

National Institute of Business Management

Higher National Diploma in Information Systems 24.1F

Final Project Documentation Events Tunes Events Management Website

SUBMITTED BY:

COHNDIS241F-023 WIJERATHNA A P G D C

COHNDIS241F-025 WICKRAMASINGHE S M D D

COHNDIS241F-026 HAMIDON T R

COHNDIS241F-027 BANDARA B S R

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| Project title | : Events Tunes Events Management Website |
|---------------------|---|
| Authors | : COHNDIS241F-023 WIJERATHNA A P G D C COHNDIS221F-025 WICKRAMASINGHE S M D D COHNDIS221F-026 HAMIDON T R COHNDIS221F-027 BANDARA B S R |
| Name of the Program | : HNDIS24.1F/CO |
| Supervisor | : Mr. Keerthi Kodithuwakku |
| Institution | : School of Computing and Engineering National Institute of Business Management |
| Signature | : |
| Date | : 17/05/2025 |
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This project is submitted in partial fulfilment of the requirement of the Higher National Diploma in Information Systems of the National institute of business management.

Declaration

I certify that this project does not use any materials previously submitted for a higher national diploma at any institution without acknowledgment, and to the best of our knowledge and belief, it does not contain any materials previously published or written by us or by another person, other than where an appropriate citation is made in the text. Additionally, we agree that, if our project report is approved, the title and summary may be shared with outside organizations as well as made available for photocopying and interlibrary loans.

| WIJERATHNA A P G D C | |
|------------------------|--|
| WICKRAMASINGHE S M D D | |
| HAMIDON T R | |
| BANDARA B S R | |

Preamble

Abstract

The Events Tunes Website is an entertainment platform that uses technology to help bridging the gap between organizers and Artist. They can connect, plan, execute events without any conflicts. Most of the event organizers as well as individuals who organize their personal events are facing many problems because our country still does not have a proper Events management System.

Events Tunes provides a user-friendly online platform for seamless artist bookings. Event organizers can quickly find and compare artists, bands and dance groups, check their real time availability and access transparent pricing. The platform streamlines communication, helping to avoid misunderstandings. Secure online payments further simplify the booking process, saving time and effort for organizers.

The website is developed using XAMMP which is a local webserver for web applications and CSS, HTML and JS. We have used Figma to demonstrate our interfaces.

List of Keywords

- Organizer
- Artists
- Dance groups
- Bands
- Payment

List of Acronyms and Abbreviations

- NIBM National Institute of Business Management
- HNDIS Higher National Diploma in Computer System Design
- PK Primary Key
- FK Foreign Key
- UML Unified Modeling Language

Acknowledgement

Initially, we would like to extend our heartiest thankfulness to School of Computing and Engineering of NIBM and Specially the course director of Higher National Diploma in Information Systems, Mrs. Chandula Rajapaksa for giving this challenging opportunity, where we were encouraged to apply what we have learned into practice through a project and to accomplish the end goal successfully.

We like to convey our sincere thanks to all those who guided us in numerous ways in making this system study a success. The group members who gave their endless support until the end are also remarkably thanked.

Our special thankfulness is rendered to our supervisor, who is also the visiting lecturer of National Institute of Business Management, Chief Executive Officer at Effective Solutions (PVT) Ltd Mr. Keerthi Kodithuwakku for guiding and directing us throughout the study to make this project a success where he encouraged us a lot by giving advice for us to improve the project in a more professional and standard way. Last but not the least, we extend our thanks and gratitude for our parents, friends and everybody who involved with us directly and indirectly to help us in completing the project work.

Thank you.

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Chapter 01

1. Introduction

1.1. Introduction of the Events Tunes Website

The Events Tune management website is an online solution designed to manage and streamline of the booking process of organizers, artists, bands, and dance groups. It aims to optimize booking system, check their real time availability, payment integration and schedules to improve efficiency, cost savings, and overall Event management.

The main features of the application include artists profiles detailed information on artists, including past performances and pricing. The availability calendar updates real time on artist availability for easy scheduling, Instant booking and scheduling management for streamlined processes, secure online payment system with multiple options for convenience, feedback system and messaging system.

EventsTune.lk aims to optimize the entire Sri Lankan entertainment industry by providing secure, trustworthy, user friendly and efficiency in booking artists, bands and dance groups.

1.2. Problem Definition

The Sri Lankan tradition combine with dance and music. Most of them like to have entertainment. Recent years there is lot of conflicts between event organizers and artists. Some of them charging lot of money, not attending to events, not performing well and not satisfying the customers. There are difficulties to contact artists. Over the past years people used to contact artists with a manual process.

