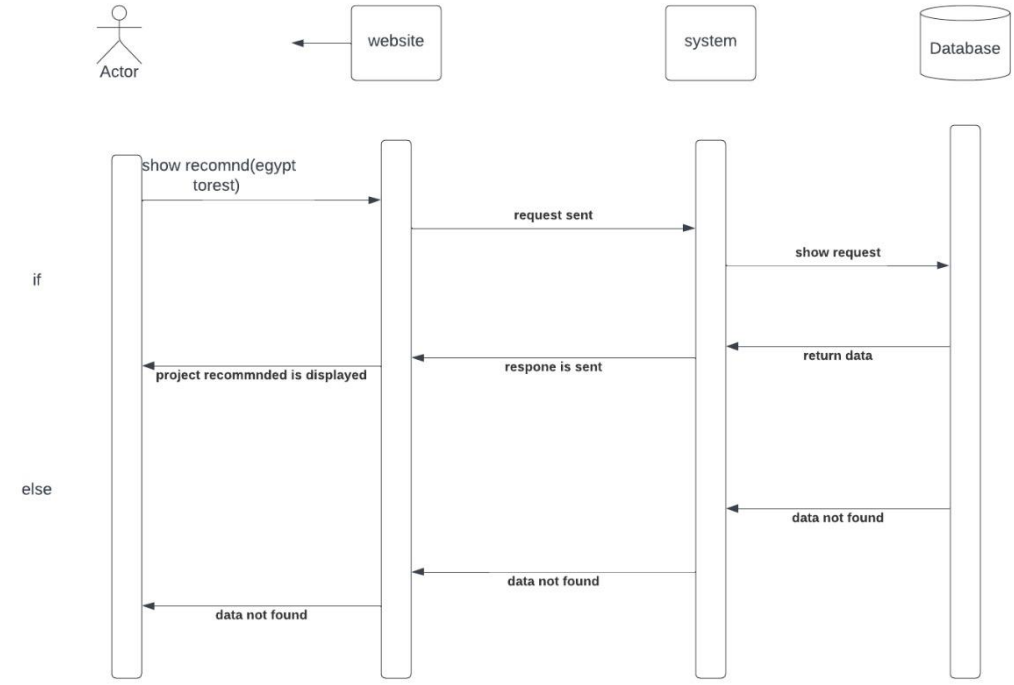
add favorate



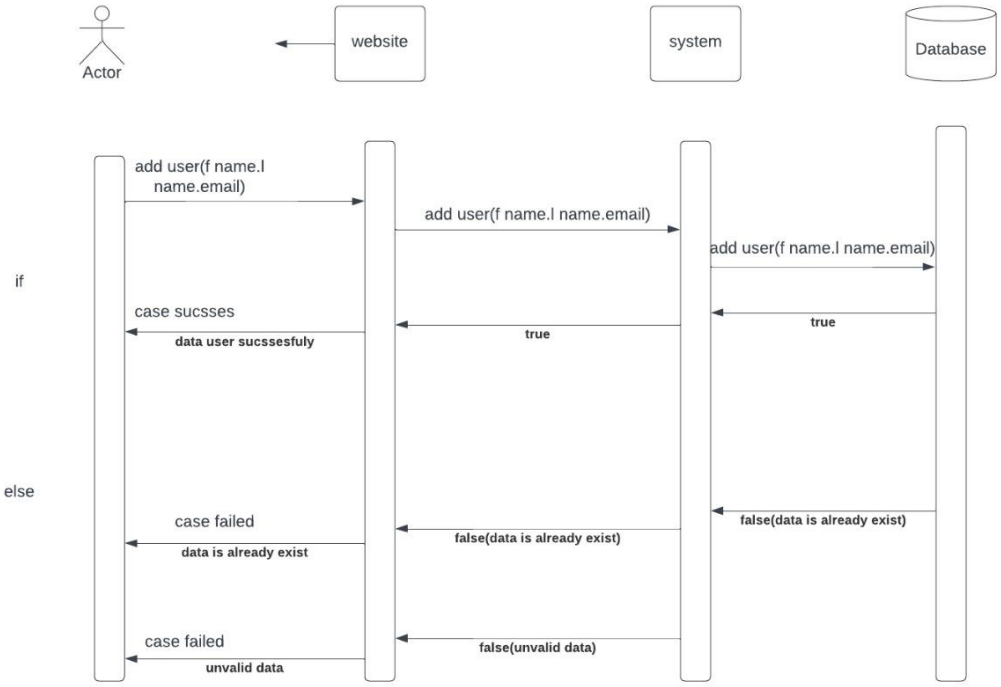
show favorate



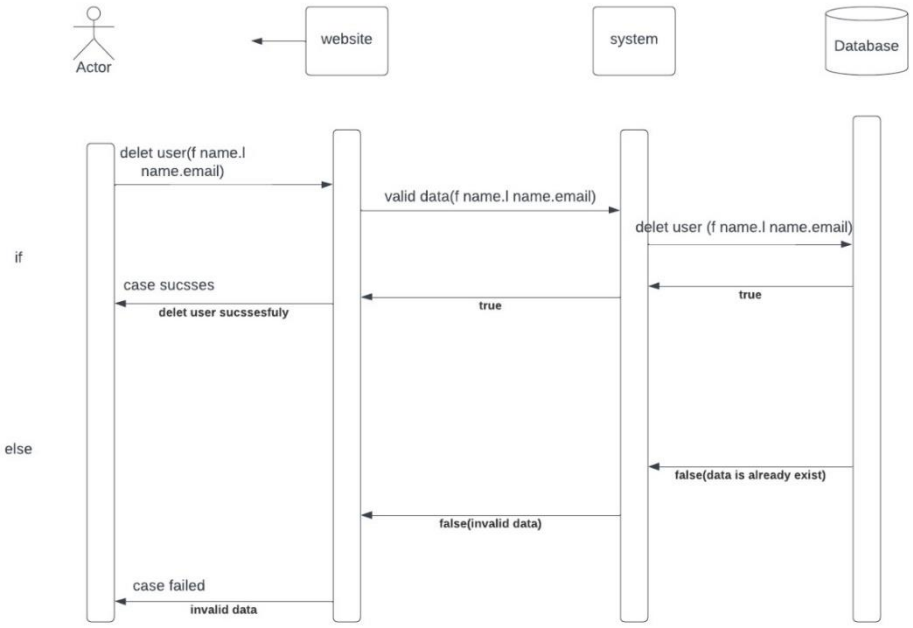
show recommend project



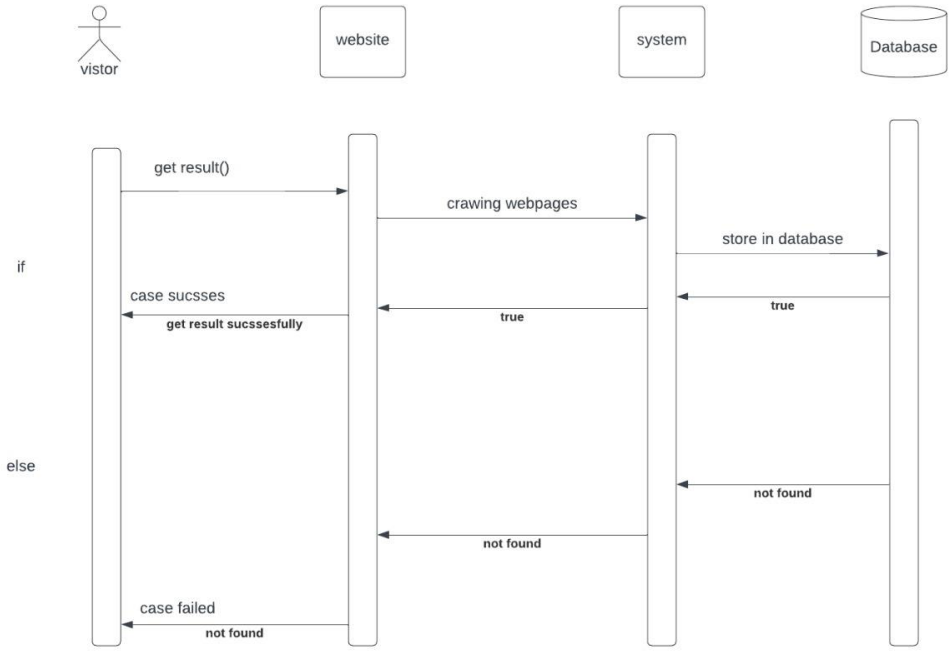
add user



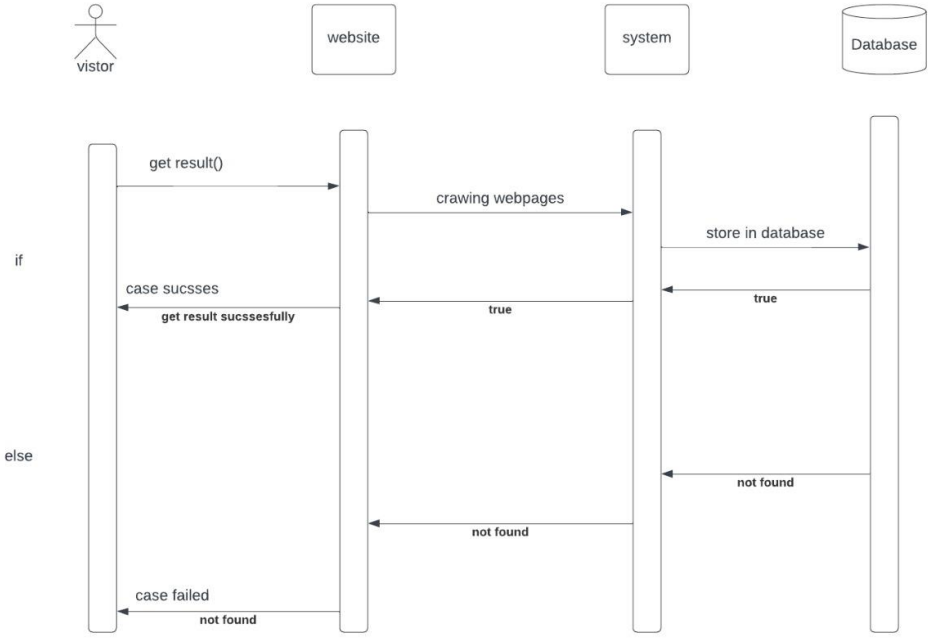
delet user



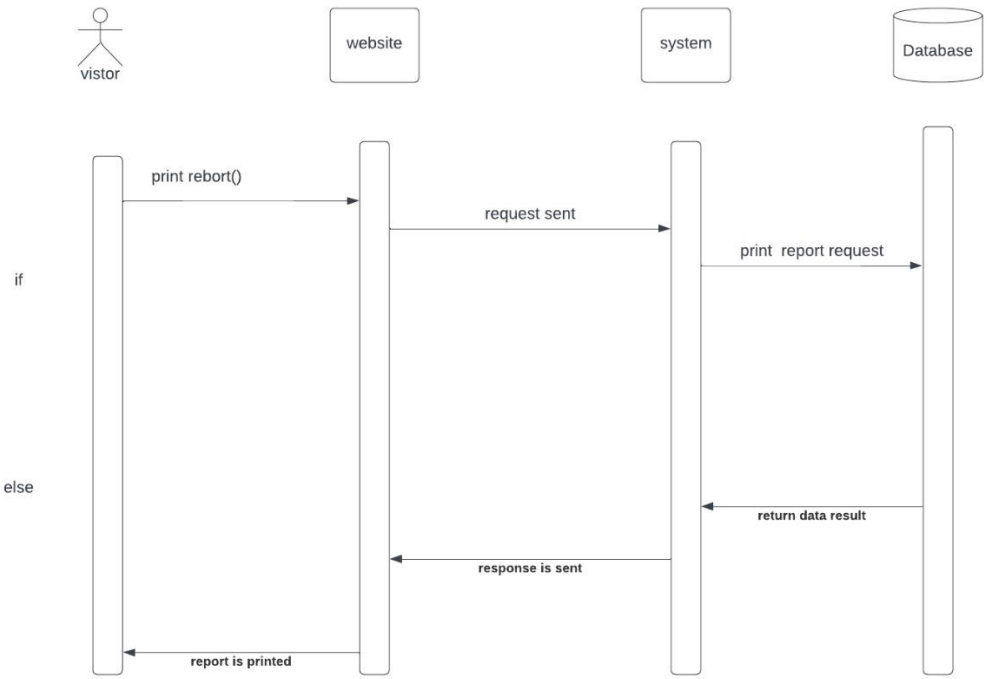
get result



get result



print report



4.9 Data privilege:

1. Admin

Order	Table Name	Data privilege
1.	**Admin**	Sign in
2.		Signup
3.		Remove account
4.		Content management
5.		Performance monitoring
6.		Change password

