Event Management System

Abstract

The project is about Event Management. With the help of this project, each person can easily book various events like marriage, birthdays, anniversaries & so on. This system keeps the records of an event & effectively manages all the information related to the various events that take place in an organization. One can easily book an event manually within their budget, look over the available dates, can deposit for the booked event. This system allows paying for the bills without going to a bank. Hence, it helps to choose the preferable event effortlessly. The primary purpose of this system is to provide a wide variety of services with zero workforces & less time-consuming. There is detailed information about the owners with contact information. The design provides a secure, error-free, reliable & fast management system & ensure user have better utilization of given resources. In short, it is a convenient & flexible system for managing an event with detailed information.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION

1.1 Objectives 1-2

1.2 Scope 2

1.3 Problems of Existing System 3

CHAPTER 2: BACKGROUND

2.1 Proposed System 3

2.2 Benefits of My System 4

2.3 Drawback of My System 4

CHAPTER 3: METHODOLOGY

3.1 Introduction of Methodology 5

3.2 Software Development Life Cycle 5-6

3.3 SDLC Stages 7-8

3.4 Feasibility study 8-9

3.5 Use Case Diagram 10-11

CHAPTER 4: SOFTWARE DESIGN & IMPLEMENTATION

4.1 Data Flow Diagram (DFD) 12-13

4.2 Entity Relationship Diagram 14

4.3 Technologies used… ……15

4.4 Tools Used ……15

4.5 Interface Design……16-20

CHAPTER 5: CONCLUSION

5.1 Future Plan of Project…… 21

5.2 Conclusion..... 21

REFERENCES…… 22

CHAPTER 1

INTRODUCTION

Event Management System automates the booking function for an event. The objective of this system is to manage all the data of the event activities & provide services according to them. This system is user friendly & the whole procedure is understandable for everyone. In the Users profile, login with details & book an event according to their budget. This profile contains their name, booking id, event date, address & contact details. It tracks all users' information so it is required to sign-up to book an event. It also needs a 30% advance payment & also user can pay in this system by providing bank details. The purpose is to manage various functions and processes necessary to operate the data efficiently. Users can easily search the guest & user details from the menu. One can contact the admin through "About Us". It carries out an operation in a smooth & effortless manner so that users can get services without any difficulty.

1.1 Objectives

- Event Management system provides admin all users information like names, addresses, and contact details.
- Provides the search facilities based on several factors of the user.
- This software helps to book an event online, which is user-friendly. It reduces the hardships & increases the efficiency of managing an event activity.
- It deals with the task of the total cost according to the booked event.
- It also manages the payment details & transactions online with account details.

- It provides a quality service with the event surveys. Admins job lessens because it records all the status of the user & events.
- A summarized user list can be viewed by monitoring the event booking details.

- It also provides admin details & shows the information and description of the event organizers.

1.2 Scope

The project includes effectively managing all the processed data with enhanced performance & carries out the perfect vision of e-business. There are different modules for admin & users. The user books events according to their needs, while the admin has all accessibility on event availability & management. Therefore, admin & user both have different areas. Users can only give information, book event, and check availability & cost. Admin can see the user information. This system maintains a centralized database of all event-related data & supports various functions and processes.

1.3 Problems of Existing System

The existing event management system contains manual paperwork. This process is time-consuming & requires workers for several tasks like writing the data each time, finding errors, and checking availability. There is a possibility of error in the data or problems may occur while maintaining the system. When staff or employee makes a blander, the whole system will suffer. It takes time & man force to search for the user's information manually. It contains less security for saving data and some data may be lost due to mismanagement. The employee costing is also high as per the budget. So, it is more convenient for a user to utilize an online application that provides accuracy & detailed work. They rather not waste their time on pen-paper-based tasks.