• Lack of facilities to find entertainment services

Due to some problems in entertainment industry in Sri Lanka there is no proper entertainment services to find available artist and booking system for events.

• Inefficient manual booking

Reliance on phone calls and personal connections leads to inefficiency.

• Lack of price transparency

There is no clear pricing information of the artists. It makes hard for event organizers to budget properly.

Miscommunication and errors

Manual process often leads to misunderstandings or mistakes.

1.3. Project Objectives

The lack of proper entertainment system in the country may lead to inefficiencies, delays and secure payment concerns for both artist and event organizers. Developing the Events Tunes website aims to address these challenges by using technology to optimize and streamline the event booking process.

The development of this EventsTunes.lk aims to revolutionize and modernize the events management process, improving user friendly and secure experience for event organizers and artists.

What are the benefits?

EventsTunes.lk offers a comprehensive solution to the challenges faced in events management. It brings efficiency, cost savings, and improved user experiences, making is a valuable website for consumers.

1.4. Proposed Solution

Functional requirements

1. User Authentication & Authorization

User should be able to secure registration, login, and account management. Role-based access control to manage permissions.

2. Artist Profile Management

Artists should be able to manage profiles by create, update, and delete details like past performances, pricing and password.

3. Real-Time Availability Calendar

Real time calendar help artists to update their availability and organizers can view artists real time availability.

4. Instant Booking & Scheduling

Instant booking helps Organizers book artists instantly according to their availability and schedule event. The system will send automated confirmations and reminders to both users.

5. Secure Payment Integration

Users will get multiple payment options like credit and debit. secure transaction processing with encryption. Both parties will get invoicing and receipts.

6. Feedback & Rating System

The website should support feedback features on artist profiles, rate and review post.

7. Messaging System

Organizers and artists can message private for event details. Messaging system will indicate notification alerts for new messages.

8. Reporting & Analytics

The system will generate reports on bookings, revenue, and feedback. Provide data analytics to help administrators make data-driven decisions and improve overall event management.

Non-functional requirements

1. Performance

The system should able to control high traffic during peak times and response times for user action should be under 2 seconds.

2. Security

The system must handle and secured sensitive information like payment details. System compliance with data protection regulations.

3. Reliability

The system should ensure continuous availability. The system should provide robust error handling and recovery mechanisms.

4. Usability

The system should provide user friendly interfaces for all user roles to do their tasks easily in a easy manner.

1.5. Chapter Summary

This chapter discusses about the introduction of the system, current users and the problems identified in the existing systems and the objectives of the proposed software and the solutions for the identified problems are also discussed.

Chapter 02

2. Methodology

2.1. Introduction

This section describes the overall plan which will be used throughout the process of making the software system into a reality.

2.2. Data Collection Method(s)

Primary data collection (Interview/focus group)

- To gain an in-depth understanding of perceptions or opinions.
- Verbally ask participants open-ended questions in individual interviews.
- focus group discussions for understand user types and their expectations.

Secondary data collection

- Markert research reports to analyze data.
- Competitor analysis on existing event platforms like BookMyShow to see what features works well or missing.
- Insights from organizers and performers posted online that highlight common industry challenges.

2.3. Software Process Model

There are several software process models for creating software. For the EventsTunes.lk we have adopted the Agile methodology. This iterative approach allows for continuous improvement and flexibility throughout the development process.

- Iterative Development: Breakdown the project into manageable iterations allow us to deliver functional component of the platform.
- User-Centric Design: To ensure the platform meets user needs continuously integrated with feedback from organizers, artists, bands, and dance groups.
- Continuous Testing: End of each iteration conduct testing helps to identify and address issues promptly.
- Adaptability: we can adjust the development process based on stakeholder requirements and feedbacks.

2.4. Software Development Tools

The Events Tunes Website in order to get success we have researched about the best software development tools and following tools are utilized to facilitate the development. These tools ensuring a streamlined and efficient process.

• Frontend Development : HTML / CSS / JavaScript / PHP

Backend Database : SQL
 Flow chart/ ER Diagram : draw.io
 UI/UX Design : Figma

2.5. Testing Strategies

We have used Agile Testing strategy because we have to ensure quality is maintained throughout the development process. Testing is embedded within each iteration.

Continuous Testing

Automated tests running continuously at various stages of development. This helps to identify defects early and often.

• Test Automation

The manual testing will time consuming but this approach increases test coverage of repetitive and time-consuming tests and allows for quick regression testing.