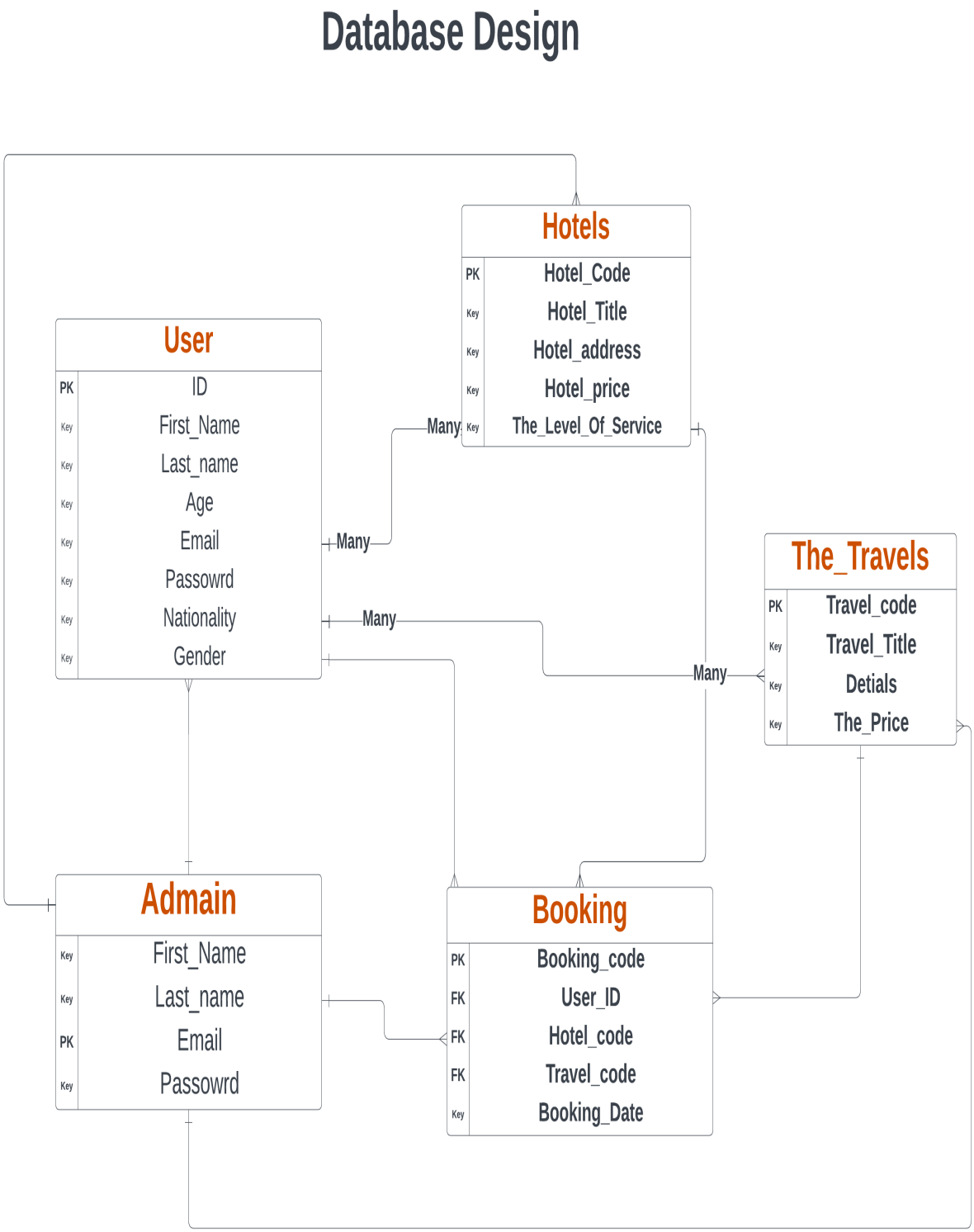
2. Visitor

Order	Table Name	Data privilege
1	**Visitor**	Sign in
2		Signup
3		Browse site
4		Interact with Chatbot
5		Change password

3. Chatbot

Order	Table Name	Data privilege
1	**Chatbot**	Process query
2		Answer question

4.10 DATABASE DESIGN:



User

	id	FullName	MobileNumber	EmailId	Password	RegDate	UpdationDate
Edit Copy Delete	2	Kishan	9871987979	kishan@gmail.com	202cb962ac59075b964b07152d234b70	2024-01-16 08:33:20	2024-01-31 04:00:48
Edit Copy Delete	3	Salvi Chandra	1398756416	salvi@gmail.com	202cb962ac59075b964b07152d234b70	2024-01-16 08:33:20	2024-01-31 04:00:48
Edit Copy Delete	4	Abir	4789756456	abir@gmail.com	202cb962ac59075b964b07152d234b70	2024-01-16 08:33:20	2024-01-31 04:00:48
Edit Copy Delete	5	Test	1987894654	test@gmail.com	f925916e2754e5e03f75dd58a5733251	2024-01-16 08:33:20	2024-01-31 04:00:48
Edit Copy Delete	10	Garima Singh	1425362540	garima12@gmail.com	f925916e2754e5e03f75dd58a5733251	2024-02-03 15:03:43	2024-02-03 15:04:02

Admin

	id	UserName	Name	EmailId	MobileNumber	Password	updationDate
Edit Copy Delete	1	ayman	Administrator	ayman@gmail.com	7894561239	202cb962ac59075b964b07152d234b70	2024-01-10 13:18:49

Booking

	BookingId	PackageId	UserEmail	FromDate	ToDate	Comment	RegDate	status	Cancelle
Click the drop-down arrow to toggle column's visibility.	1	1	test@gmail.com	2020-07-11	2020-07-18	I want this package.	2024-01-16 08:38:36	2	u
Edit Copy Delete	2	2	test@gmail.com	2020-07-10	2020-07-13	There is some discount	2024-01-17 08:43:25	1	NULL
Edit Copy Delete	3	4	abir@gmail.com	2020-07-11	2020-07-15	When I get conformation	2024-01-17 08:44:39	2	a
Edit Copy Delete	4	2	test@gmail.com	2024-02-02	2024-02-08	NA	2024-01-31 04:03:27	1	NULL
Edit Copy Delete	5	3	test@gmail.com	2024-01-31	2024-02-05	please offer some discount	2024-01-31 07:21:52	0	NULL

Feedback

	id	FullName	EmailId	MobileNumber	Subject	Description	PostingDate	Status
Edit Copy Delete	6	Ayman	aymanmansourg659@gmail.com	1024943729	test	test if it work	2024-05-21 21:16:44	NULL

Packages

PackageName	PackageType	PackageLocation	PackagePrice	PackageFetures	PackageDetails	PackageImage	Creationdate
A trip to the pyramids of Giza	Family Package	Giza, Greater Cairo, Egypt	500	Free Wi-fi, Free Breakfast, Free Pickup and drop f...	As you approach the Giza plateau, the pyramids ris...	pexels-florian-gerus-33524460-7272414.jpg	2024-07-15 08:21:58

4.11 Conclusion:

This chapter has outlined a comprehensive plan for an Egypt Tourist Guide website, designed to address the challenges faced by tourists and propel the Egyptian tourism industry forward.

Understanding Tourist Needs: The target audience is diverse, encompassing independent travelers, history buffs, adventure seekers, and families. The website caters to their varied interests and needs.

Content is King: Comprehensive information is provided, including visa requirements, travel guides, cultural norms, and safety protocols. The website prioritizes accuracy and up-to-date information.

Embracing Technology: User-friendly mobile and web platforms with multilingual support ensure accessibility for a global audience.

Chapter 5
IMPLEMENTATION

Now that we have clarified the steps that our model should follow, we will explain in depth these steps during the implementation phase. Implementation in deep learning refers to the process of building, training, and deploying a deep learning model for a specific task or application. The implementation process involves several steps:

5.1 Gathering Data:

There are several ways to gather data for machine learning algorithms, depending on the specific needs of the project and the type of data require. Here are some common methods:

1. Public Datasets:

- Numerous online repositories offer publicly available datasets on various topics. These datasets can be a great starting point, especially for experimenting with algorithms or prototyping applications. Popular platforms include Kaggle, UCI Machine Learning Repository, and Google Dataset Search.

2. Web Scraping:

- This method involves extracting data from websites. However, it's crucial to check the website's terms of service to ensure scraping is allowed. You can use tools like web scraping libraries or APIs to automate the data collection process.

3. Surveys and Interviews:

- This approach allows you to gather data directly from your target audience. You can create surveys or conduct interviews to collect responses and opinions relevant to your project.

4. Manual Data Entry:

- In some cases, you may need to manually enter data, especially if you require very specific information or the desired data isn't readily available elsewhere.

Best way to gather data for our Algorithm is **Manual Data Entry .**

Some reasons to chose this method in data gathering :

1. Relevance:

The data we collect should be directly relevant to the task our algorithm is designed to perform. Irrelevant data can lead to inaccurate or misleading results.

2. Quality:

Data quality is crucial. We should ensure data is accurate, consistent, and free of errors. Dirty data can significantly impact the performance of algorithm.

3. Quantity:

The amount of data we need depends on the complexity of your algorithm and the task at hand. Generally, more data is better, as it allows the algorithm to learn more effectively.

4. Source:

Consider the source of our data. Public datasets might be readily available but may not be tailored to your specific needs. Conversely, collecting data yourself provides more control over its quality and relevance, but it can be time-consuming and expensive.