CHAPTER 2

BACKGROUND

2.1 Proposed System

Event Management System is an application. It handles booking information, availability, user information & other data. Through this, users can check availability status, book events at any place, deposit an advance & pay online. It provides secure registration and profile management of all the users. There is no inaccuracy or blander in collecting data & providing services. It also has an admin panel for the users to learn about the event organizers. One can contact them if they are in need. The cost of this system can be less than paper-based event booking. This module is preferable to a non-computerized one.

Cost benefit Analysis

System cost can be defined in earlier stages of system development. Though this general system, a cost plan is identified. The cost plan is divided in two phases:

1. Cost of development

2. Cost of using the system.

Cost of Development

System should setup in the online server system, there is website maintenance cost. There should be a maintenance engineer. System update cost is also measure. System development cost is just one time cost, which will not recur after the project has been developed. Development costs, programmers and analyst other peoples salary, service fee that is related in development.

Cost of using the system

The cost of using the system is predefined and in sometimes it's depends on user. Software purchase cost & licensees cost are fixed in a system.

2.2 Benefits of my system

Advantages of my Event Management system are:

1. Manage Events
2. Book Events
3. Available & Booked Event Info
4. Search User
5. Costing of Event
6. About Admin Panel
7. Event Summary Report

2.3 Drawback of my system

1. Security wise is not guarantee to all information and data's.

2. If customer wants search their details it very difficult. Not easy to handle details & storage problem may occur.

3. Update, Search, Delete, Edit ,these types of method are not accessible without a backup data collection on system failure.

CHAPTER 3

METHODOLOGY

3.1 Introduction of Methodology

In software engineering, a methodology is a process used to structure, plan and control the development process of a system. The methodology enables a project to provide better estimates, keep the user informed, create a clear concept of the task ahead, deliver stable systems, identify errors earlier, & make adjustments. A software development methodology refers to a structured approach to a software development project. Effective methodologies often combine well-defined steps with process, its purpose is to produce better quality maintainable software within a reasonable time frame and affordable cost. It is achievable only if we have the structure/process to build & improve the quality of the software.

3.2 Software Development Life Cycle

Software Development Life Cycle is a way to measure and improve the development process. It is a framework defining involved steps in the software development at each phase.

SDLC lowers the cost of software development while simultaneously improving quality and shortening production time.

SDLC stages ensure the work process is smooth, efficient, and productive way. It creates the software through the stages of analysis, planning, design, development, testing, and deployment & defines the requirement of the new system.

SDLC gives us an overview and guidelines for developing quality software. It reduces waste and increases the efficiency of the development process.

It covers the detailed plan for building, deploying and maintaining the software.

To make the Event Management System reliable for the user, we rely on SDLC.