• Continuous integration and Continuous Deployment (CI/CD)

Integration testing into CI/CD pipe line ensures that every code before being deployed to production undergoes automated testing.

2.6. Implementation Plan

The implementation of the EventsTunes.lk will be direct implementation because it will be low costly and can be implemented with less time.

2.7. Chapter Summary

This chapter discusses the data collection methods used to create the software system, the process model chosen to carry out the software development, tools which will be used, the testing strategies which will be used as well as the implementation plan of the proposed software.

Chapter 03

3. Analysis

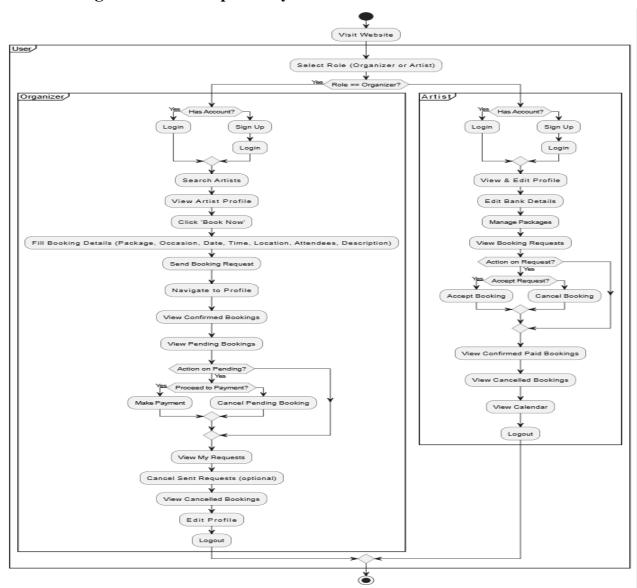
3.1. Introduction

The Events Tunes Analysis Model is a technical representation of the website. It works as a link between the website description and design model. In Analysis Modelling, behavior, information, and functions of the system are defined and translated into the component, architecture, and interface level of design in the design modeling.

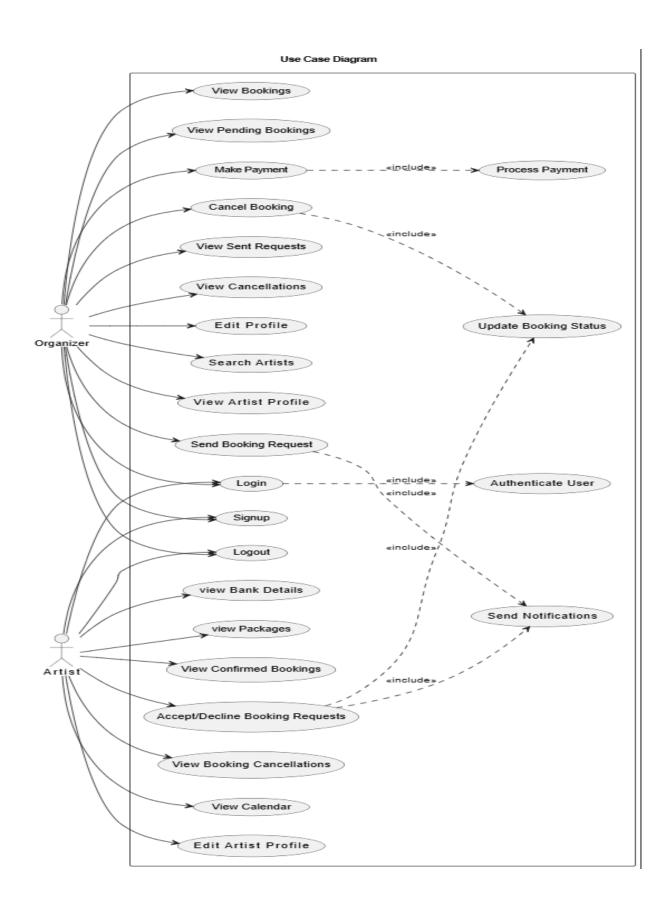
The chapter is focusing on project analysis of each process and the way of analyzing the problems. The sub headings illustrate each function and diagrams that is related to this system.