The methodology we use in collecting data allows us more flexibility and control in cleaning the data

tms > { } intents.json

```
{"intents":[
    {
        "tag":"greetings",
        "patterns":["hello","hey","hi","good day","What is up"],
        "responses":["hello!","hi!","how can i help you?"]
    },



    {
        "tag":"Tourism in Alexandria",
        "patterns":["What are the top 3 reasons to visit Alexandria? "],
        "responses":["  1-Rich Historical Significance: Alexandria is famed for its
    },
```

Figure 11 Data collection

```
lemmatizer =WordNetLemmatizer()
intents = json.loads(open('intents.json').read())
words=[]
classes=[]
documents=[]
ignore_letters= ['?','!','.',',']
```

Figure 12 Preparing directories

5.2 Preparing Data:

Data Preprocessing:

```
lemmatizer =WordNetLemmatizer()
intents = json.loads(open('intents.json').read())
words=[]
classes=[]
documents=[]
ignore_letters= ['?','!','.',',']
for intent in intents['intents']:
  for pattern in intent['patterns']:
    word_list = nltk.word_tokenize(pattern)
    words.extend(word_list)
    documents.append((word_list,intent['tag']))
    if intent['tag'] not in classes:
      classes.append(intent['tag'])
print(documents)
words = [lemmatizer.lemmatize(word) for word in words if word not in ignore_let
words = sorted(set(words))
classes = sorted(set(classes))

pickle.dump(words, open('words.pkl','wb'))
pickle.dump(classes, open('classes.pkl','wb'))
```

Figure 12 Preparing directories

This section performs data preprocessing steps to prepare training data for the machine learning model:

Loading Intents: It loads the intents.json file containing information about user queries (patterns) and corresponding chatbot responses (tags).

Creating Word List and Classes: It iterates through the patterns in each intent, tokenizes the words (breaks them down into individual words), and creates a list of words and a list of unique classes (tags) found in the intents.

Lemmatization and Cleaning: It lemmatizes the words (converts them to their base form) and removes punctuation marks from the word list.

Saving Preprocessed Data: It saves the processed word list and class list as pickle files (words.pkl and classes.pkl) for later use.

5.3 Choosing a Model:

Pattern Recognition: ANNs excel at identifying patterns in complex data, like natural language used in user messages. This allows the chatbot to map user input to the most fitting intent category (e.g., greetings, inquiry about product details, complaint, etc.)

Learning from Data: ANNs can learn and improve over time. As the chatbot interacts with more users and the training data is expanded, the model can become more accurate in predicting user intent and providing appropriate responses.

Handling Ambiguity: Natural language can be ambiguous, and ANNs can handle this to some extent. By considering the context of user input and the learned patterns, the model can make better predictions even for phrased messages that might not be perfectly clear.

5.4 Training and Testing:

Training the Machine Learning Model:

```
training = []
outputEmpty = [0] * len(classes)

for document in documents:
    bag = []
    wordPatterns = document[0]
    wordPatterns = [lemmatizer.lemmatize(word.lower()) for word in wordPatterns
    for word in words:
        bag.append(1) if word in wordPatterns else bag.append(0)

    outputRow = list(outputEmpty)
    outputRow[classes.index(document[1])] = 1
    training.append(bag + outputRow)

random.shuffle(training)
training = np.array(training)

trainX = training[:, :len(words)]
trainY = training[:, len(words):]
model = Sequential()
model.add(Dense(128 ,input_shape=(len(trainX[0]),), activation = 'relu') )
model.add(Dropout(0.5))
model.add(Dense(64, activation = 'relu'))
model.add(Dropout(0.5))
model.add(Dense(len(trainY[0]), activation='softmax'))

sgd = SGD(learning_rate=0.01, momentum=0.9, nesterov=True)
model.compile(loss='categorical_crossentropy', optimizer=sgd, metrics=['accurac

hist = model.fit(trainX, trainY, epochs=200, batch_size=5, verbose=1)
model.save('chatbot_model.h5', hist)
```

Figure 12 Training the Machine Learning Model

It converts the conversation data into a numerical format suitable for machine learning.

It defines a neural network architecture with layers for processing the text data.

It trains the model on the prepared conversation data to predict appropriate responses for new user inputs.

5.5 Prediction

The algorithm predicts a list of possible intents associated with the user's message. This list is ranked by probability, with the most likely intent at the top.

1. Each intent also has a probability score between 0 and 1, indicating the model's confidence in its prediction for that particular intent. The higher the score, the more likely the user's message aligns with that specific intent.

Example:

Imagine a user types the message "What are your opening hours?". The algorithm might predict something like:

[{'intent': 'inquiry_about_opening_hours', 'probability': 0.85}, {'intent': 'general_question', 'probability': 0.15}]

This indicates that the model predicts the user's intent is most likely "inquiry_about_opening_hours" with a confidence score of 85%. There's also a secondary possibility of it being a general question with a lower confidence score (15%).

The chatbot would then use this information to retrieve an appropriate response based on the most likely predicted intent ("inquiry_about_opening_hours") from the definitions in your intents.json file.

5.6 Evaluation & Result

And the goal here is that you try your model on what you know, see its accuracy, and test it on the Testing Set, so if it doesn't work well, you won't waste the whole Evaluation Set. In the Cross Testing, it turned out fine. Start worrying about the Testing Set and try it too, and see our model accuracy percentage also, and see how much it has reached to make sure that my model is working properly or not.

```
Epoch 9/200
29/29 ━━━━━━━━━━━━━━━━━━━━ 0s 5ms/step - accuracy: 0.8533 - loss: 0.4390
Epoch 10/200
29/29 ━━━━━━━━━━━━━━━━━━━━ 0s 7ms/step - accuracy: 0.7924 - loss: 0.5068
Epoch 11/200
29/29 ━━━━━━━━━━━━━━━━━━━━ 0s 5ms/step - accuracy: 0.8407 - loss: 0.4318
Epoch 12/200
29/29 ━━━━━━━━━━━━━━━━━━━━ 0s 7ms/step - accuracy: 0.8560 - loss: 0.4369
Epoch 13/200
...
Epoch 199/200
29/29 ━━━━━━━━━━━━━━━━━━━━ 0s 8ms/step - accuracy: 0.9973 - loss: 0.0207
Epoch 200/200
29/29 ━━━━━━━━━━━━━━━━━━━━ 0s 7ms/step - accuracy: 0.9829 - loss: 0.0476
```

5.7 Libraries used :

```
import random
import json
import pickle
import pandas as pd
import numpy as np
import nltk
nltk.download('punkt')
nltk.download('wordnet')
from nltk import WordNetLemmatizer
from nltk.stem import WordNetLemmatizer
import tensorflow as tf
from tensorflow.keras.models import Sequential
from tensorflow.keras.models import load_model
from tensorflow.keras.layers import Dense ,Activation, Dropout
from tensorflow.keras.optimizers import SGD
import json
```

These lines import various libraries required for different functionalities in chatbot:

- random: Used for generating random responses.
- Json: Used for working with JSON data (intents.json file).
- pickle: Used for saving and loading data objects (words.pkl and classes.pkl files).
- pandas and NumPy: Used for data manipulation (might be unnecessary in this code).
- nltk: Used for natural language processing tasks like tokenization and lemmatization.
- WordNetLemmatizer: Used to convert words to their base form (lemmas).
- TensorFlow: Used for building and training the machine learning model.
- Sequential and other Keras functions: Used to define and train the neural network model for chatbot responses.

Chapter 6
System Design

6.1 Introduction:

In this chapter we will discuss the design phase and how it will look like in the proposed system and its attributes and actions and capabilities. During the Design Phase, the system is designed to satisfy the requirements identified in the previous phases, explain the implementation stages

The requirements identified in the Requirements Analysis Phase then transformed into a System Design Document that accurately describes the design of the system and that can be used as an input to system development in the next phase.

6.2 Database Design

User

	id	FullName	MobileNumber	EmailId	Password	RegDate	UpdationDate
Edit Copy Delete	2	Kishan	9871987979	kishan@gmail.com	202cb962ac59075b964b07152d234b70	2024-01-16 08:33:20	2024-01-31 04:00:48
Edit Copy Delete	3	Salvi Chandra	1398756416	salvi@gmail.com	202cb962ac59075b964b07152d234b70	2024-01-16 08:33:20	2024-01-31 04:00:48
Edit Copy Delete	4	Abir	4789756456	abir@gmail.com	202cb962ac59075b964b07152d234b70	2024-01-16 08:33:20	2024-01-31 04:00:48
Edit Copy Delete	5	Test	1987894654	test@gmail.com	f925916e2754e5e03f75dd58a5733251	2024-01-16 08:33:20	2024-01-31 04:00:48
Edit Copy Delete	10	Garima Singh	1425362540	garima12@gmail.com	f925916e2754e5e03f75dd58a5733251	2024-02-03 15:03:43	2024-02-03 15:04:02

Admin

	id	UserName	Name	EmailId	MobileNumber	Password	updationDate
Edit Copy Delete	1	ayman	Administrator	ayman@gmail.com	7894561239	202cb962ac59075b964b07152d234b70	2024-01-10 13:18:49

Booking

	BookingId	PackageId	UserEmail	FromDate	ToDate	Comment	RegDate	status	Cancelle
Edit Copy Delete	1	1	test@gmail.com	2020-07-11	2020-07-18	I want this package.	2024-01-16 08:38:36	2	u
Edit Copy Delete	2	2	test@gmail.com	2020-07-10	2020-07-13	There is some discount	2024-01-17 08:43:25	1	NULL
Edit Copy Delete	3	4	abir@gmail.com	2020-07-11	2020-07-15	When I get conformation	2024-01-17 08:44:39	2	a
Edit Copy Delete	4	2	test@gmail.com	2024-02-02	2024-02-08	NA	2024-01-31 04:03:27	1	NULL
Edit Copy Delete	5	3	test@gmail.com	2024-01-31	2024-02-05	please offer some discount	2024-01-31 07:21:52	0	NULL

Feedback

	id	FullName	EmailId	MobileNumber	Subject	Description	PostingDate	Status
Edit Copy Delete	6	Ayman	aymanmansourg659@gmail.com	1024943729	test	test if it work	2024-05-21 21:16:44	NULL

Packages

PackageName	PackageType	PackageLocation	PackagePrice	PackageFetures	PackageDetails	PackageImage	Creationdate
A trip to the pyramids of Giza	Family Package	Giza, Greater Cairo, Egypt	500	Free Wi-fi, Free Breakfast, Free Pickup and drop f...	As you approach the Giza plateau, the pyramids ris...	pexels-florian-gerus-33524460-7272414.jpg	2024-07-15 08:21:58

6.3 User Interface Design:

User Interface Design aims to create interfaces that are easy and enjoyable to use. It prioritizes user needs and preferences, ensuring accessibility and responsiveness across different devices and screen sizes. Key principles include user-friendliness, intuitive navigation, clear visuals, and keyboard compatibility. This approach bridges the gap between users and technology, making it seamless and efficient to achieve desired goals.

The tourist or admin sign-in process involves accessing a dedicated page that features a user-friendly form for visitors to input their login credentials. The form provides the ability to enter credentials, such as an email address and password. Additionally, there are various options available within the form. In the event that tourists do not have an existing account, they will be prompted to either reset their password or create a new one, the administrator can log in to access the dashboard .

