

ABSTRACT

Trekking is one of the latest trends in tourism in the world. It is treated primarily as a modern form of adventure tourism and geo-tourism. On one hand, due to the extreme terrain where it can be practiced and a certain dose of adrenaline, is treated as a form of adventure tourism. The desire to achieve, acquire and reach out to many of the most difficult places decide the characteristics of a sports competition.

Although it seems that in today's world all the places have already been discovered, still there may appear new challenges. On the other hand, the beauty of trekking relies on that it is implemented in an extraordinary and stunning natural and geological environment. Although many challenges, tourists are attracted by geodiversity and fascinating landscapes, changing weather conditions, or spiritual survival.

It is often associated only with mountains, but it must be emphasized that one may distinguish eight types of trekking, these are: mountain, desert, tropical, glacial, polar, river, swamps, and volcanic trekking. All of these allow a person to come true in very unusual circumstances. People also discover and learn about their own abilities, both mental and physical. Modern trekker has much more opportunities for exploration of challenging environments. Comfortable clothing and equipment ensure a high level of safety. Adventurers and explorers functioned quite differently for ages, they were condemned to intuition.

INTRODUCTION

1.1 Introduction:

Events create opportunities for people to connect with an area, spend time together, celebrate and experience the diversity of cultures and foster creativity and innovation. They allow a community to come alive and provide an opportunity for a destination to showcase its tourism experience and increase economic activity. Events contribute significantly to community building, lifestyle and leisure enhancement, cultural development, tourism promotion, increased visitation, volunteer participation, fundraising, and economic development. Most importantly, events create a sense of fun and vibrancy, resulting in a strong sense of community connectivity, pride, and a sense of place.

1.2 Purpose:

This report presents the general use cases and data models of the HikerStop Project. With these use cases and data models, this report expects to show the processes of the HikerStop, and help the development of the project itself.

1.3 Problem Statement:

Adventure activities have become the core products of many tourism destinations. Hiking, which is known to be a soft adventure activity, represents an especially important product for many tourism destinations around the globe and in the European Alps. However, little research has explored hikers' underlying motivation and experiences, which are expected to differ from the hard adventure context, as mountain hiking provides a low risk, but high immersion. This paper aims to determine and explore the underlying dimensions and dynamics of mountain hikers' soft adventure motivation (SAM).

1.4. The Scope of the Project:

This system will be a web-based application that will allow the user to book events according to the given user input. This will allow the user to find the treks/activity they are looking for and arrange the complete trek/activity in a well-planned manner. So that the user can have a better experience and not go through all the hassle of booking multiple things for a single trip.

1.5 Aims & Objectives:

After reading this unit learners will be able:

- To understand the concept of Event Organization.
- To study the different types of Events.
- To analyze the role of creativity in the Event Organization process.
- To study the various types of Event Organization structures.

1.6 Benefits of HikerStop

The potential benefits of hosting major events from the perspective of the visitor economy include:

1. Structural expansion of the visitor economy:

Visitors coming to a city or region for an event will contribute to a more buoyant economy, with visitor expenditure having a multiplier effect on incomes throughout related supply chains. With the multiplier effect, the host destination shall benefit in terms of employment, income, and better standards of living.

2. Alignment of tourism with other strategies:

The requirements of hosting a major event can be used to, promote an integrated whole-of-government approach, and maximize synergies between relevant development and growth infrastructures constructed for events are one of the most visible lasting legacies for a host city or region and can have real impacts on tourism growth.

3. Marketing and promotion:

Pre-event branding associated with the successful hosting of a major event, can provide lasting recognition of destination branding in key tourism markets, encourage return visitation of attendees or participants, and a better understanding of the focus of the event such as sport, arts, and culture, food, and wine, etc.

4. Environmental impacts:

The international focus often associated with major events can help to prioritize work on an often under-developed or neglected built environment and therefore the attractiveness and competitiveness of destinations. In addition, ensuring that events are managed in an environmentally friendly manner is also becoming a high priority in terms of branding.

A positive legacy can encourage community and stakeholder support for an event, represent a tangible return on investment, or justification for public expenditure. However, achieving a positive result requires strategic planning well in advance of the event, adoption of a long-term perspective, and evaluation throughout the event lifecycle, from inception through to the post-event period.

1.6.Overview of Document:

The document is divided into the overall description and functional requirements. The overall description describes the basic use cases for the system's process, while the functional requirements mention the necessary interactions for the use cases.

