American International University- Bangladesh

CSC 4261: Advanced Programming in Web Technology

CO1 Evaluation
Project Report
FALL 23-24

Project Title: **Tourism Management System**
Project Domain: **Tourism Industry Domain**
Group Number: **01**
Section: **C**

Student Name	Student Id
Adeepta Shushil Shuvo	20-43092-1
Md. Asif Al Mamun	20-43132-1
Salima Farha	20-42497-1
Sakib-Ul-Ahsan	20-42978-1

Tourism Management System

Introduction:

A Tourism Management System is a comprehensive software solution designed to streamline and enhance various aspects of the tourism industry, ranging from booking and reservations to itinerary planning, customer management, and administrative tasks. This system integrates technology to facilitate smoother operations for travel agencies, tour operators, hotels, and other service providers within the tourism sector.

Problem Analysis

Problem Statement: The tourism industry faces inefficiencies in booking processes, fragmented information management, lack of personalized experiences, and inadequate data utilization, hindering seamless operations and optimal customer satisfaction.

Significance of Solving the Problem:

1. Enhanced Efficiency: A streamlined system would simplify booking processes, reducing errors and saving time for both service providers and travelers.
2. Improved Customer Experience: Personalized recommendations and seamless interactions would elevate the overall travel experience.
3. Data Utilization: Leveraging data analytics would offer valuable insights, aiding in better decision-making and tailored service offerings.
4. Competitive Edge: Implementing an effective Tourism Management System would provide a competitive advantage by offering innovative and efficient services.

Feature Analysis:

1. User Category:

There are n-types of Users here. They are:
(4 users)

- Admin
- Employee
- Agent
- Customer

Tourism Management System

2. Feature List:

In this project the "Admin" has the following features:

- Sign up
- Sign in
- Logout
- View own profile
- Update profile
- Delete profile
- Upload profile picture
- View profile picture
- Can see content list
- Can see specific content
- Add content
- Update content
- Delete content
- Can see package list
- Can see specific package
- Add package
- Update package
- Delete package
- View destination list
- View destination with id
- Search destination by name
- Add destination
- Update destination
- Delete destination
- Send Mail to users.
- Find contents of specific admin
- Find admin of the specific content
- View Package of specific destination
- View Contents of specific destination

In this project the "Employee" has the following features:

- Sign In for Employee.
- Search employee by query.
- Create New Employee.
- Search All Employee list.
- Employee details check by ID.
- Update Employee details.
- Delete Employee by ID.
- Sign Out for Employee.
- File/Image upload Api.
- Check Mailer.
- Create a New Hotel.

Tourism Management System

- Update Hotel details by ID.
- Check Hotel details by ID.
- Check All Created hotels.
- Delete Hotel by ID.
- Create New TravelGuide.
- Update TravelGuide Details.
- Search TravelGuide by ID.
- Check all TravelGuide details.
- Delete TravelGuide by ID.
- Create a new Transport package.
- Update Transport package.
- Search Transport packages by ID
- Get all Transport packages details.
- Delete Transport package by ID

In this project the "Agent" has the following features:

- create new agent
- view all agents
- search agents by name
- Update agent by id
- Delete agent by id
- Add new tour package
- View all tour packages
- Get tour packages by id
- get tour packages by creator_id
- Create new bookings
- View all bookings
- Update bookings
- Delete Bookings
- View bookings by id
- Create support
- View all support
- Update Support by booking_id
- Login as an agent
- Upload image
- View Image

In this project the "Customer" has the following features:
- Create new customer
- View all customers
- View customer by id
- Delete customer by id
- Update Customer
- Book tour package
- View tour package

Tourism Management System

- View tour packages by booking
- Update tour packages
- Login
- Send Email
- Create Payment
- View Payment
- Update Payment
- Create new Feedback
- Update Feedback
- Login as a customer
- Upload image
- View image