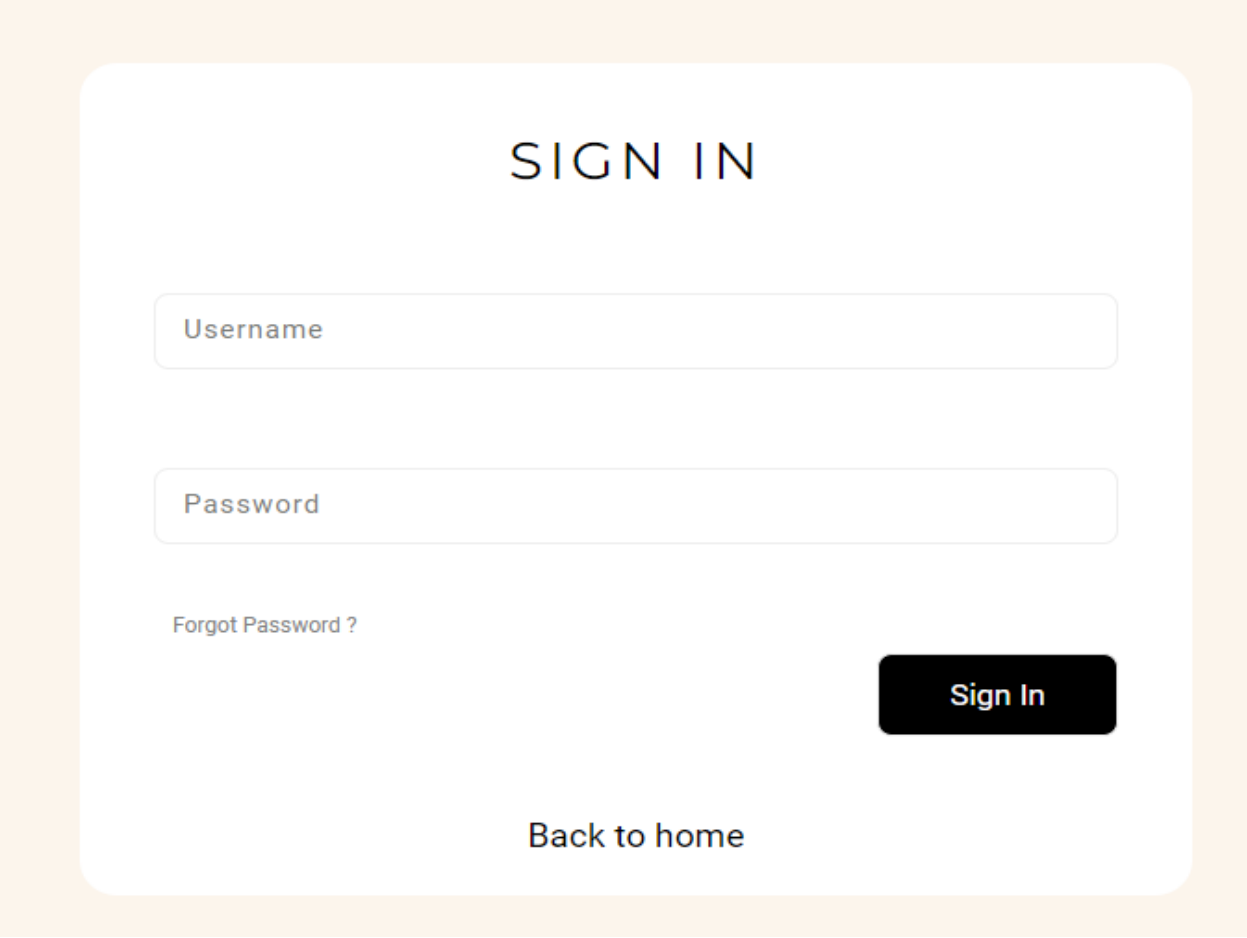


Figure 4: Tourist Sign In.

Sign Up: Within the signup page, there is a designated form that allows user to input their personal information. To establish a fresh account, you will need to provide the necessary details. The registration form will prompt you to input your first and last name, as well as your email address. The form consists of fields for entering personal information such as name, address, and password. Additionally, it provides sign-in choices specifically designed for user .

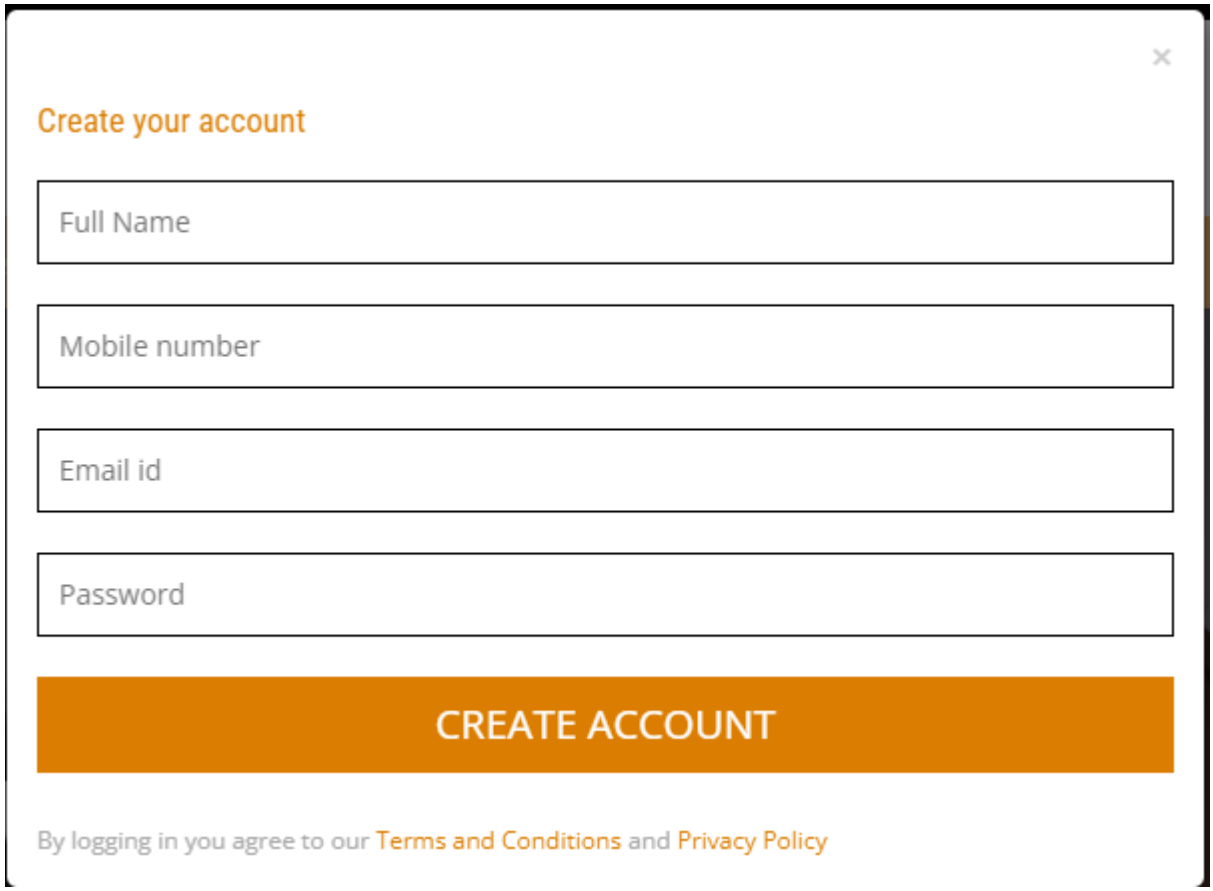
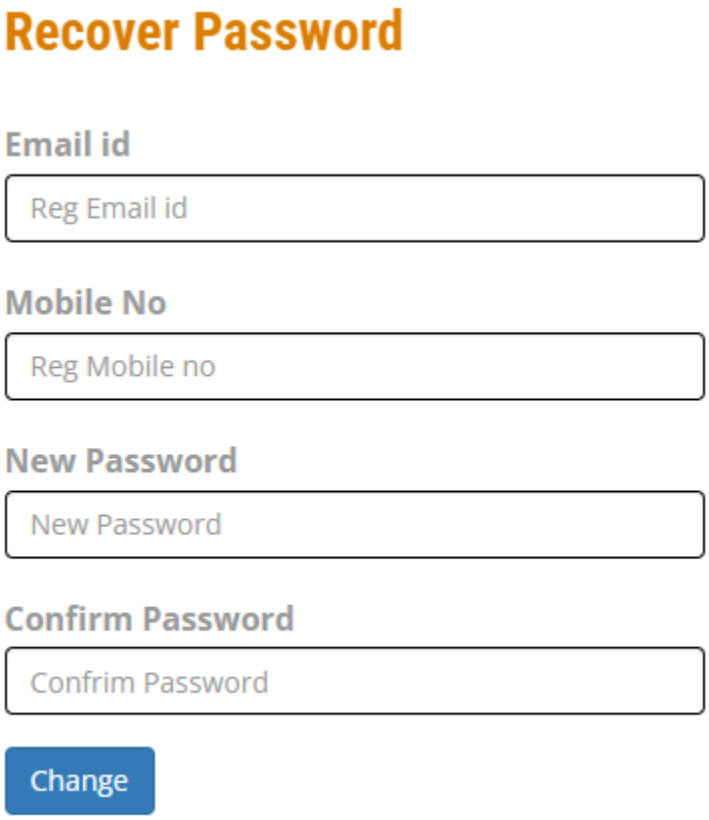
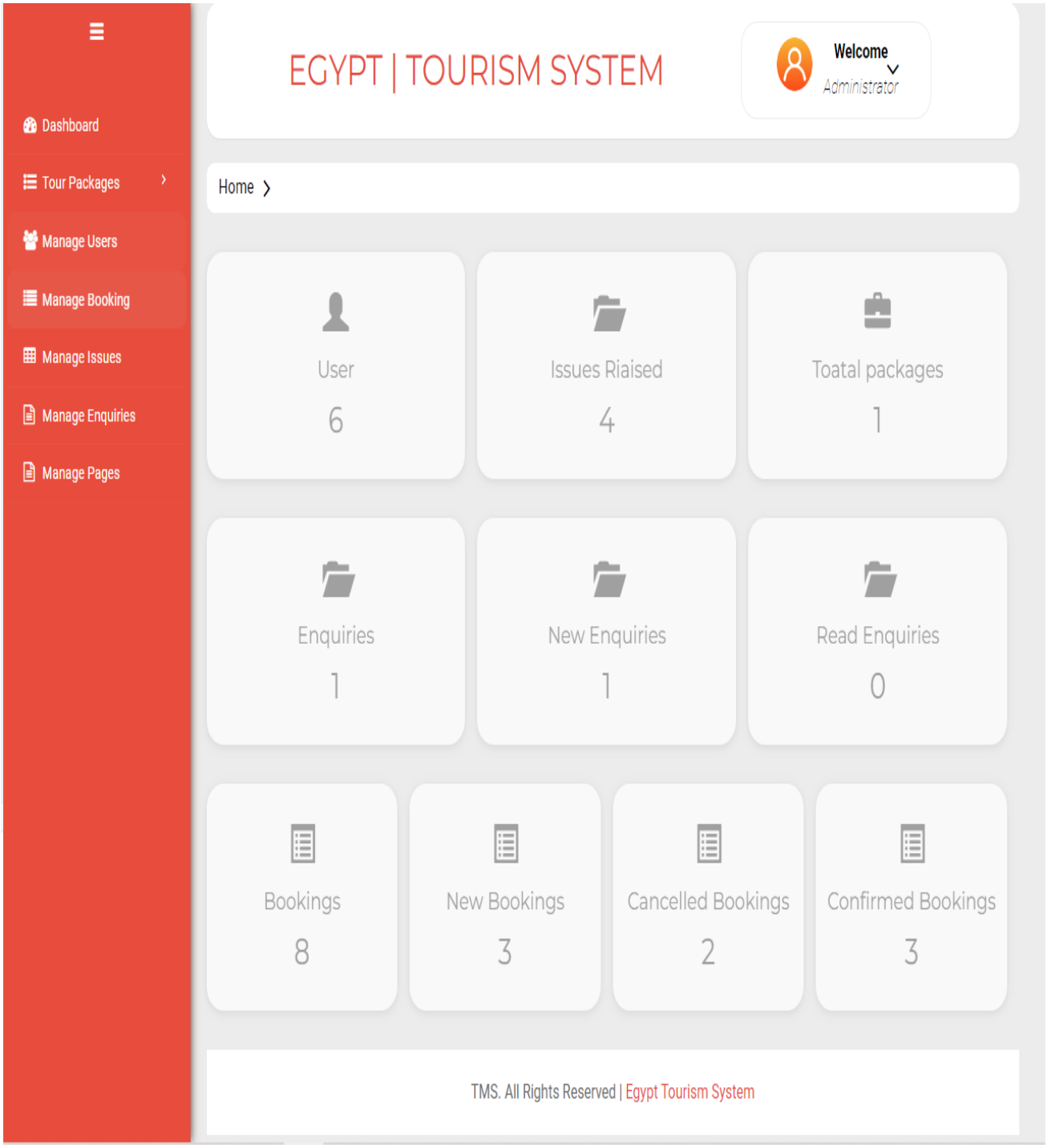


Figure 5: Tourist Sign up.