3.2. UML Diagrams

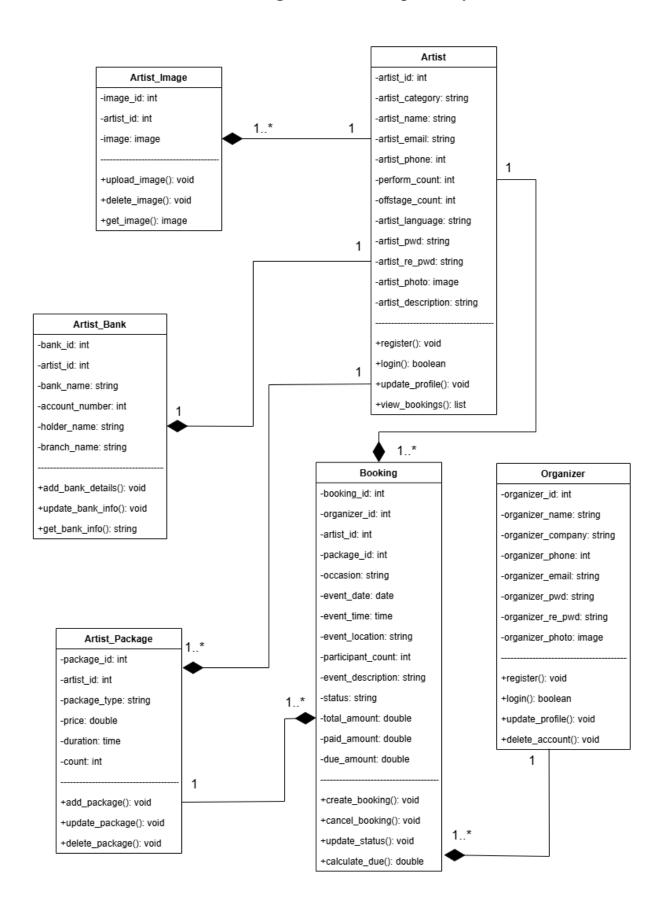
Process Diagram of the Proposed System



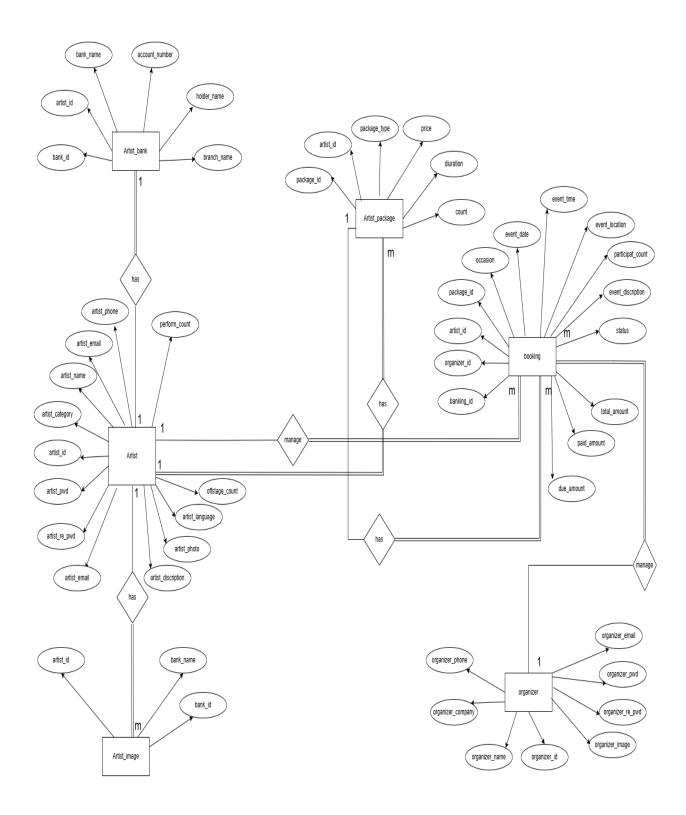
Use Case Diagram of the Proposed System



Class Case Diagram of the Proposed System

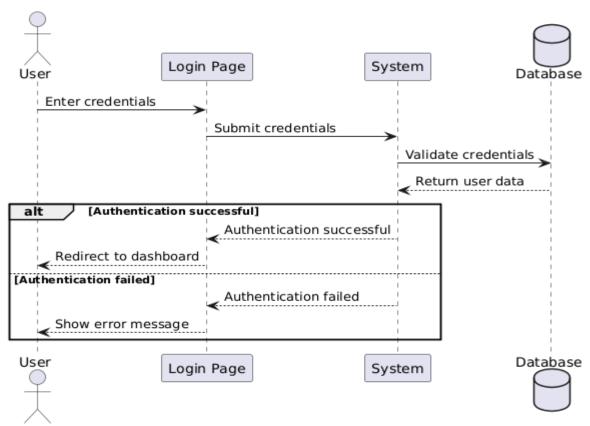


ER Diagram of the Proposed System