Overall Description

2.1 Product Perspective

Events create opportunities for people to connect with an area, spend time together, celebrate and experience the diversity of cultures and foster creativity and innovation. They allow a community to come alive and provide an opportunity for a destination to showcase its tourism experience and increase economic activity. Events contribute significantly to community building, lifestyle and leisure enhancement, cultural development, tourism promotion, increased visitation, volunteer participation, fundraising, and economic development. Most importantly, events create a sense of fun and vibrancy, resulting in a strong sense of community connectivity, pride, and a sense of place.

2.2 Product Features

Admin:

- Admin can Login to the system.
- View the list of Events.
- Add a New Event.
- Delete Event.
- Update event.
- View User Data
- Manage User

Customer:

- Customers can login to the system.
- View his/her details.
- View Events
- Customers can Edit the Event
- Customers can Book an Event
- Customers can View All Booked Event

2.3 User Classes and Characteristics

Admin can Login to the system

The admin has full access to the system. He will maintain the flow of the whole event to ensure better and secure service and solve any errors appearing in the system.

View the list of Events

A customer login a website and choose any package shown in our list of events provided by us. Customers book an event and see upcoming events also after that customers select any package admin book event.

Add a New Event

Admin can easily add and update event details with date, time, location, etc., and provide their users with updated event details when and where needed.

Delete Event.

The admin can see the event and check whether this event can be taken or not and then confirm the package who choose by the customer if is not possible to conduct the event so the admin has full access to cancel an event.

Update event:

Admin is flexible to edit whatever events he has created. the update includes capacity, price, documentation required, etc. All updates will immediately be reflected in the user Interface.

View User Data:

Admin could manipulate event data that he wants to display to a user interface. It includes all descriptions of events and proper flow and guidance to reach that event destination.

Manage User:

Admin can set the limit for customer capacity of the event. So that they can manage customers according to their resources and make their customers happy.

Customers can login to the system.

when a first-time customer visits the application then he or she registers first

when registration is done the user can log in to the system and check whether the user writes the correct username and password if not then an error message is shown i.e. invalid user id and password.

View his/her details.

Upon signing in, customers can view their personalized dashboards.

View Events

Customers can have complete information about event details with the fare, location, and timings.

Customers can Edit the Event

firstly customers check whatever event is showing on the application based on that customer's selection of the event they can edit the event also

Customers can Book an Event

Customers can search for events location-wise and apply further filters like category, date, and time

Customers can View All Booked Event

Customer can view All Booked events and make a plan accordingly.

Requirements Specification:

3.1 Software Requirements:

- Technology: J2SE and J2EE, Hibernate Spring Boot
- SDK, EC2, AWS S3 Standard Bucket.
- Web-Technologies: React, CSS, JavaScript
- Web Server: Tomcat 9.0
- Java Version: JAVA Version 1.8
- Backend Database: MySQL 8.0
- IDE: Eclipse

3.2 Hardware Requirements (Minimum):

- Processor: Pentium IV
- RAM Capacity: 1GB
- Hard Disk: 160GB

J2EE: Java 2 Enterprise Edition is a programming platform part of the Java Platform for Developing and running multitier architecture Java applications, based largely on modular software components running on an application server.

TOMCAT: It's an application server that is mostly used in the web-applications. It implements the Servlet2.5 & JSP2.1 specifications. It's a cross-platform application Server.

ECLIPSE: In computer programming, Eclipse is an integrated development environment (IDE). It contains a base workspace and an extensible plug-in system for customizing the environment. Written mostly in Java, Eclipse can be used to develop applications. By means of various plugins, Eclipse may also be used to develop applications in other programming languages: C, C++, and JavaScript. It can also be used to develop packages for the software Mathematical. Development environments include the Eclipse Java development tools (JDT) for Java.

SPRING BOOT: Java Spring Boot (Spring Boot) is a tool that makes developing web applications and microservices with Spring Framework faster and easier through three core capabilities: Autoconfiguration. An opinionated approach to configuration. The ability to create standalone applications.

MySQL: MySQL is an open source 'Relational Database Management System' in which all the data are stored in the form of tables. Each table is connected to some other table i.e. has a relationship with another table and this relationship is established through integrity constraints. These tables have columns that represent the attributes of an entity and there are rows of data for each column. This is called the database and is connected to the front end or user interface with the help of a controller. This is a fast and highly scalable database management System.

Non- Functional Requirements

3.3.1 Performance Requirements:

The system should store all the database records of each builder and user properly and the application should be available for use 24*7 through the server. Also, the application should be user-friendly with a proper user interface that makes it easy for the user to understand. All the options should be present in properly accessible places for user convenience

3.3.2 Safety Requirements:

All login ids and passwords of the admins, builders, and users should be protected for privacy using whatever constraints are required in the database or the application. Admins, builders, properties, and users' records are to be backed up securely across database servers. In case the database is hacked by someone, and data is deleted a backup server should be present for such purpose.