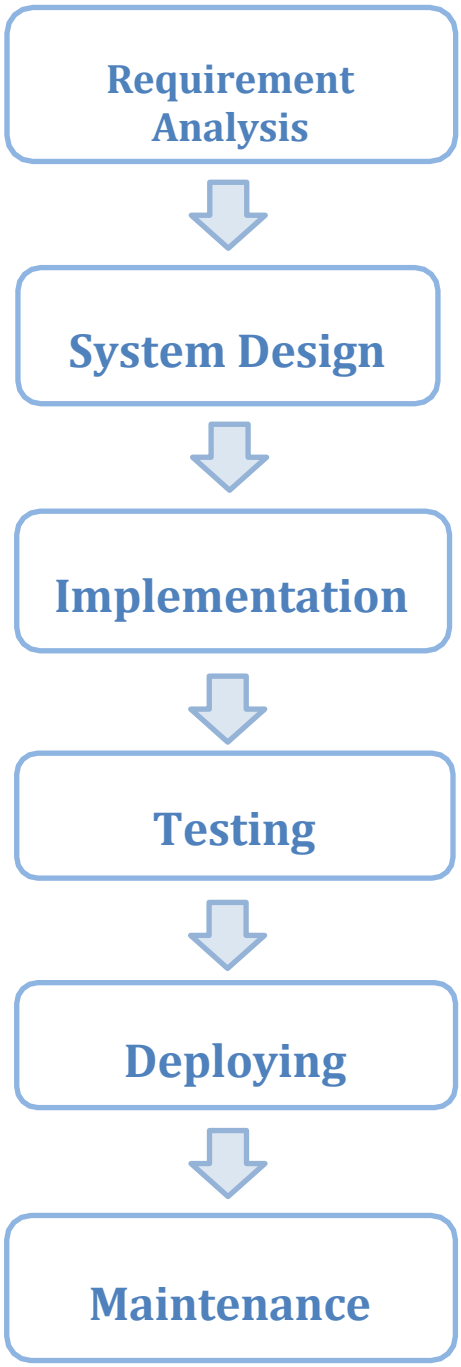


Fig 3.2: Software Development Life Cycle

3.3 SDLC Stages

Requirement Analysis

In Requirement Analysis, developers plan for the upcoming project. It determines the objective for the system & helps to define the problem and scope of any existing systems. Requirements analysis includes determining the needs & conditions to meet for an altered project, analyzing, documenting, taking account of the several conflicting requirements of the stakeholders and managing & validating the system requirements. It helps to secure the funding and resources they need to make their plan happen. The Requirement Engineering contains three main frameworks, Requirement Analysis, Requirement Specification & Validation. In requirement specification, we need to focus on ERD or Entity Relationship Diagram.

System Design

The requirement gathered in the SRS document is used as input in this stage & software architecture used for implementing system development is derived.

Implementation

Implementation starts once the developer gets the Design document. The Software design turns into source code. In this phase, all the software components are implemented.

Testing

Testing starts once the coding is complete and the modules are released for testing. In this phase, the developed software is tested thoroughly & any blunders found are assigned to developers to get fixed. Until the software is created according to the customer's expectation, retesting and regression testing are done.

Deployment

Once the product is tested, deployment of the production environment or the first user acceptance testing is done depending on the customer's expectation. A replica of the production environment is created & the customer with the developers does the testing. If the customer finds the application as expected, then a sign-off is provided by the customer to go live.

Maintenance

In this stage, errors get fixed. If an issue occurs & needed to be fixed or any enhancement needed to be made, it is done in the maintenance stage.

3.4 Feasibility study

A feasibility study defines a study to evaluate the feasibility of a proposed system. A feasibility study contains a proposal designed to determine the complexity of carrying out a designated task. After SDLC, comes the feasibility study. It is the stage where software needs and requirements are written down and thoroughly documented. The study begins by classifying the problem definition. Feasibility is to determine if it's worth doing. A feasibility study is an analysis of the potential impact of a proposed project.

Operational Feasibility

Operational feasibility measures the efficacy of a proposed system & benefits the opportunities detected during scope definition & the requirements found in the requirements analysis phase. The operational feasibility assessment focuses on how well the proposed projects fit in with the business environment and objectives concerning the development, corporate culture, delivery date & other processes.

Technical Feasibility

Technical feasibility refers to the ability of the process to take advantages of the current state of the technology in pursuing future improvement. The technical capability of the personal as well as the capability of the available technology should be considered. Technology transfers between geographical areas and cultural needs to be analyzed to understand productivity of loss or gain.

Economical Feasibility

Economical feasibility decides whether this project is economically feasible to consider various factors such as cost-benefit analysis, long-term relations and maintenance costs. It determines the cost-effectiveness of the proposed system. The benefits of the project in the current scenario make it economically feasible. The purpose of the economic feasibility is to determine the positive economic benefits from the proposed system to the organization.