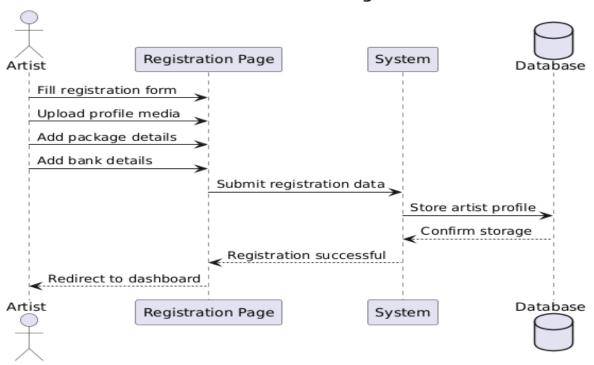


Sequence Diagram of the Proposed System

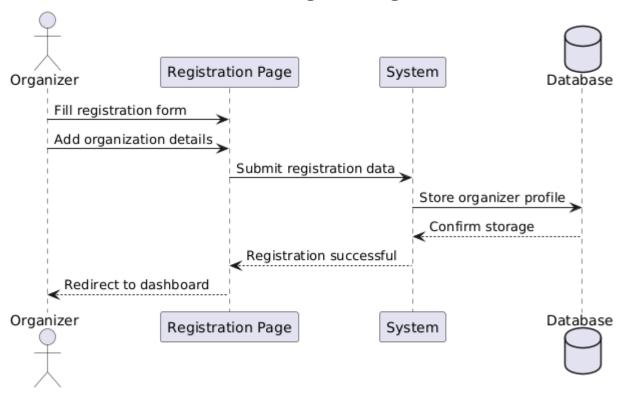
EventTunes.lk - User Authentication



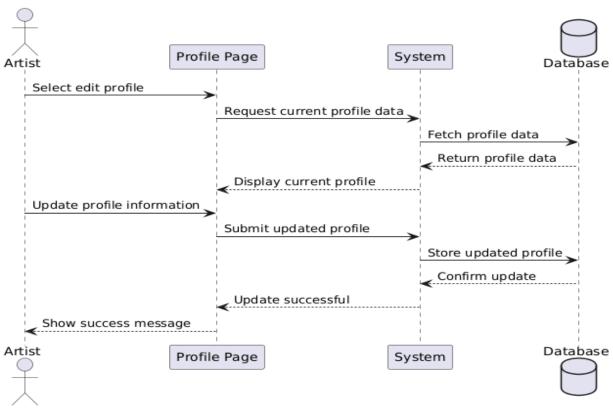
EventTunes.lk - Artist Registration



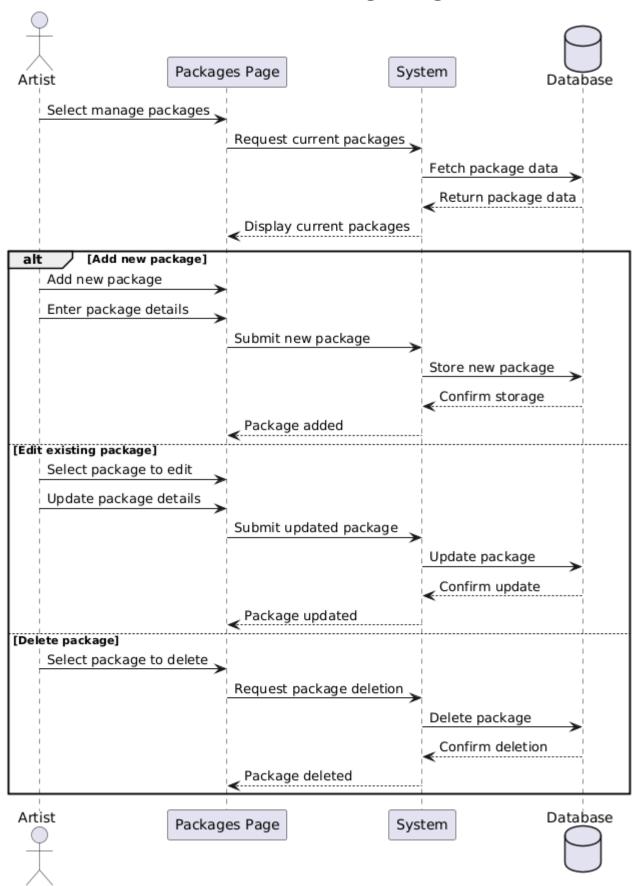