Design:
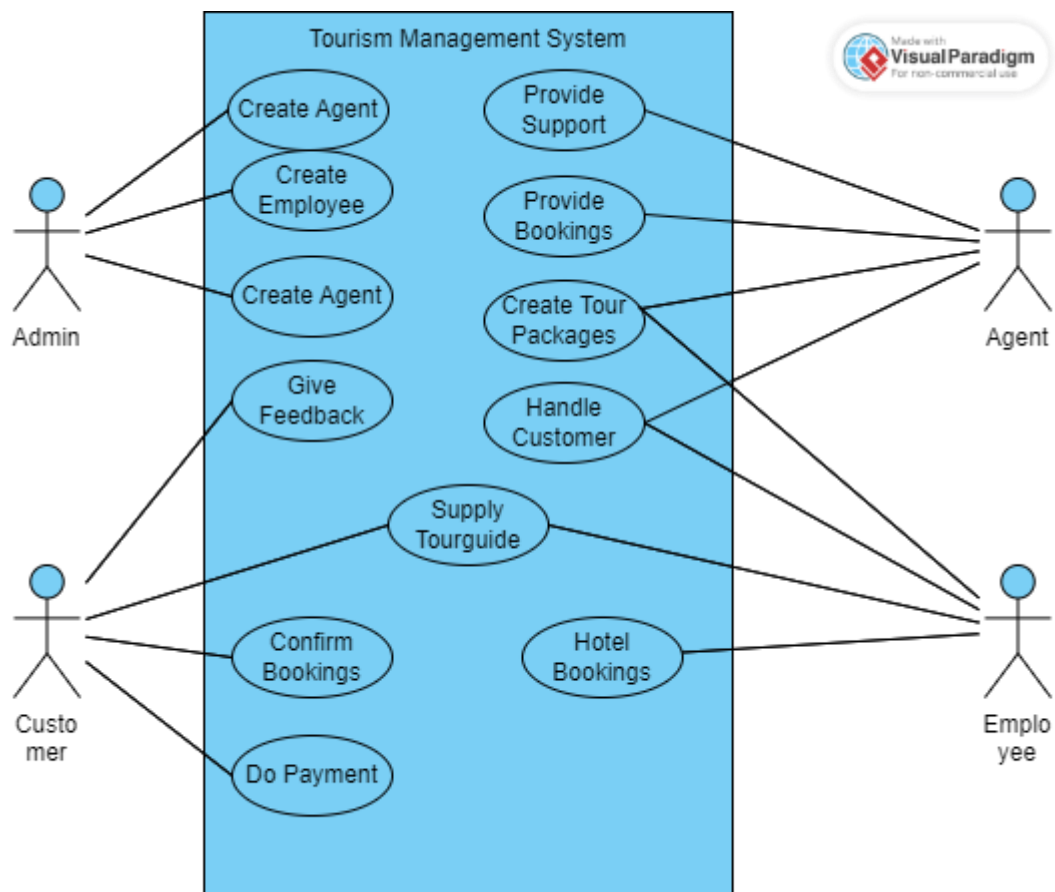
Figure : Use Case diagram

Tourism Management System
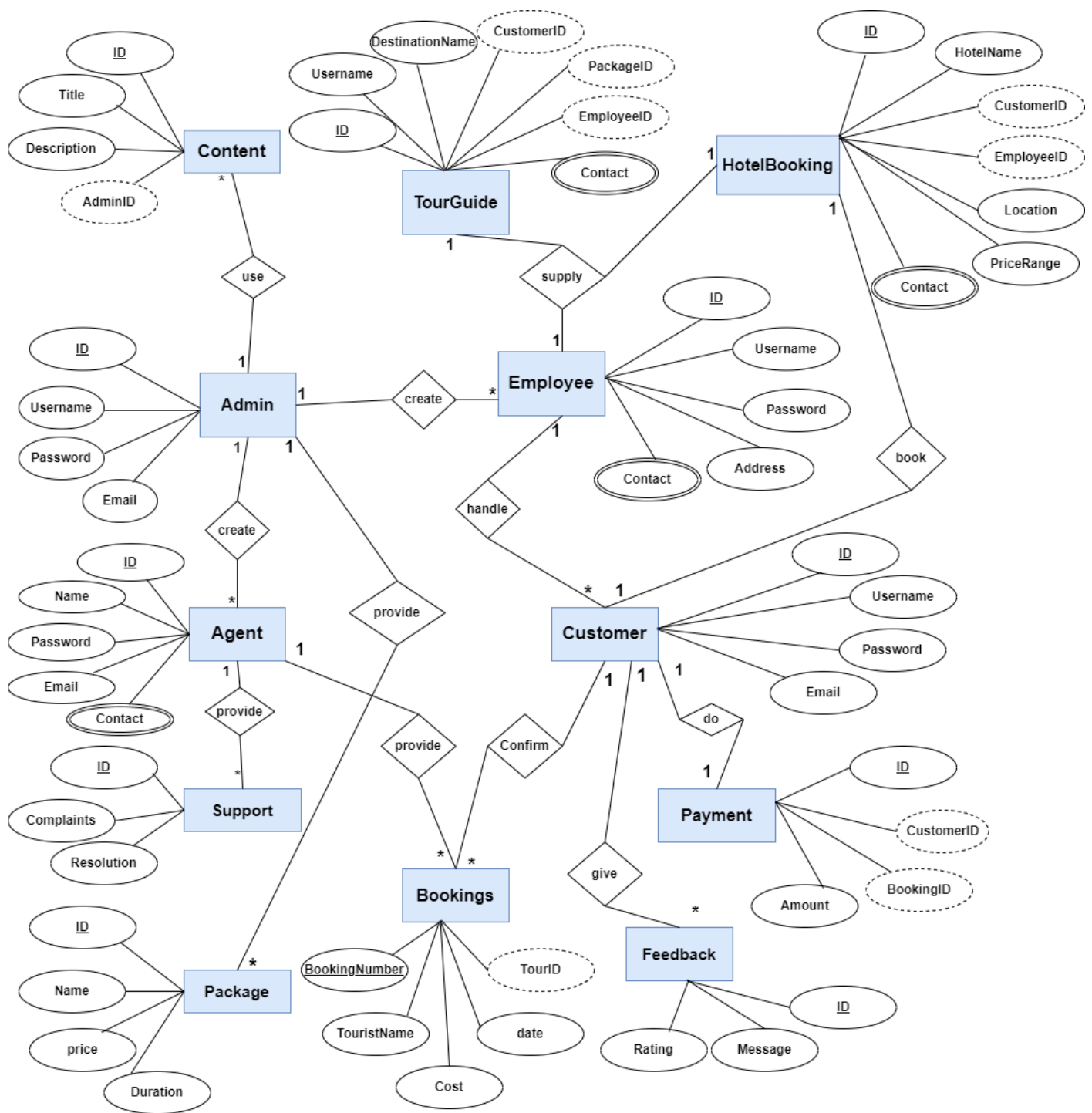
Figure : ER diagram

Tourism Management System

Tools Used:

To develop this project, we have used the following:

- VS Studio Code
- Draw.io
- Figma
- Github
- Postman
- PgAdmin

System Images against the Specification:
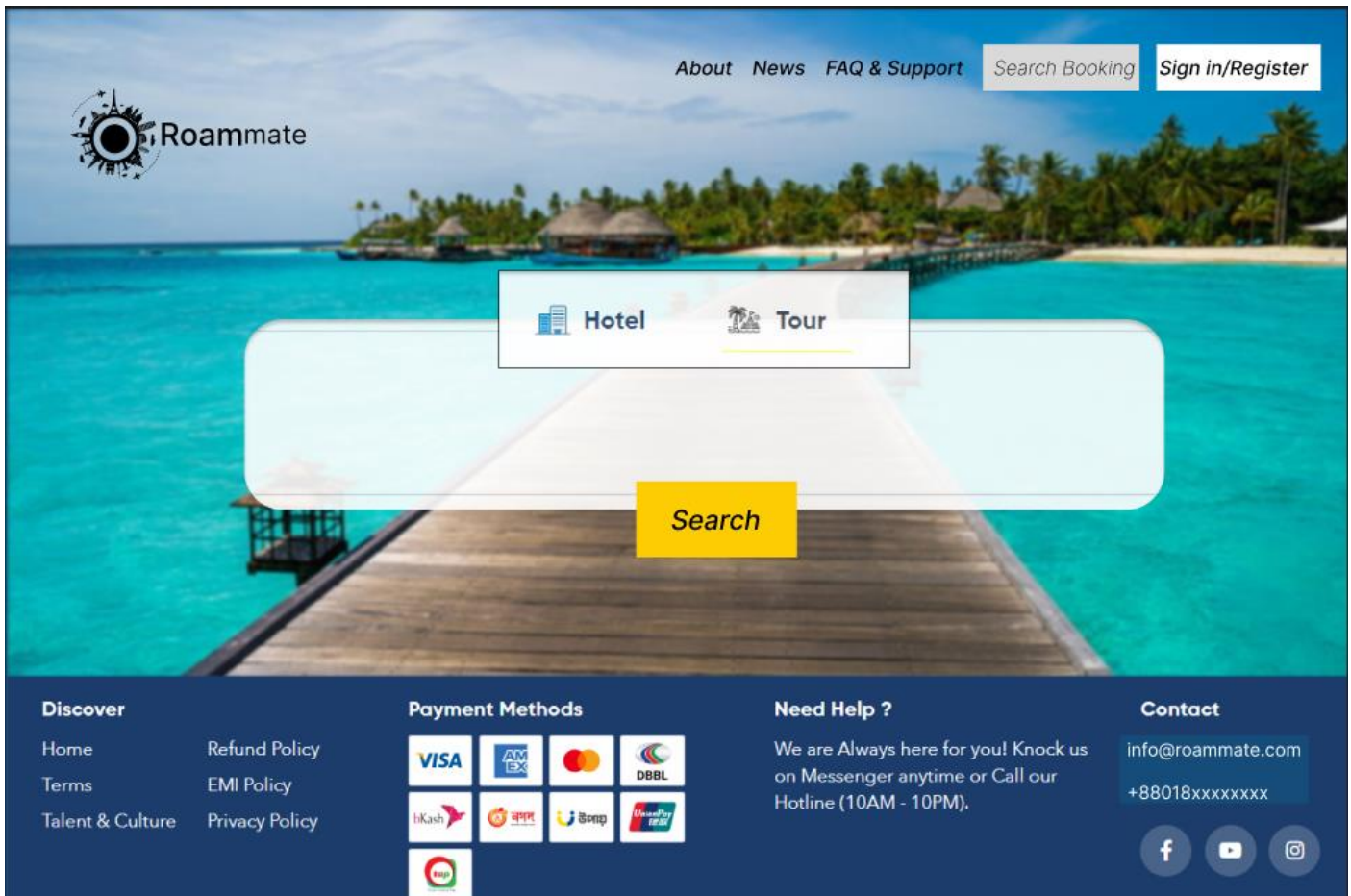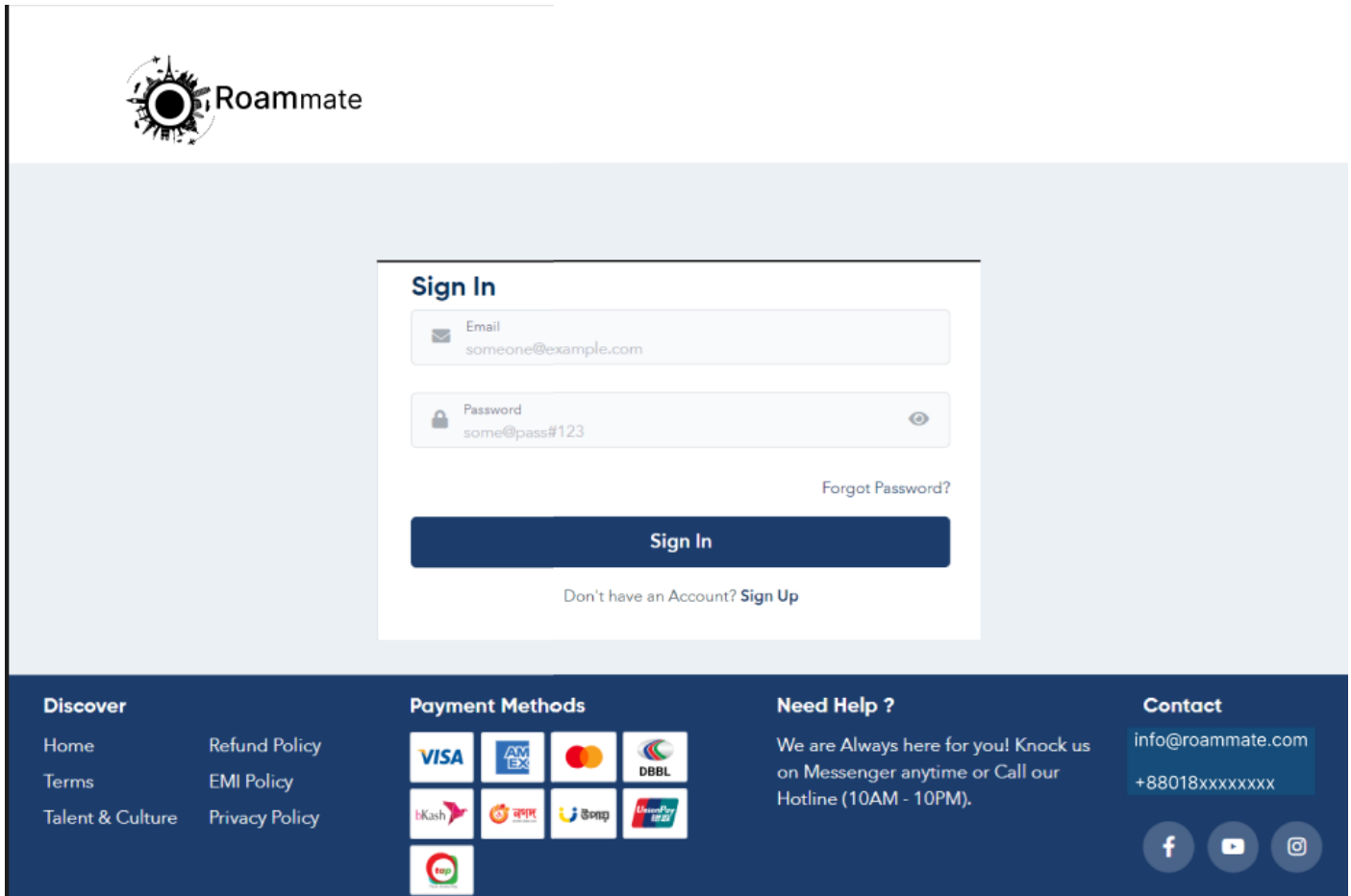
Figure 1