Financial feasibility

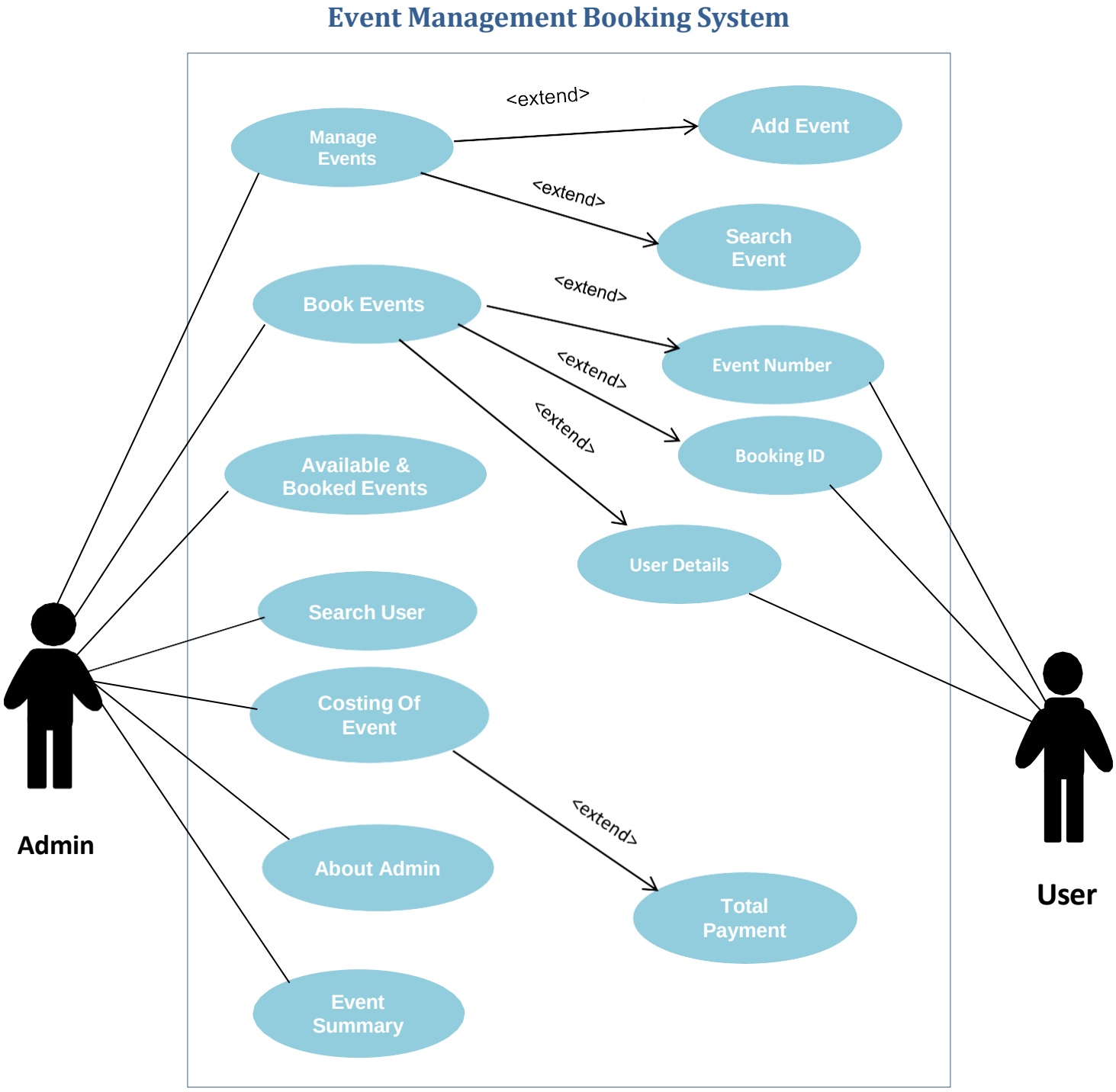
Financial feasibility should be distinguished from economic feasibility. Financial feasibility involves the capability of the project organization to raise the appropriate funds needed to implement the proposed project. Project financing can be a major obstacle in large multiparty projects because of the level of the level of capital required. Loan availability, credit worthiness, equity, and loan schedule are important aspects of financial feasibility analysis.

Cultural feasibility

Cultural feasibility deals with the capability of the proposed project with the cultural setup of the project environment. In labor-intensive projects, planned functions must be integrated with the local cultural practices and beliefs. For example, religious beliefs my influence what an individual is willing to do or not do.