EventTunes.lk - Organizer Registration



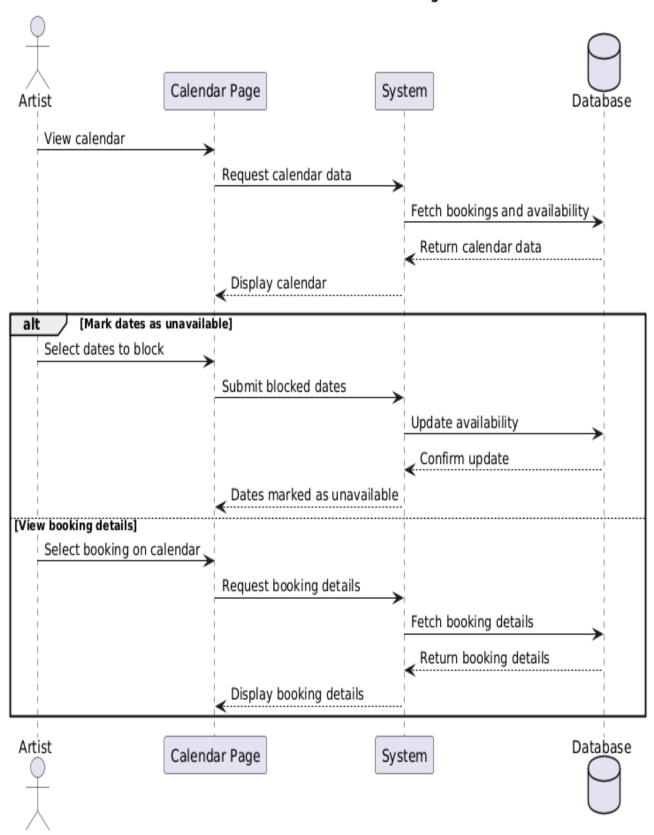
EventTunes.lk - Artist Profile Management



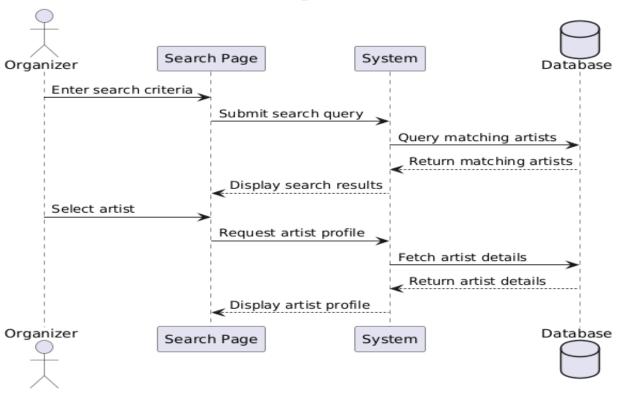
EventTunes.lk - Artist Package Management



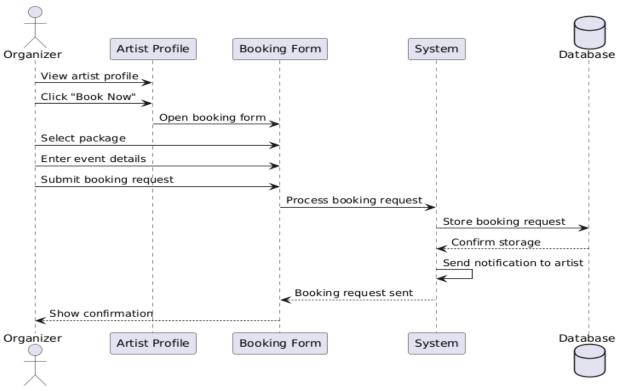
EventTunes.lk - Artist Calendar Management