3.3.3 Security Requirements:

All passwords of the administrators should be protected for privacy using whatever constraints are required in the database or the application. Transactions regarding properties should be carried out properly. Only the admin will have access rights to the user and builder data according to the need. The database should be protected from attacks and unauthorized access.

3.4.1. Software Quality Attributes

3.4.1 Availability

The system should run on a variety of operating systems that support the JavaScript language. The system should run on a variety of hardware

3.4.2 Accessibility

The software will be accessible to admins, builders, and users.

3.4.3 Compatibility

The software will be compatible with multiple platforms.

3.4.4 Durability:

The software will be tested for working with multiple users

3.4.5 Effectiveness

The software will be made to handle operations effectively.

3.4.6 Maintainability

The system should be easy to maintain. There should be a clear separation between the interface and the business logic code. There should be a clear separation between the data access objects that map the database and the business logic code.

System Design

4.1 Use Case Diagram:

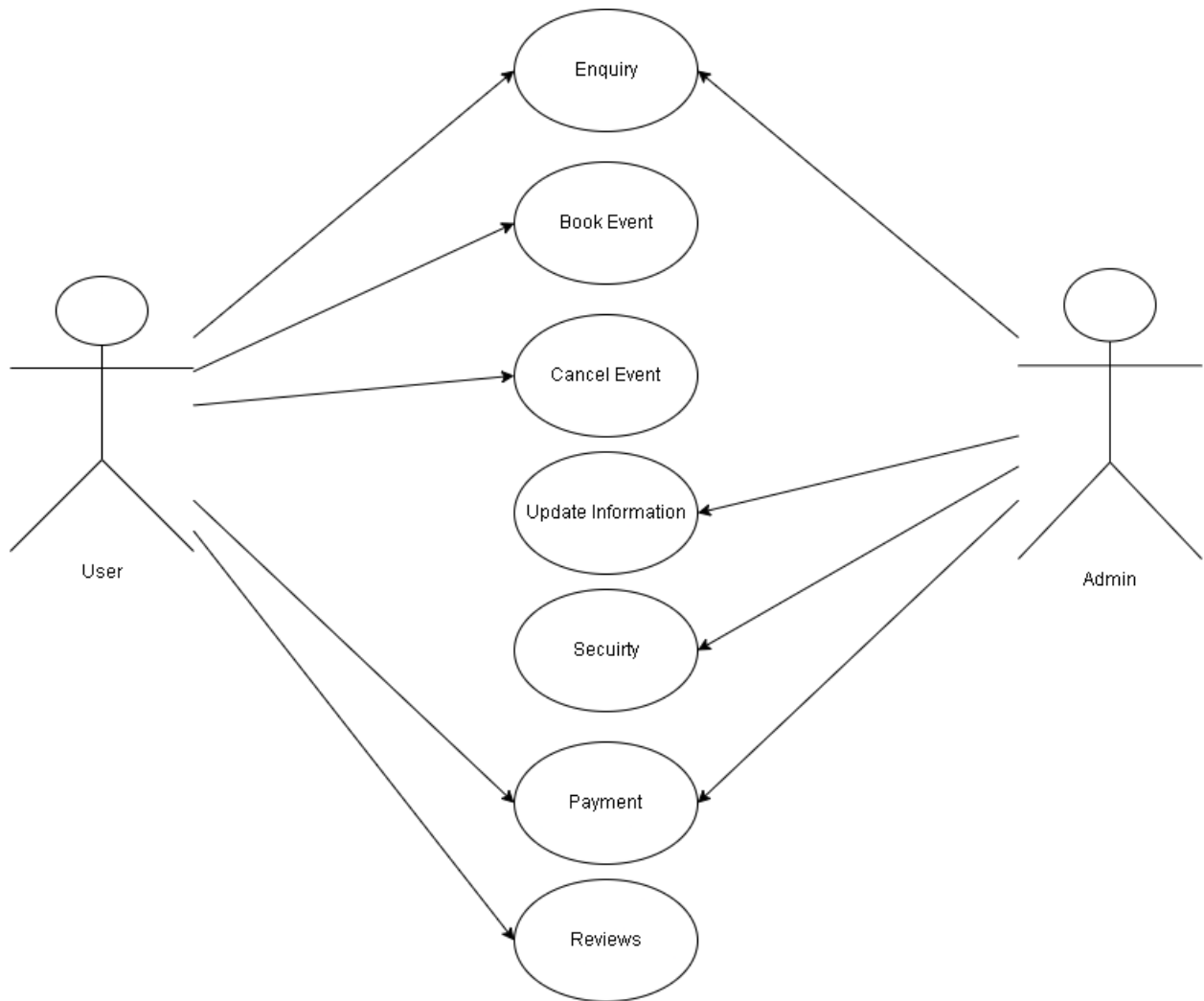


Figure 1.1: Use Case Diagram

4.1.1 Admin DFD

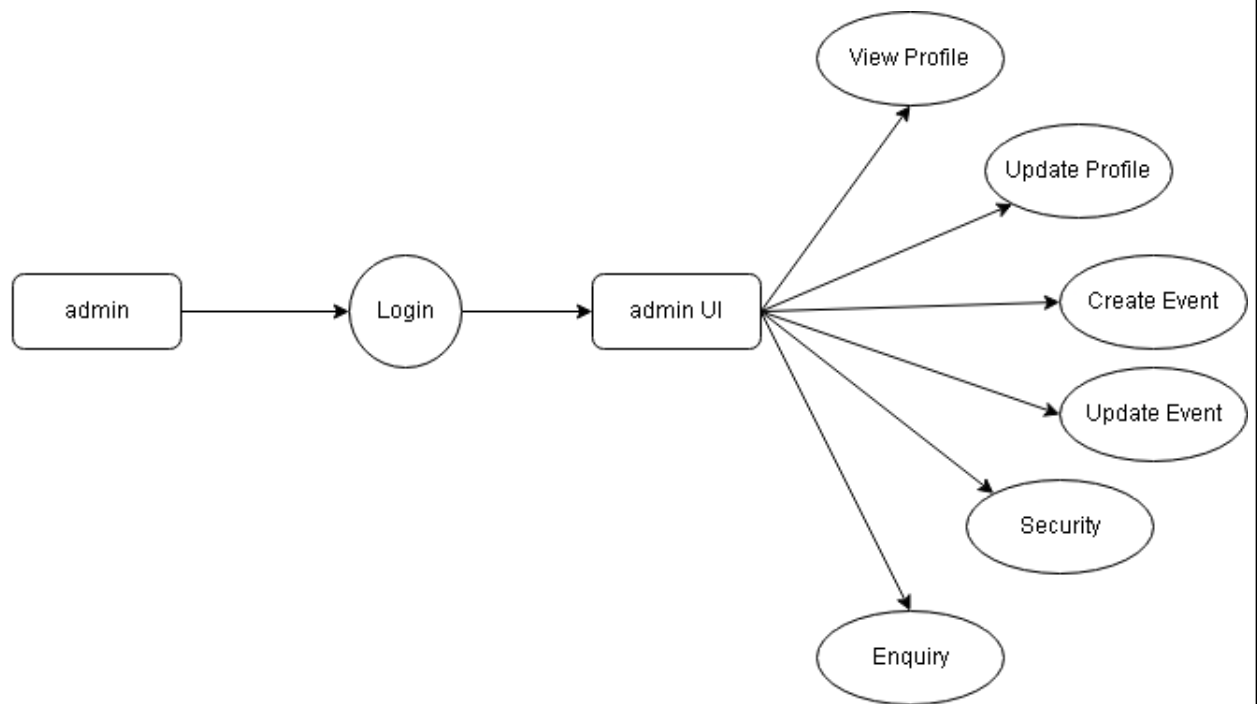


Fig 1.2 Admin DFD

4.1.2 User DFD

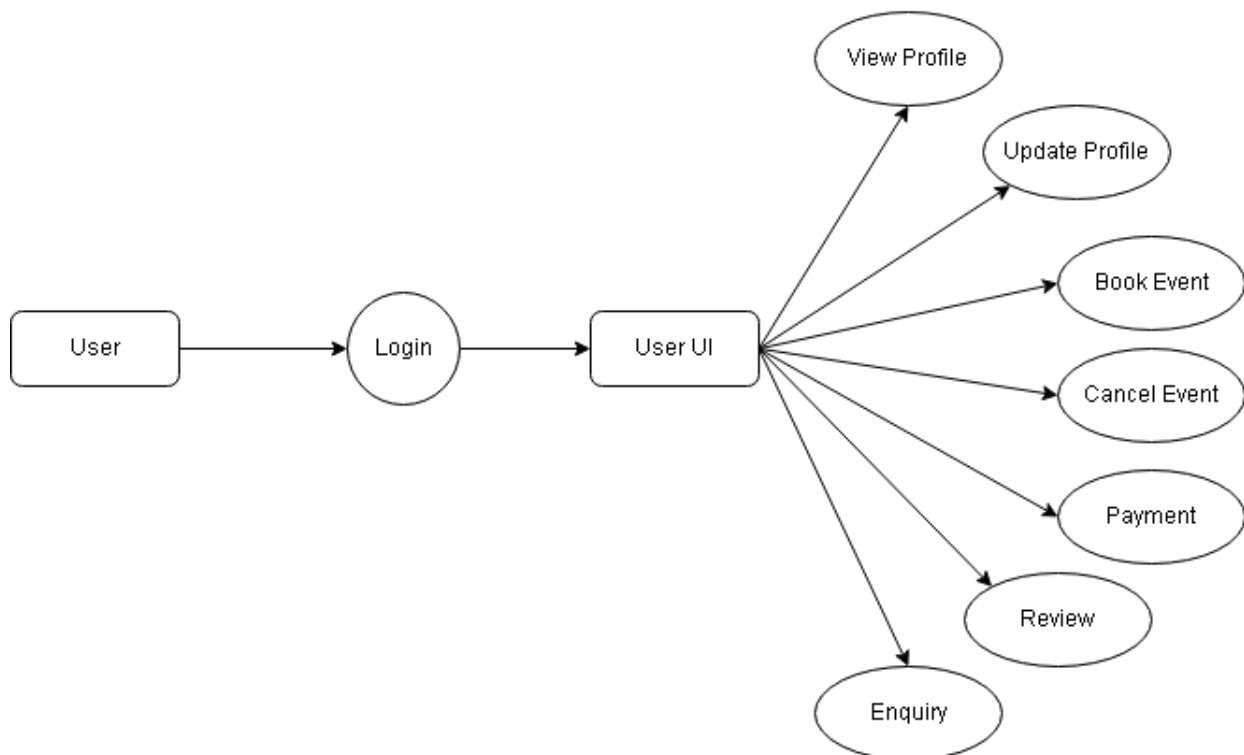


Fig 1.3 User DFD

4.2 User Data Flow

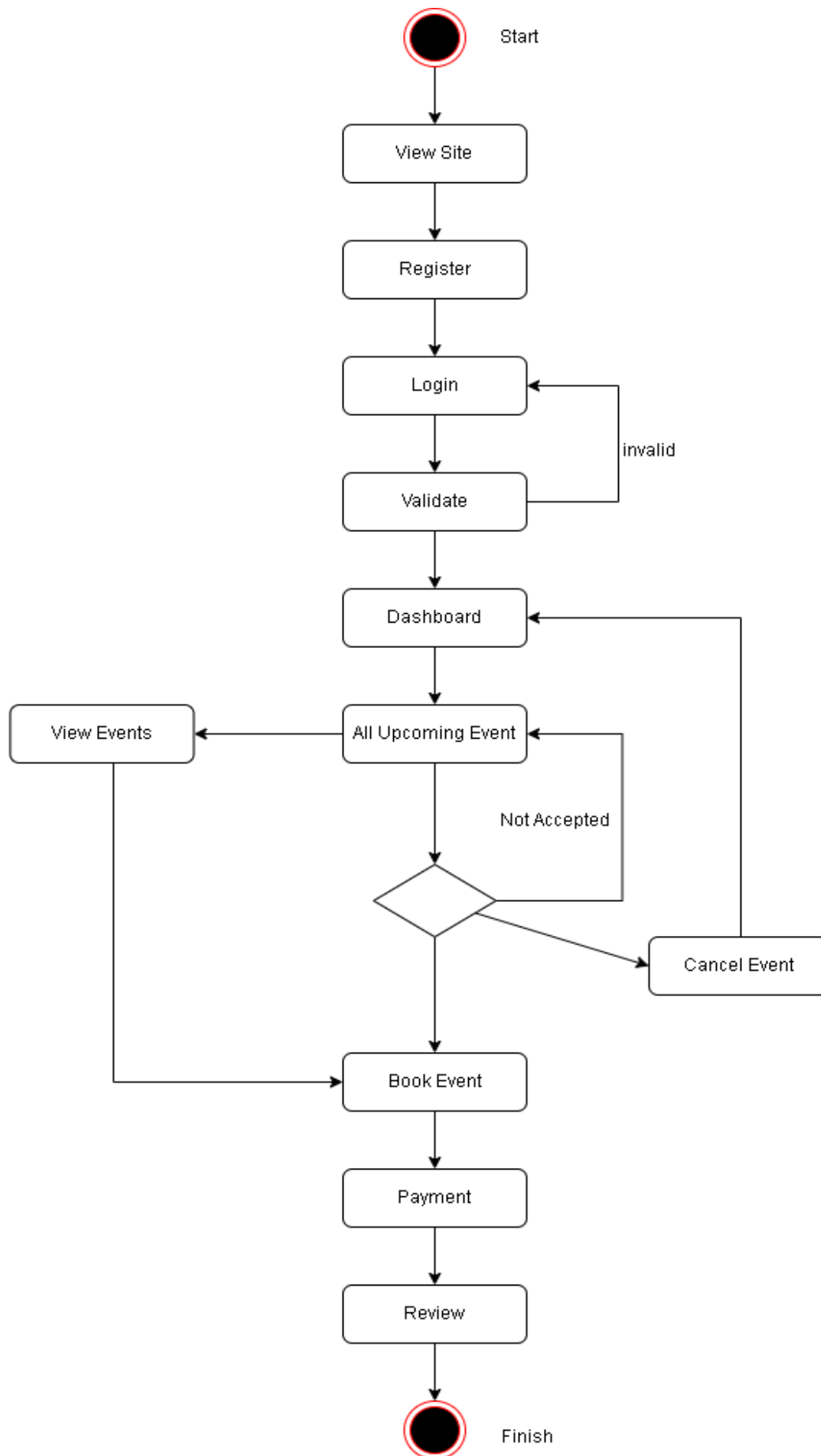


Figure 2: Customer Data Flow

4.3 Class Diagram

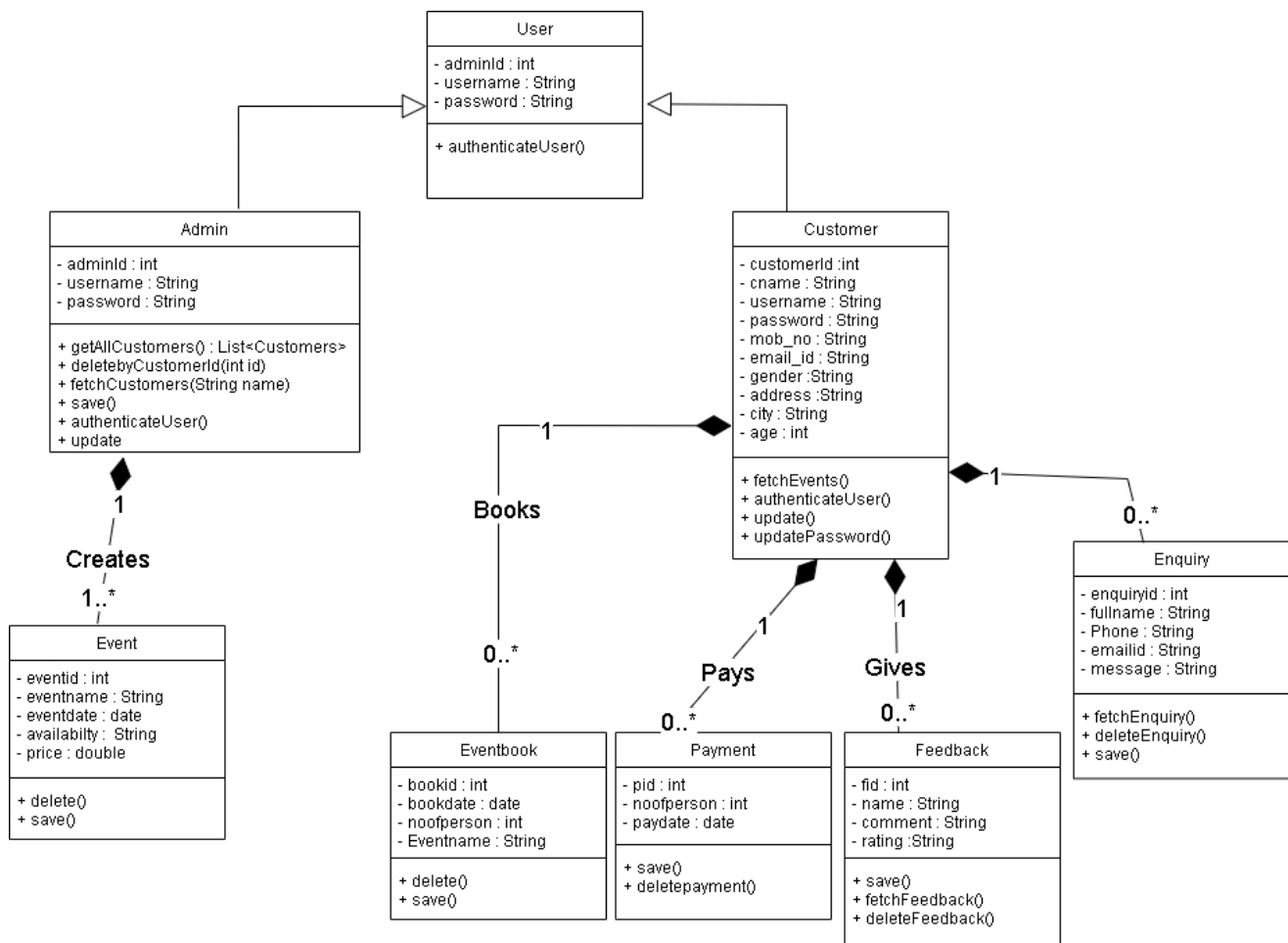


Fig 3:Class Diagram

4.4 ER Diagram