3.5 Use Case Diagram

A use case diagram summarizes all of the use cases together in one picture. The use Case Diagram of Event Management System is shown here:



Explanation of Using Use Case Diagram in Event Management System

- **Actor**

Here we have used actor named as Admin & User. A user of a system in a particular role, it can be human or an external object can be an actor.

- **System Boundary**

System Boundary separates the event management system from the external actors. It is rectangular shaped.

- **Connector Description**

Connector Description shows the relationship of an actor to a use case. In this diagram, it is showing that Manage Events & Admin are connected.

- **Use Case shapes**

The UML places inside the subsystem boundary. It brings Actor shapes to the outside of the subsystem boundary.

- **Include**

Include can be used everywhere in the system, it is basically the reuse of functionality. Include depicts a dependency on another use case.

- **Generalization**

Generalization shows one class (subclass) inherits from another class (superclass). It indicates that one use case is simply a special kind of another.

- **Extend**

An extend relationship indicates that one use case is a variation of another. Extend is labeled as '<<extend>>' with an arrow toward the base case.

CHAPTER 4

SOFTWARE DESIGN & IMPLEMENTATION

4.1 Data Flow Diagram (DFD)

A Data Flow Diagram (DFD) is a traditional visual graphical representation of the information flows within a system. It shows how data entered & leaves the system & where it is stored. DFD depicts the graphical representation of the proper amount of system requirement. The objective of DFD is to represent the scopes & boundaries of the whole system.

DFD has set of components to represent destination, source, storage and flow of data, these are:

• **Entities** - Entities are source and destination of information data. Entities are represented by rectangles with their respective names.

• **Process** - Activities and action taken on the data are represented by Circle or Round-edged rectangles.

• **Data Storage** - There are two variants of data storage - it can either be represented as a rectangle with absence of both smaller sides or as an open-sided rectangle with only one side missing.

• **Data Flow** - Movement of data is shown by pointed arrows. Data movement is shown from the base of arrow as its source towards head of the arrow as destination.