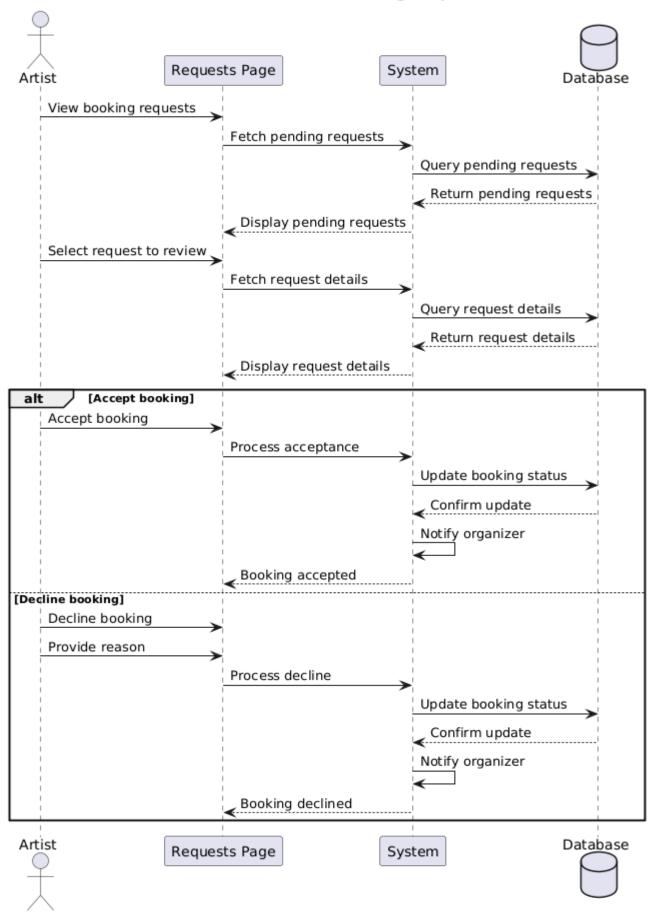
EventTunes.lk - Organizer Artist Search



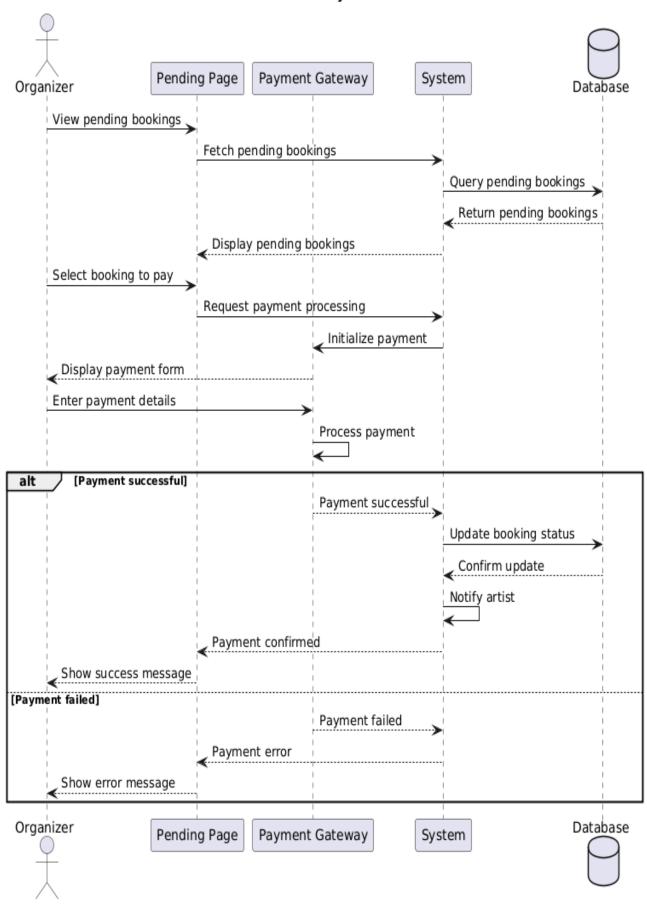
EventTunes.Ik - Booking Request Process



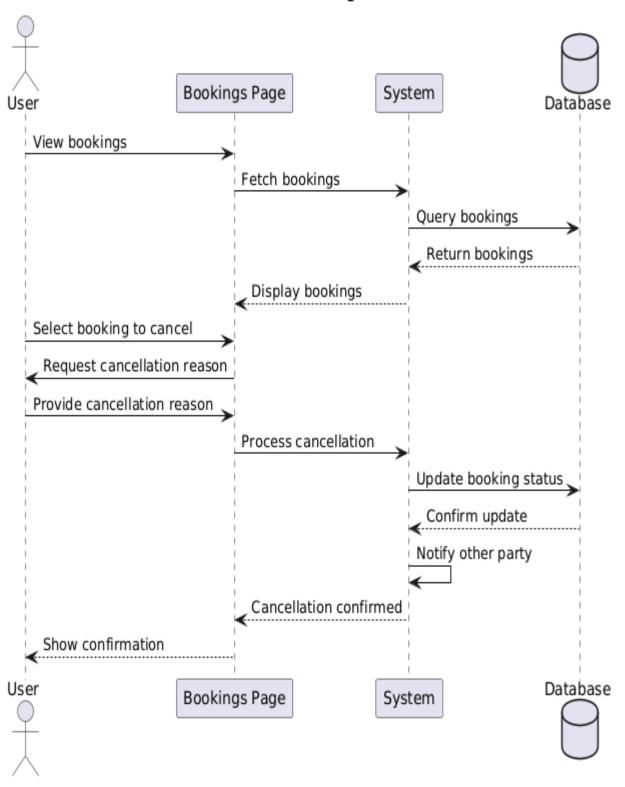
EventTunes.lk - Artist Booking Response



EventTunes.lk - Payment Process



EventTunes.lk - Booking Cancellation



3.3. Database Design

Oracle Database Schema Design Document

Table: Organizer

Primary Key: organizer_id

| Attribute Name | Data Type | Size | Description |
|-------------------|------------|------|----------------------|
| organizer_id | INT | 11 | Unique identifier |
| | | | for the organizer |
| organizer_name | VARCHAR | 50 | Name of the |
| | | | organizer |
| organizer_company | VARCHAR | 50 | Company name |
| | | | associated with the |
| | | | organizer |
| organizer_phone | INT | 10 | Contact phone |
| | | | number of the |
| | | | organizer |
| organizer_email | VARCHAR | 50 | Email address of the |
| | | | organizer |
| organizer_pwd | VARCHAR | 225 | Encrypted password |
| | | | for organizer |
| | | | account |
| organizer_re_pwd | VARCHAR | 225 | Repeated password |
| | | | for verification |
| organizer_photo | MEDIUMBLOB | - | Profile photo of the |
| | | | organizer |

Table: Artist_Bank

Primary Key: bank_id

Foreign Keys: artist_id references artist(artist_id)

| Attribute Name | Data Type | Size | Description |
|----------------|-----------|------|-------------------|
| bank_id | INT | 11 | Unique identifier |
| | | | for bank details |
| artist_id | INT | 11 | Reference to the |
| | | | artist |
| bank_name | VARCHAR | 50 | Name of the bank |
| account_number | INT | 20 | Bank account |
| | | | number |
| holder_name | VARCHAR | 30 | Name of the |
| | | | account holder |
| branch_name | VARCHAR | 30 | Name of the bank |
| | | | branch |

Table: Artist

Primary Key: artist_id

| Attribute Name | Data Type | Size | Description |
|--------------------|------------|------|-----------------------------|
| artist_id | INT | 11 | Unique identifier |
| | | | for the artist |
| artist_category | VARCHAR | 20 | Category/type of the |