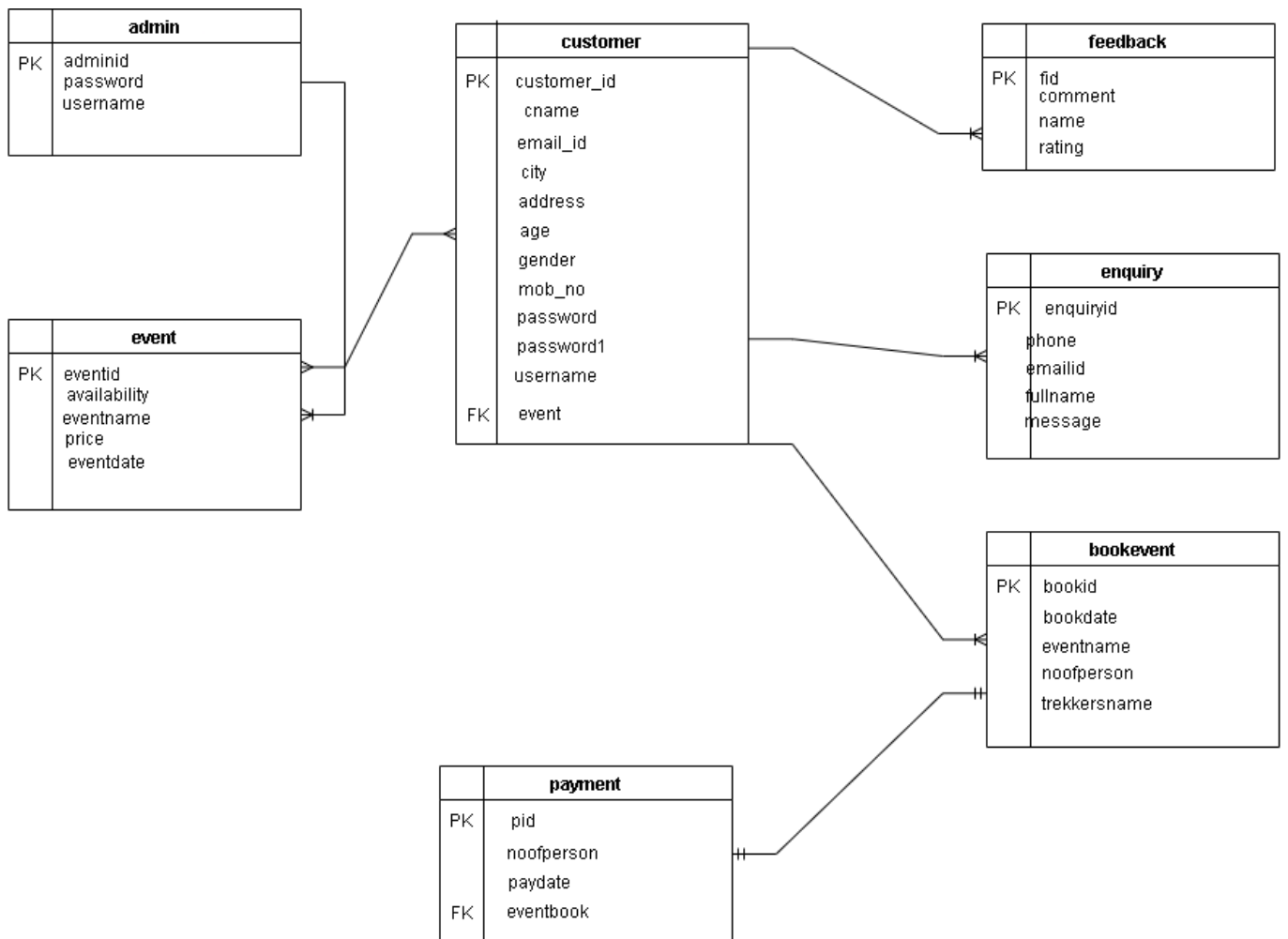


Fig 4: ER Diagram

4.5 Sequence Diagram

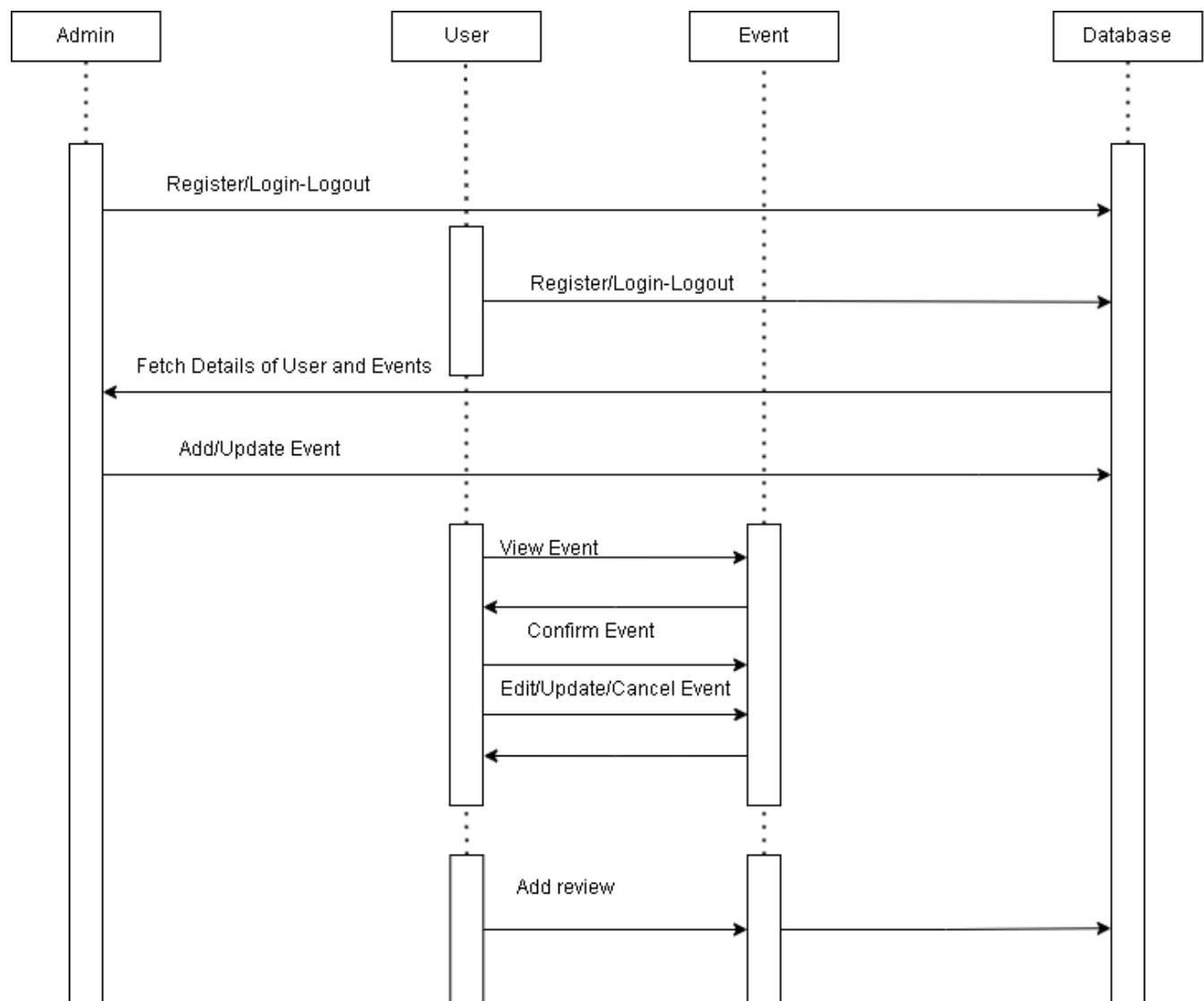


Fig 5: Sequence Diagram

Future Scope

- This Project can be further extended to roles where the different guide can add their own and also add extra information regarding the site.
- Travelling for foreigners, Trekkers, and their dream life events can be managed by Our Project Hikerstop.

Conclusion

Trekking event management system puts forth the actual working of trekking in the traditional way. Guides at online mode for customers and management is a main key feature of the project. Customers and can online products and admin can manage orders at ease through this project using this website anywhere and anytime for their own comfort.

References

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