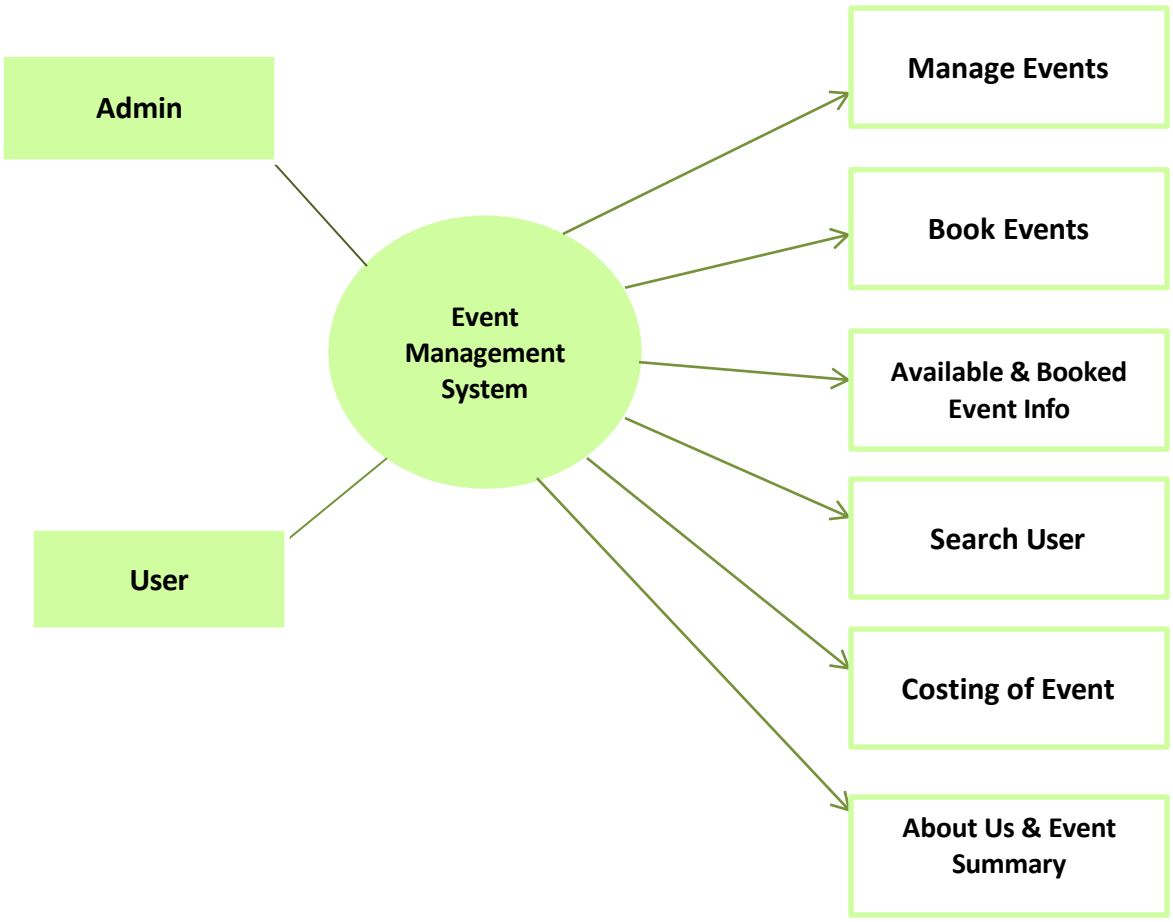


Fig 4.1.1: Data Flow Diagram of Event Management System

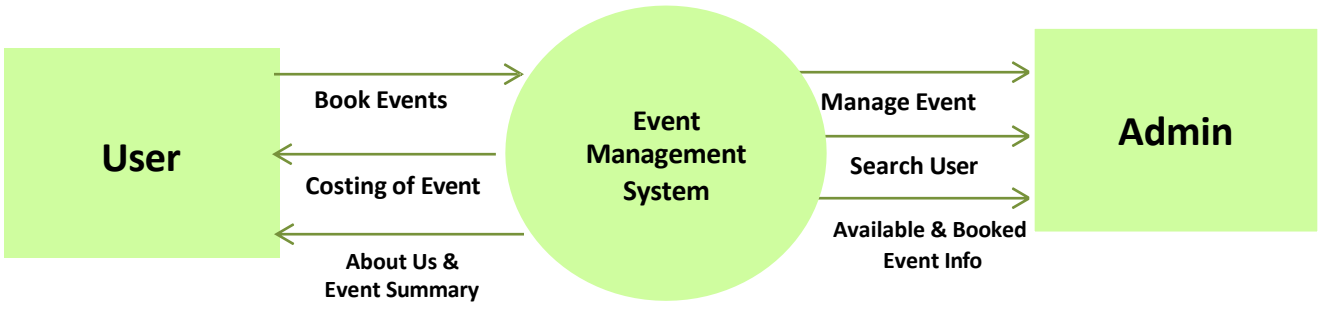


Fig 4.1.2: Level 0 DFD of Event Management System

4.2 Entity Relationship Diagram

Entity Relationship Diagram (ERD) is a modeling method of data to produce a conceptual data model of an information system in software Engineering.