Forget Password: If tourists forget their password, they can reset it through a "forgotten password" page that includes a form asking them to enter their account's email address. After submitting their email address, the system emails instructions for resetting their password on how to reset their password



Admin dashboard: serves as a centralized control panel that empowers administrators to manage various aspects of the website's operations and content. It provides a comprehensive set of tools and features to streamline administrative tasks and ensure smooth functioning of the tourism platform. Here is a description of the key components and functionalities typically found in an admin dashboard for a tourism website



Chatbot: is an intelligent conversational agent designed to provide personalized and interactive assistance to tourists. It serves as a virtual tour guide, offering real-time information, recommendations, and support to enhance the travel experience. Here's a description of the key features and functionalities typically found in a chatbot for tourist guidance

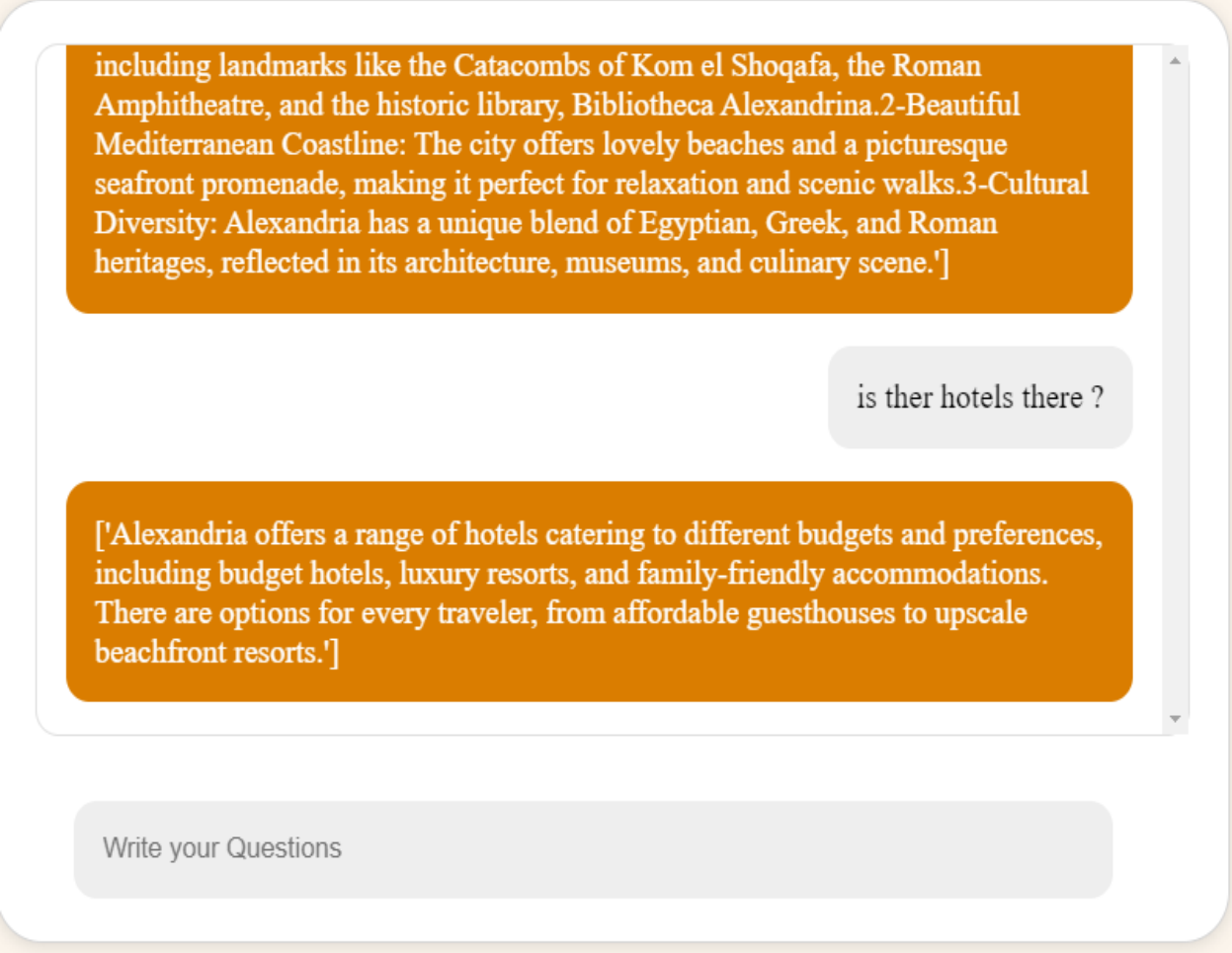


Figure 8: Chat bot.

A tour booking form: is an online document or interface that collects basic information from individuals or groups who wish to book a trip or tour. It serves as a unified means for tour operators, travel agencies or online platforms to collect the necessary details to facilitate the booking process. You can fill in your data and there is a supplement to the data

A trip to the pyramids of Giza

#PKG-2

Package Type : Family Package
Package Location : Giza, Greater Cairo, Egypt
Features Free Wi-fi, Free Breakfast, Free Pickup and drop facility

From dd-mm-yyyy

To dd-mm-yyyy

Grand Total
USD.800

Package Details

As you approach the Giza plateau, the pyramids rise from the desert sandscape, dominating the view. Their sheer scale is hard to grasp from photos; you'll truly appreciate their size once you're there.

Travels

Comment

Book

An order list: is a compilation of the bookings and purchases made by customers on the website. It serves as a record of transactions and helps manage the fulfillment process. Here are the key components typically found in an order list .

Manage Bookings

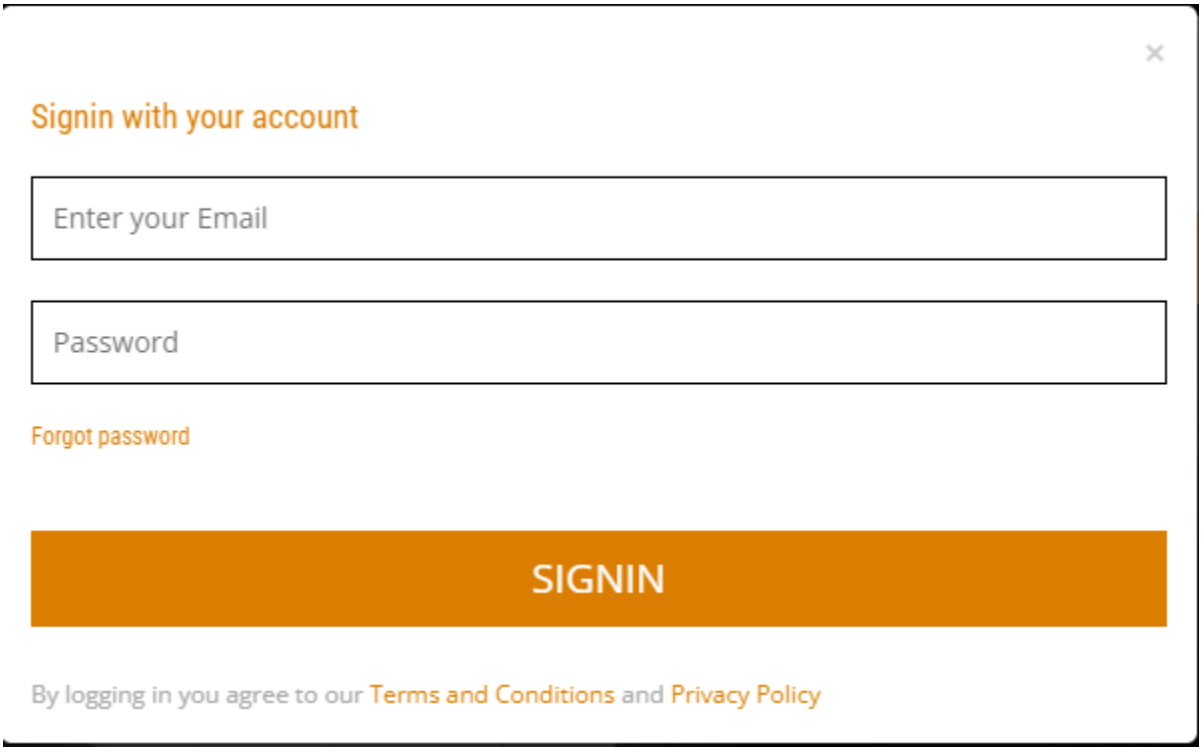
BOOIKN ID	NAME	MOBILE NO.	EMAIL ID	REGDATE	FROM /TO	COMMENT	STATUS	ACTION
#BK-1	Test	1987894654	test@gmail.com		2020-07-11 To 2020-07-18	I want this package.	Canceled by User at 2024-01-30 07:18:29	Cancelled
#BK-2	Test	1987894654	test@gmail.com	A trip to the pyramids of Giza	2020-07-10 To 2020-07-13	There is some discount	Confirmed	Confirmed
#BK-3	Abir	4789756456	abir@gmail.com		2020-07-11 To 2020-07-15	When I get conformation	Canceled by you at 2024-01-30 07:18:52	Cancelled