This is the homepage of our website. From here we can navigate throughout our website. Here user can search easily for Hotels and Tour Packages. Users also can search for their booking if they have any.

Tourism Management System

Figure 2

This is the Sign In page. From here a user can log in with his/her registered email and password so that he/she can enjoy our services.

Tourism Management System

Figure 3

This is the registration page. A new user have to signup by giving valid information in this form to enjoy the full potential of our website.

Tourism Management System

Figure 4

This page is from admin dashboard. Using this an admin can add a new employee.

Tourism Management System

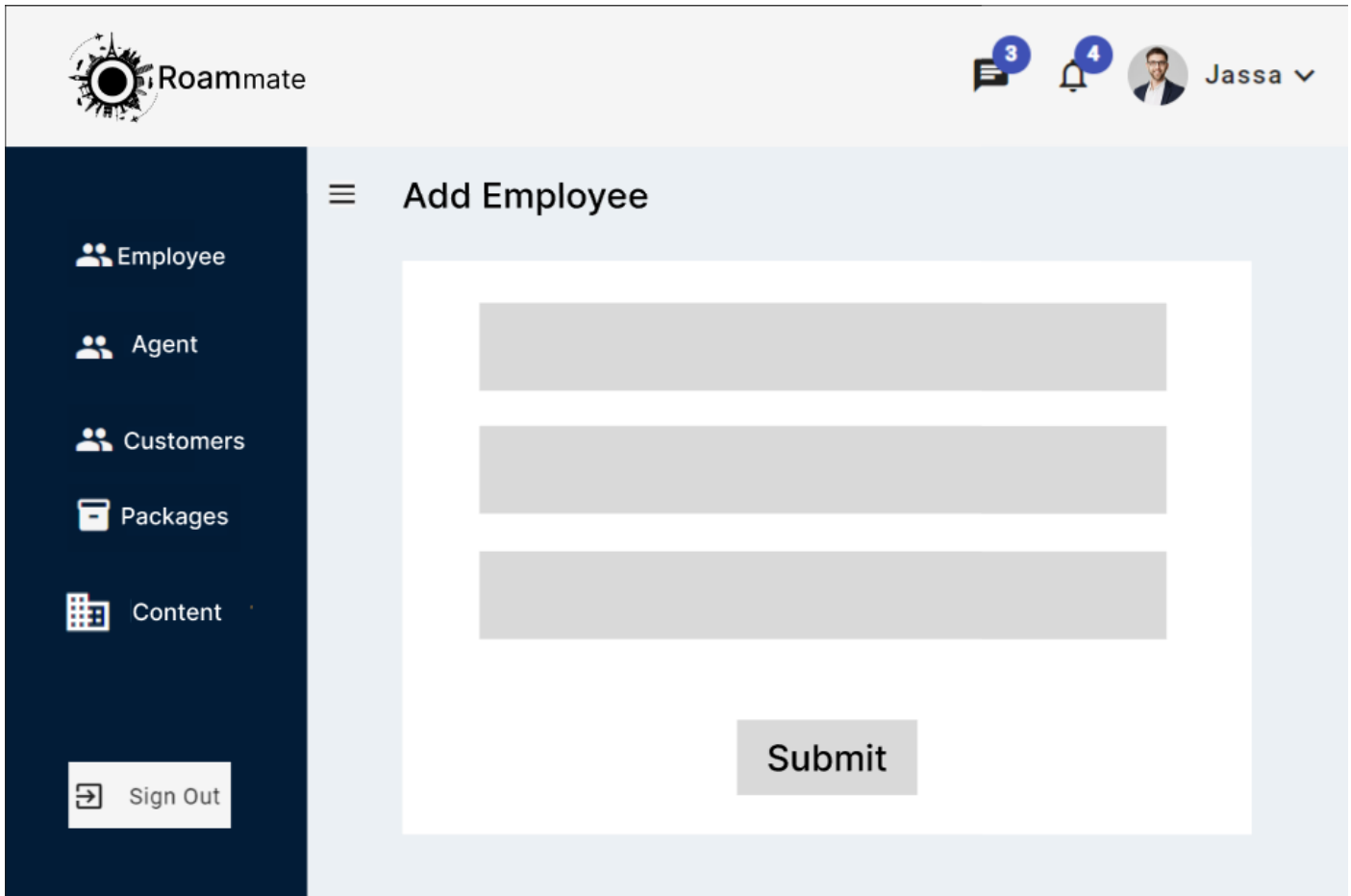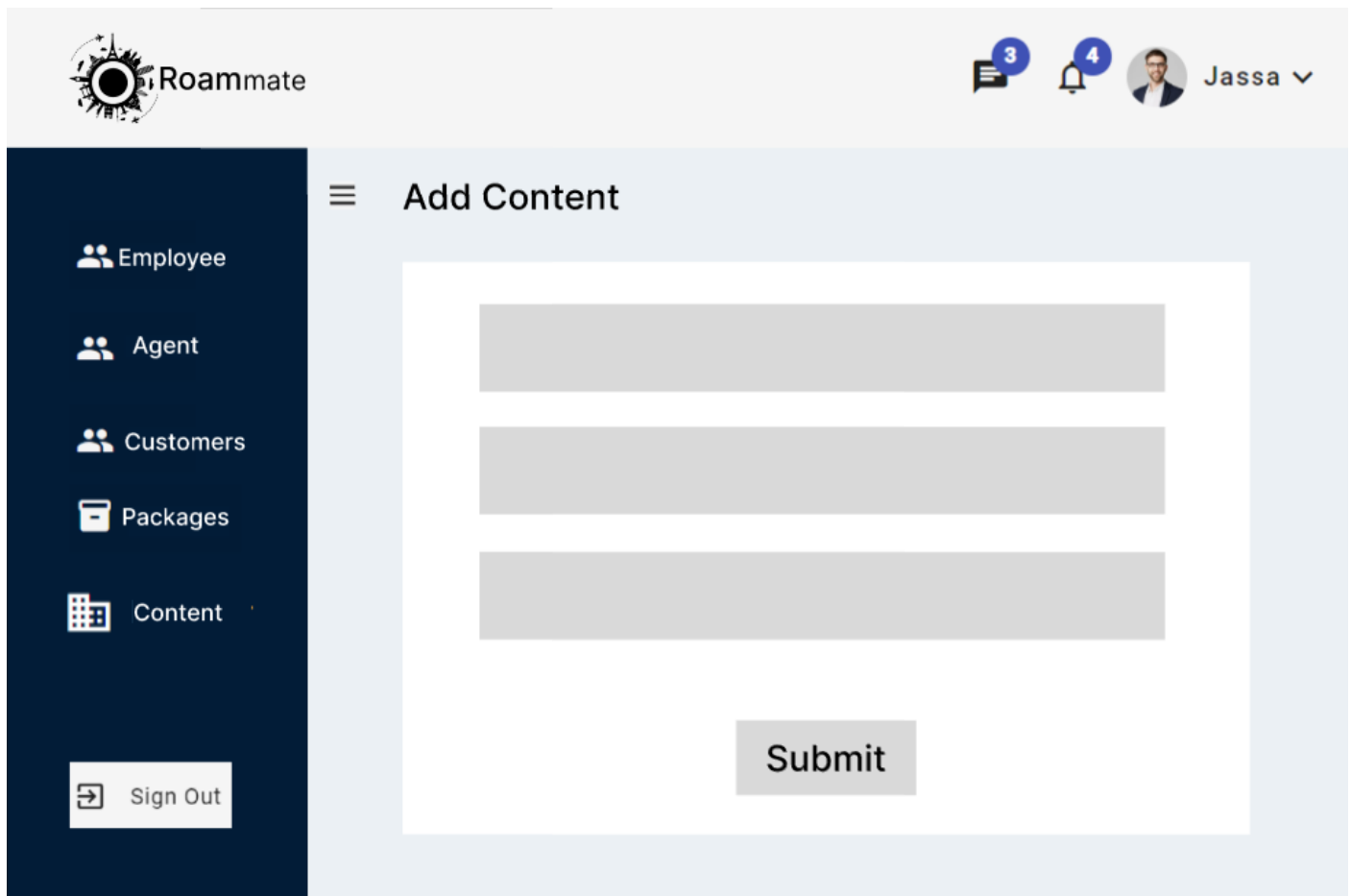*Figure 5*