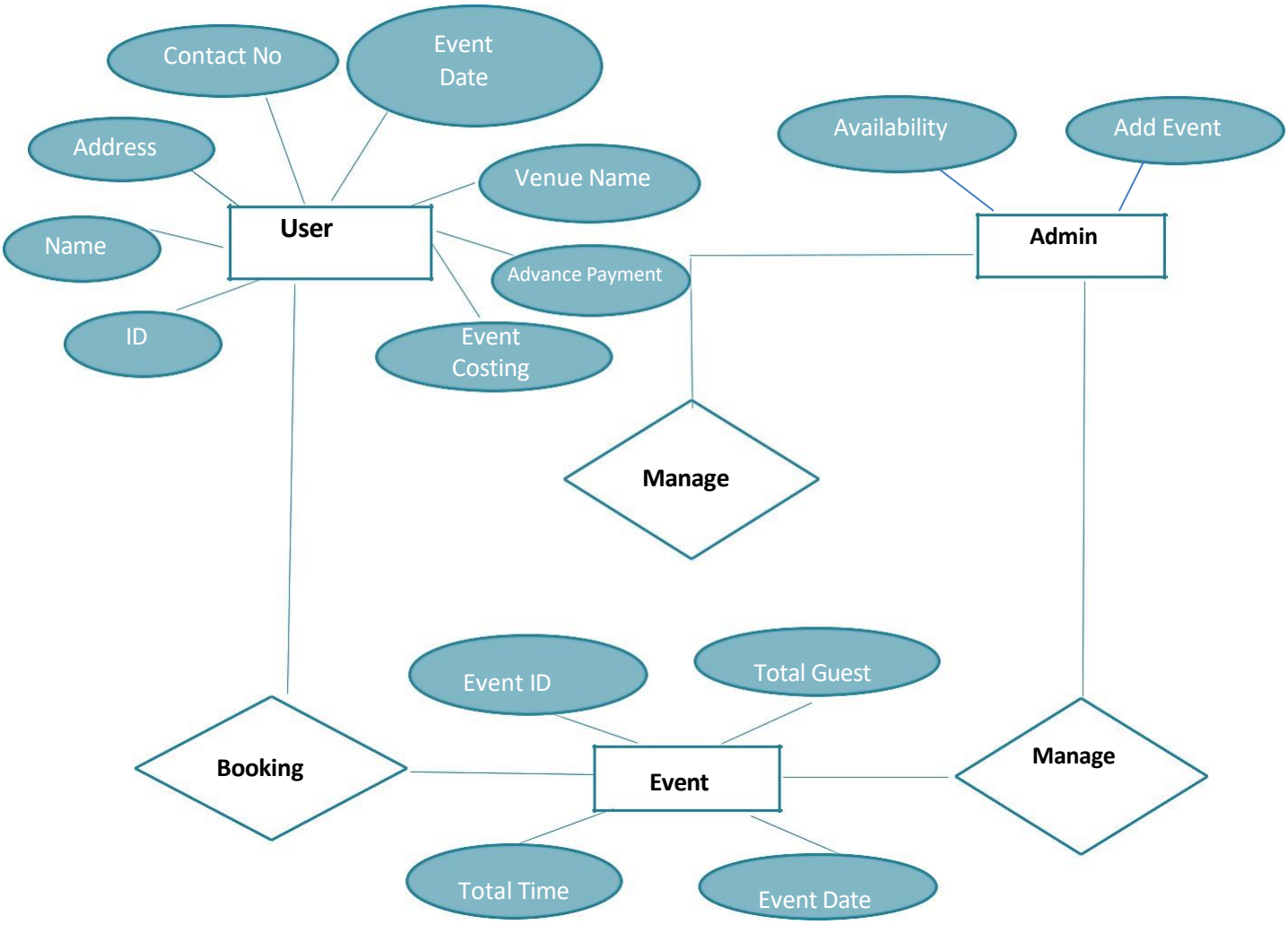


Fig 4.2: ER Diagram of Event Management System

4.3 Technologies used

My project is only done with C++.

The programming language, C++ has popular uses in: game programming, software engineering, data structures, developing browsers, operating systems, web development, compiler writing, graphics designing, and desktop applications and so on.