Figure 10: Order list

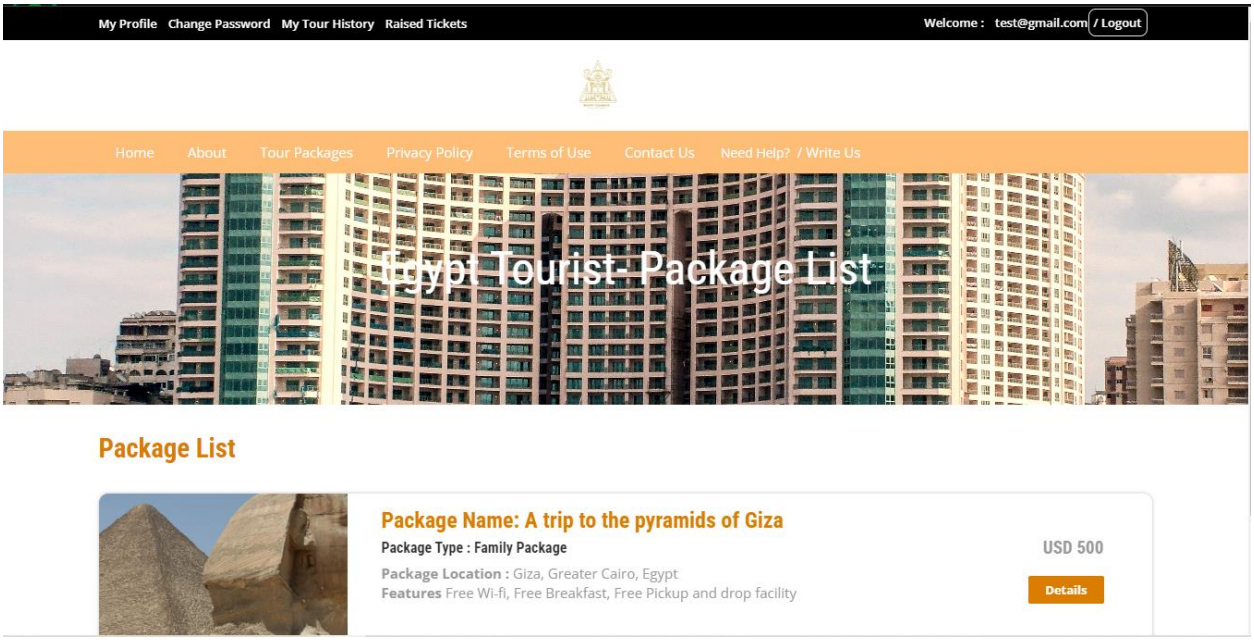
6.4 Input and Output Design:

Sign In for Tourists.

Input → Valid tourist's email and password.

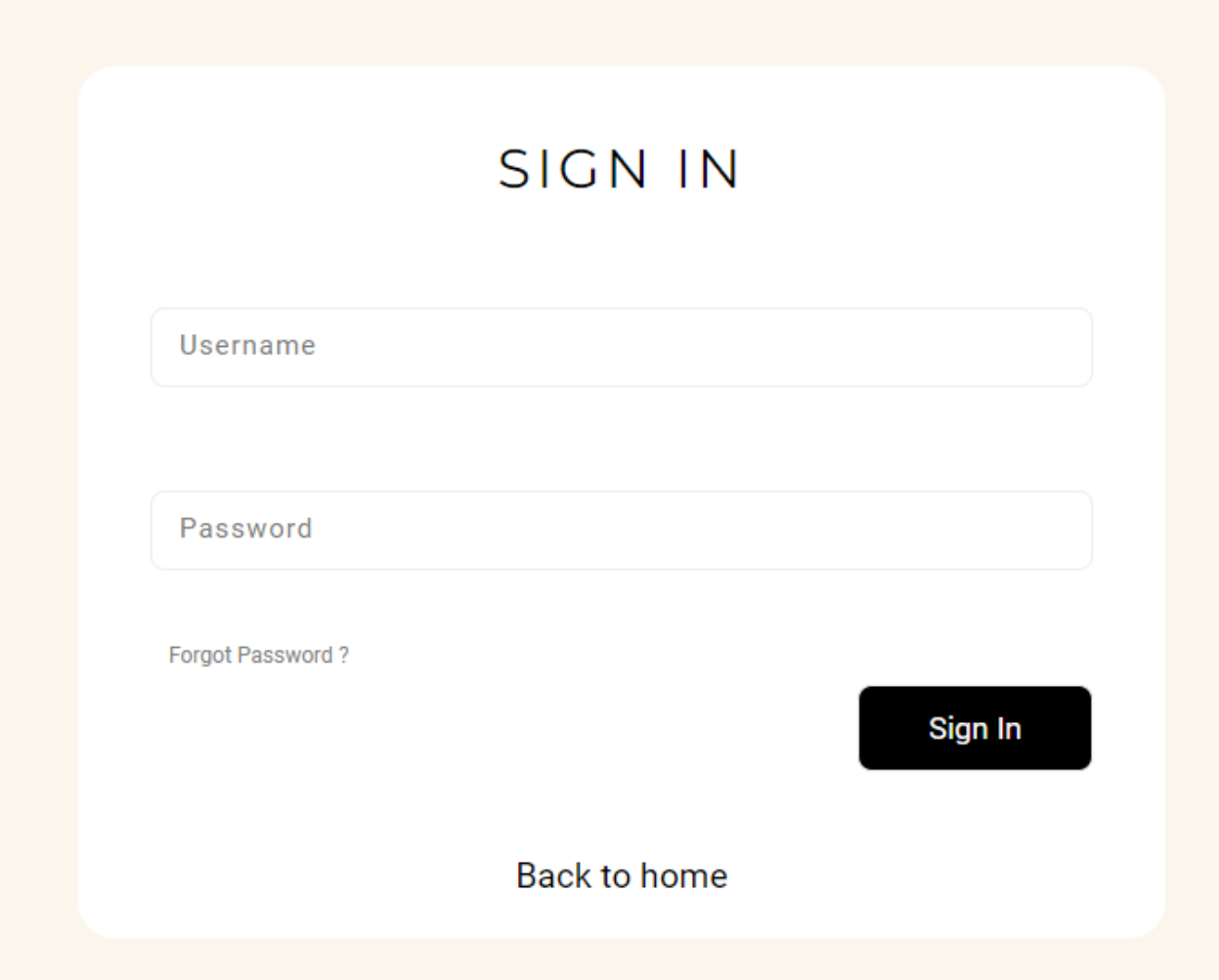


Output → Redirect to his/her profile



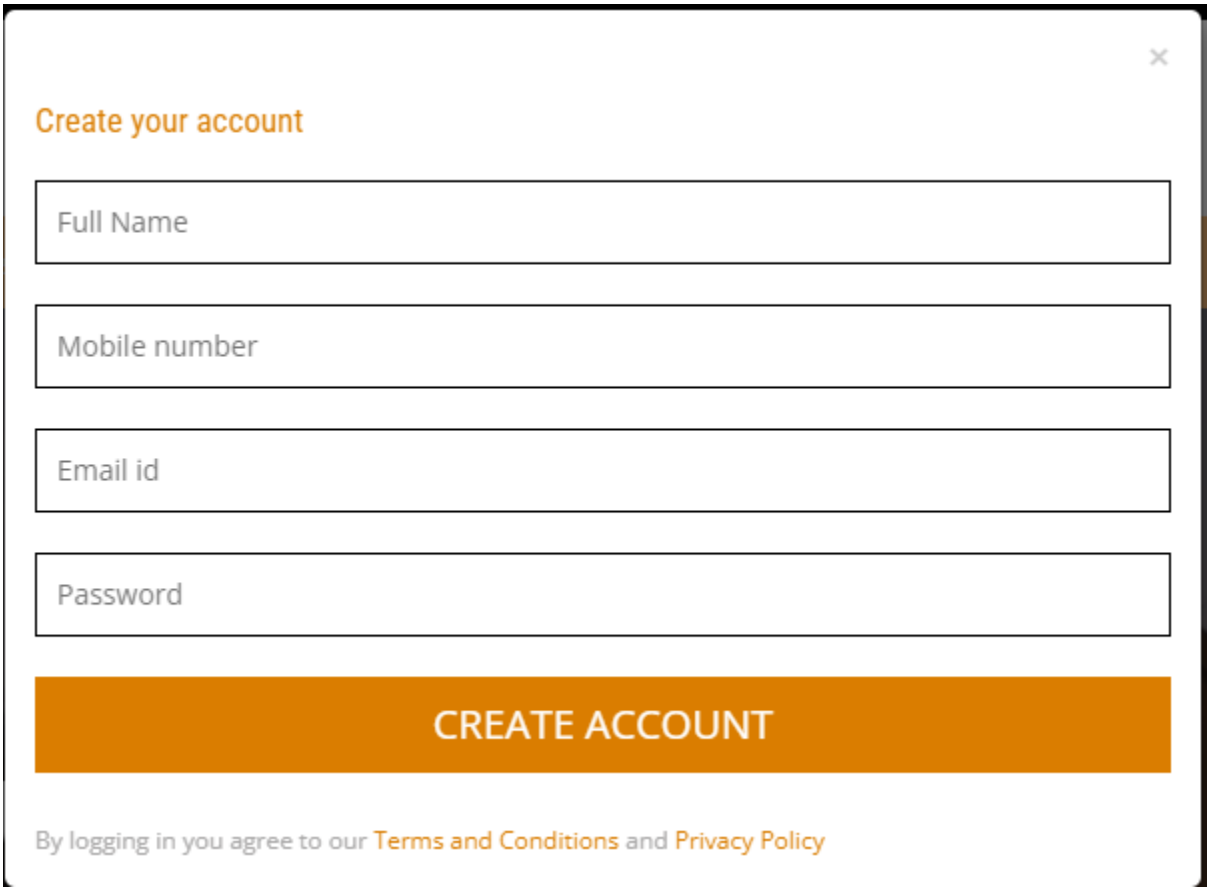
Sign In for admin.

Input → Valid admin's email and password.

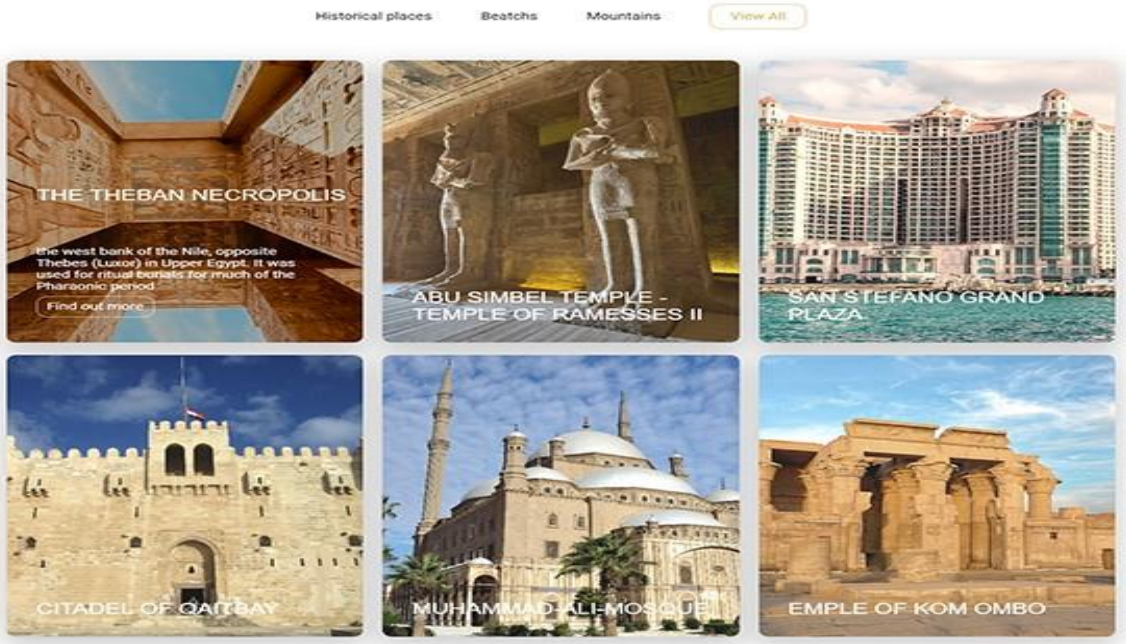


Output → Redirect to her dashboard

Tourist sign up. Input → Enter tourist's first and last name, email address, and password.