This page is from admin dashboard. From this page an admin can add content which can be used for the website.

Tourism Management System

Impact of this project:

The tourism management system can have a significant impact on modern society. Also, it can have a vital role in the environment and the economy of the local people. A short description of the increasing importance of our project is described below:

Importance:

1. Boosting local economies: As this project promotes tourism, it can contribute to the growth of local economies. If there are more tourists there would be improvement in hospitality, transportation, local business and cultural experiences.
2. Environmental sustainability: This system can help people practice responsible and sustainable tourism practices. This includes eco-friendly accommodations, activities, transportation options and encourage users to make environmentally conscious choices.
3. Infrastructure Development: The promotion in tourism side can also lead to the development of tourism related infrastructures. Local authorities will be more interested to invest in transportation, accommodations and other facilities.
4. Cultural Exchange: Tourism always helps people to have a lot of cultural exchanges. People can understand, tolerate, appreciate diverse cultures.

Benefits to people:

1. Convenience and efficiency: Tourists can access comprehensive information about destinations, accommodations, transportation and the planning process.
2. Personalized travel experiences: The whole system is built in such a way that people can have a completely tailed and personalized tour of their own. This personalization can increase satisfaction in a great way.
3. Cost savings: Travelers can save a lot of money by finding the best deals on accommodations, transportations. All these information would be real-time.
4. Enhanced safety: The system will have real time tracking, which would make it extremely safer for people to travel to the unknown.
5. Local communities will benefit from the increased tourism as it brings new opportunities.
6. Reduced Environmental Impact: Travelers will always be encouraged to use eco-friendly options, reducing overall environmental impacts.

American International University-Bangladesh (AIUB)

Tourism Management System

Limitations:

1. Limited coverage: The system initially will focus on the famous/popular tourist spots while ignoring the lesser known areas.
2. Language barriers: Initially the whole system will be built on only one language, which is English.
3. Connectivity issues: Most of the popular tourist spots are on remote areas which makes internet availability an issue which might hamper the real time tracking.

Possible future improvements:

1. Global Expansion: Extending the system in such a way that we can organize foreign tours.
2. Multilingual Support: The system will be multilingual, which will help have a very diverse user base.
3. Offline functionality: Some critical information can be easily fetched while being offline.
4. Support: Employees and agents will always be available for customer support.

CO1 Evaluation: Project Report Evaluation			
Problem Analysis (5)	Use Case Diagram (5)	ER Diagram (5)	Total (15)