4.4 Tools Used

Hardware Tools

- CPU
- Monitor
- Keyboard
- Mouse

Software Tools

Any Windows Operating System, such as

- Visual Studio
- Code Blocks
- Notepad++

Files & Tools

- Microsoft Word
- Microsoft Office
- Notepad

4.5 Interface Design

Interface design defines the set of interface objects and actions. In our event management system the following steps are done:

```
=== EVENT MANAGEMENT SYSTEM ===
1) Manage Events
2) Book Event
3) List Available Events
4) Search User
5) Checkout Event
6) Exit
Choose: 1

1) Add Event
2) Search Event
3) Back to Main Menu
Choose: 1
Enter Event Number: 1

    Total Guests: 100

    Total Time (in minutes): 60

    Venue Name: Queensland, Bathinda

    Event Added Successfully!

1) Add Event
2) Search Event
3) Back to Main Menu
Choose: 2
Enter Event number: 1

--------Event Details--------
Available
   Event Number: 1
   Total Guests: 100
   Total Time: 60
   Venue: Queensland, Bathinda

1) Add Event
2) Search Event
3) Back to Main Menu
```

```
   Total Guests: 100
   Total Time: 60
   Venue: Queensland, Bathinda

1) Add Event
2) Search Event
3) Back to Main Menu
Choose: 3

=== EVENT MANAGEMENT SYSTEM ===
1) Manage Events
2) Book Event
3) List Available Events
4) Search User
5) Checkout Event
6) Exit
Choose: 2
Enter Event Number to book: 1
Enter Booking ID: 0
Enter Name: Nikhil
Enter Address: Mehna chowk
Enter Phone: 9569752337
Enter Date: 24-06-2025
Enter Advance Payment: 2499
Booking successful.

=== EVENT MANAGEMENT SYSTEM ===
1) Manage Events
2) Book Event
3) List Available Events
4) Search User
5) Checkout Event
6) Exit
Choose: 3
No available events.

=== EVENT MANAGEMENT SYSTEM ===
1) Manage Events
2) Book Event
3) List Available Events
4) Search User
```

```
=== EVENT MANAGEMENT SYSTEM ===
1) Manage Events
2) Book Event
3) List Available Events
4) Search User
5) Checkout Event
6) Exit
Choose: 4
Enter user name: Nikhil

User: Nikhil | Event#: 1

=== EVENT MANAGEMENT SYSTEM ===
1) Manage Events
2) Book Event
3) List Available Events
4) Search User
5) Checkout Event
6) Exit
Choose: 5
Enter Event Number to checkout: 1
Checkout completed.

=== EVENT MANAGEMENT SYSTEM ===
1) Manage Events
2) Book Event
3) List Available Events
4) Search User
5) Checkout Event
6) Exit
Choose: 6
Thank you!
```

CHAPTER 5

CONCLUSION

5.1 Scope of Future Application

Event management system still has a lot of future scope to make, some of them are:

- More advance features for the system according to user demand can be done. Online event booking is more advanced, has accuracy & is also cheap.

- At present, this system is fast & convenient. It does not have Credit card facility till now. But build-in banking system is provided in this system for online payment. Thus, it saves time & cost in a way. If the demand increases, these modules can be added in future.

- In case of system failure, there is no option for backup system. We have to implement the backup mechanism. Utmost care and back-up procedures must be established to ensure 100% successful implementation of the computerized booking system.

5.2 Conclusion

Finding a perfect event after having reached a particular destination is quite time consuming as well as expensive. Here comes the importance of online event booking facility. By this system people will easily do event booking in a computerized way. Online event booking is one of the latest techniques in the arena of internet that allows person to book an event located anywhere and that too according to your tastes and preferences. In other words, online event booking is one of the latest facilities of the internet. Booking an event online is user friendly, fast & convenient but also very cheap.

References

1. https://phoenixnap.com/blog/software-development-life-cycle#:~:text=Software%20Development%20Life%20Cycle%20is,%2C%20Test%2C%20Deploy%2C%20Maintain.

2. https://www.lucidchart.com/pages/templates/data-flow-diagram-level-0

3. https://www.geeksforgeeks.org/what-is-dfddata-flow-diagram/

4. https://www.javatpoint.com/software-engineering-data-flow-diagrams

5. https://www.tutorialspoint.com/software_engineering/software_user_interface_design.htm