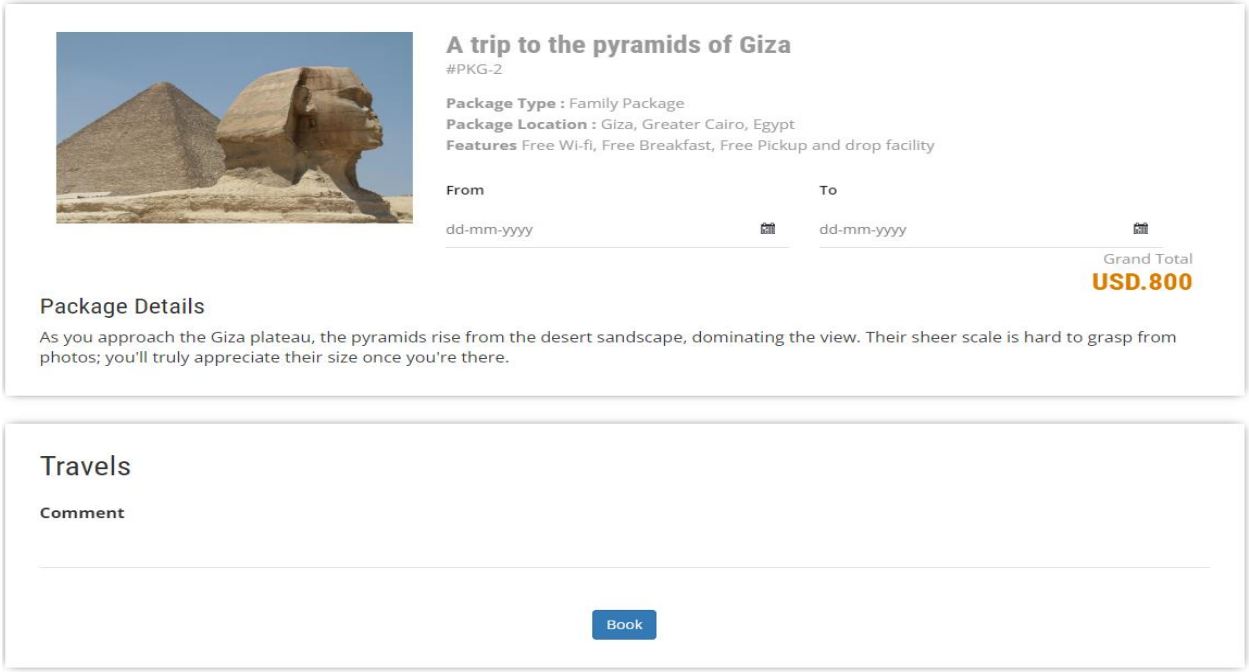


Output → Redirect to Offers, trips and tourist places page.



Booking Process.

Input → Enter tourist's check-in and check-out date, name and e-mail address & phone number.



Output → after the reservation process and filling out the data, the reservations are made in the dashboard admin with the person responsible for controlling the reservations

Manage Bookings

BOOIKN ID	NAME	MOBILE NO.	EMAIL ID	REGDATE	FROM /TO	COMMENT	STATUS	ACTION
#BK-1	Test	1987894654	test@gmail.com		2020-07-11 To 2020-07-18	I want this package.	Canceled by User at 2024-01-30 07:18:29	Cancelled
#BK-2	Test	1987894654	test@gmail.com	A trip to the pyramids of Giza	2020-07-10 To 2020-07-13	There is some discount	Confirmed	Confirmed
#BK-3	Abir	4789756456	abir@gmail.com		2020-07-11 To 2020-07-15	When I get conformation	Canceled by you at 2024-01-30 07:18:52	Cancelled

Forget Password.

Input → Enter tourist's email.

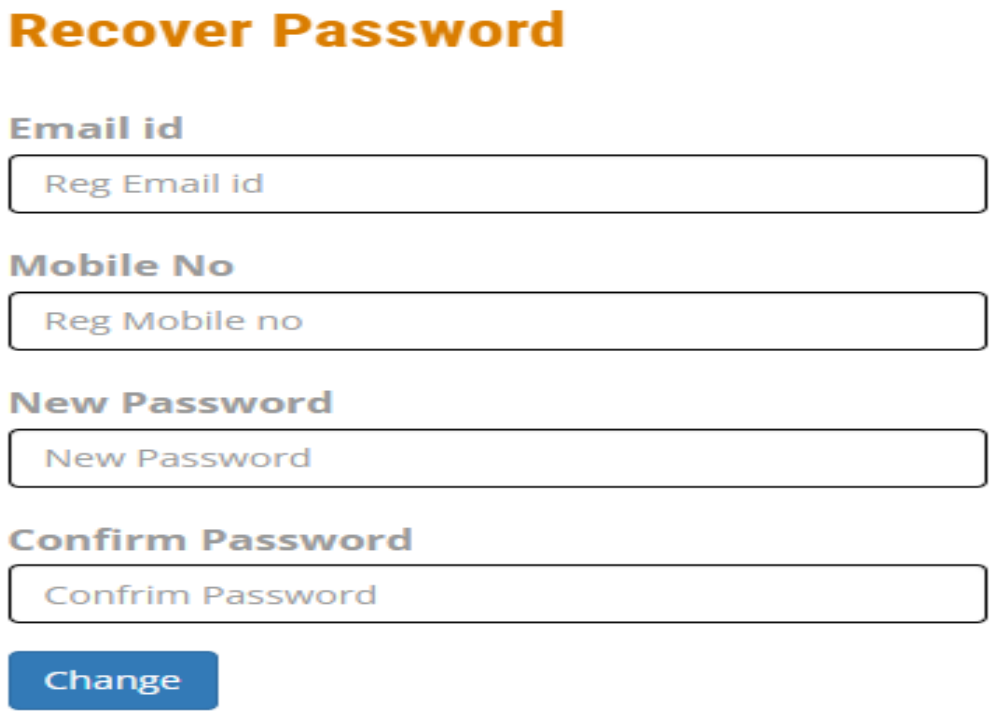


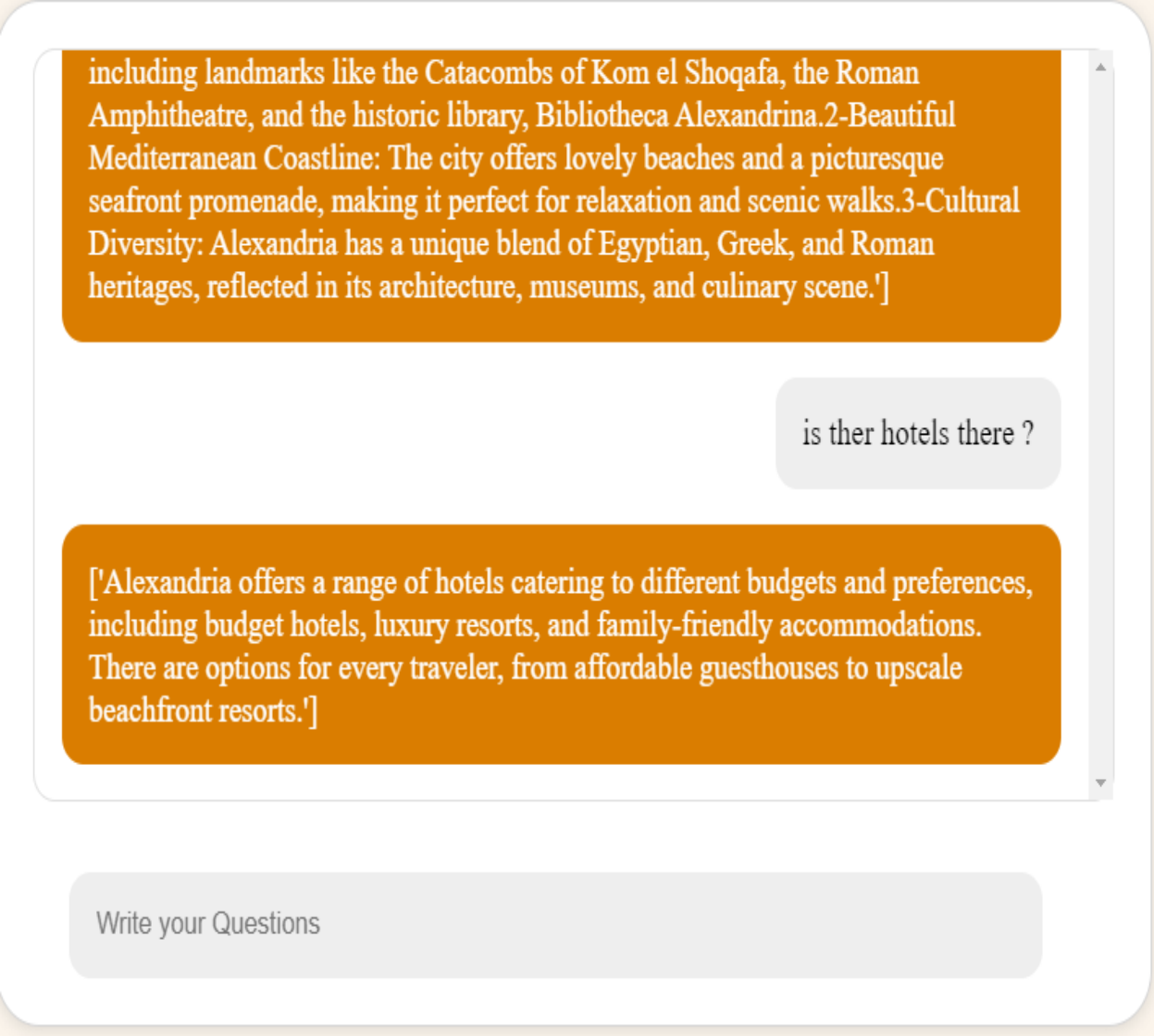
Figure 19: Forget password page.

Output →System will reset their password.

Chatbot process.

Input → user asks any questions he want to know about egypt.

Output → chatbot answer users question by processing the query using NLP to know how to interact with people.

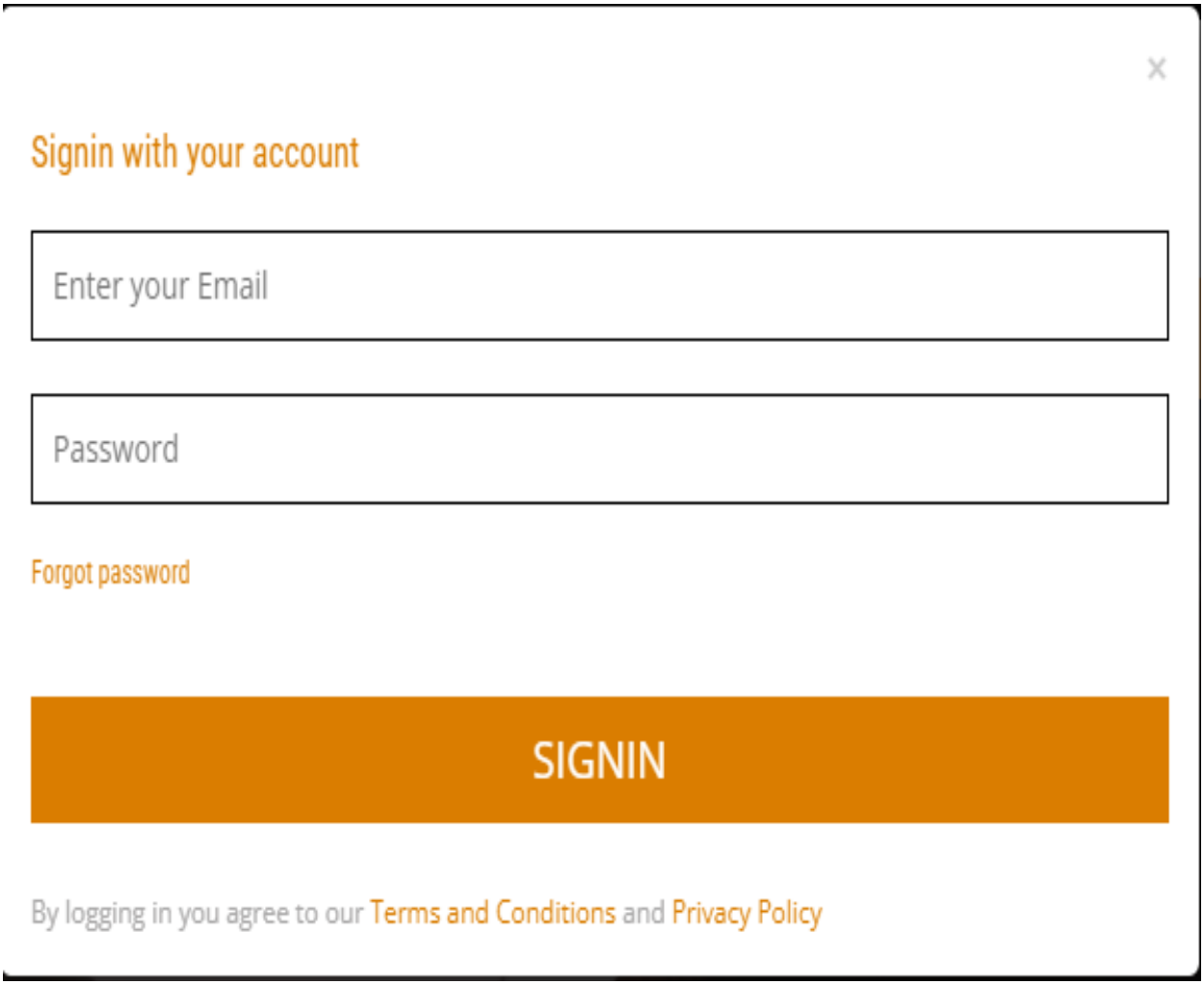


6.5 Error handling and Exception Design

Accurate data entry is crucial, so we use data validation and helpful error messages to guide users through the process. This approach is especially important because errors can be frustrating and confusing. By clearly explaining the problem and offering practical solutions in plain language, we aim to minimize user frustration and empower them to fix the issue quickly. This user-centric approach to error handling fosters a positive experience for everyone involved.

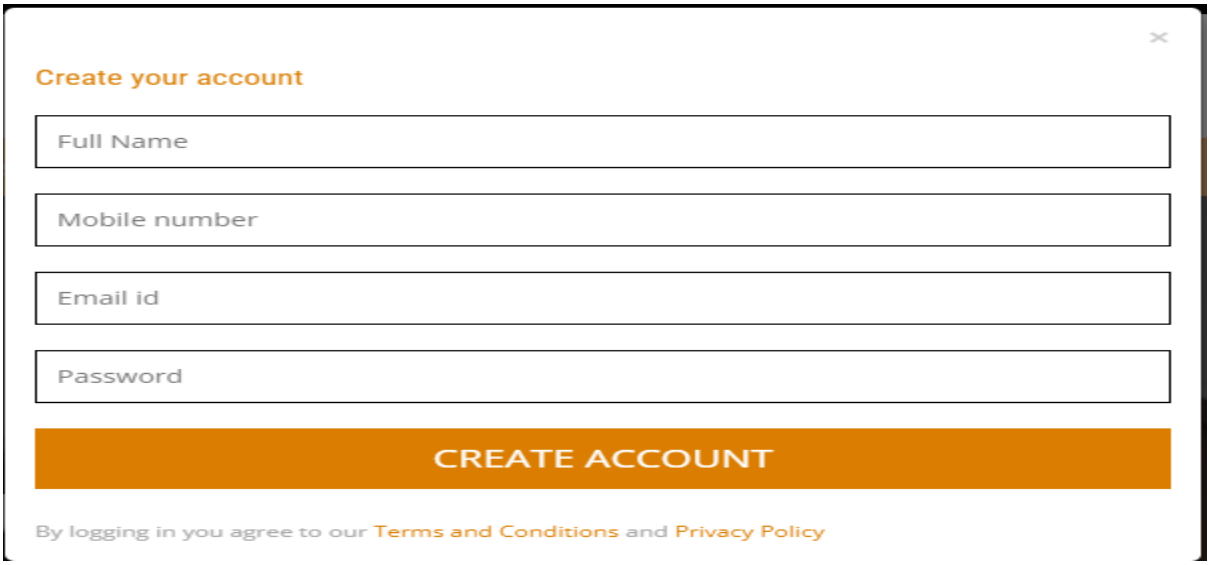
Sign in.

When the user leaves the fields empty a message notify the user that these fields can't be empty.

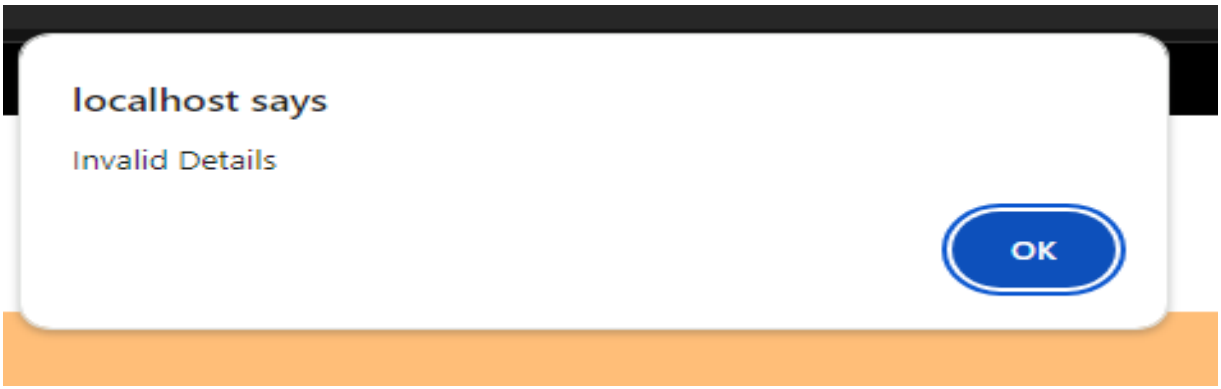


Sign up:

When the user leaves the fields empty a message notify the user that these fields can't be empty.

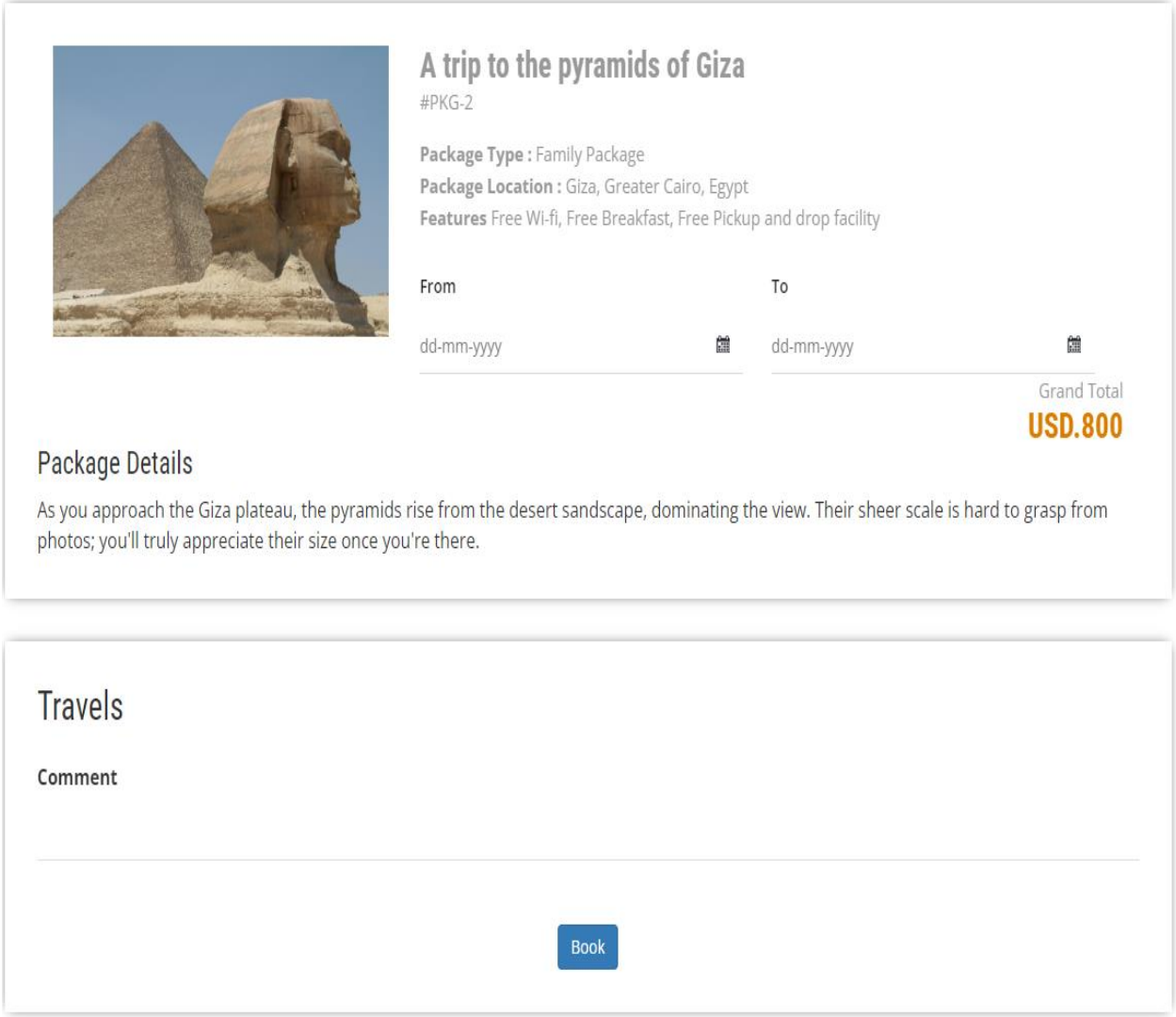


Here the user entered the incorrect format for the confirm password field.



Booking a trip:

In the event that the user neglects to fill in the required fields, a notification will be displayed informing them that certain fields must not be left empty. These fields include the tourist's name, phone number, as well as the start and end dates.



6.7 Literature Review References: -

1- arab-coaching.com

2- sis.gov.eg

3- A new E-model of Tourism Management

4- The impact of modern technologies on tourists' choice of tourist destinations

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