| | | | artist |
| artist_name | VARCHAR | 50 | Name of the artist |
| artist_email | VARCHAR | 50 | Email address of the artist |
| artist_phone | INT | 10 | Contact phone |
| | | | number of the artist |
| perform_count | INT | 20 | Number of |
| | | | performances |
| | | | completed |
| offstage_count | INT | 20 | Number of offstage |
| | | | appearances |
| artist_language | VARCHAR | 20 | Primary language of |
| | | | the artist |
| artist_pwd | VARCHAR | 225 | Encrypted password |
| | | | for artist account |
| artist_re_pwd | VARCHAR | 225 | Repeated password |
| | | | for verification |
| artist_photo | MEDIUMBLOB | - | Profile photo of the |
| | | | artist |
| artist_description | VARCHAR | 225 | Description about |
| | | | the artist |

Table: Artist_Image

Primary Key: image_id

Foreign Keys: artist_id references artist(artist_id)

| Attribute Name | Data Type | Size | Description |
|----------------|------------|------|---|
| image_id | INT | 11 | Unique identifier |
| _ | | | for the image |
| artist_id | INT | 11 | Reference to the artist |
| image | MEDIUMBLOB | - | Image file of the artist's work/performance |

Table: Artist_Package

Primary Key: package_id

Foreign Keys: artist_id references artist(artist_id)

| Attribute Name | Data Type | Size | Description |
|----------------|-----------|------|----------------------|
| package_id | INT | 11 | Unique identifier |
| | | | for the package |
| artist_id | INT | 11 | Reference to the |
| | | | artist |
| package_type | VARCHAR | 20 | Type of package |
| | | | offered |
| price | DECIMAL | 10,0 | Price of the package |
| duration | TIME | - | Duration of the |
| | | | performance |
| count | INT | 20 | Number of |
| | | | performances |
| | | | included in package |

Table: Booking

Primary Key: booking_id

Foreign Keys: organizer_id references organizer(organizer_id)

artist_id references artist(artist_id)

package_id references artist_package(package_id)

| Attribute Name | Data Type | Size | Description |
|-------------------|-----------|------|---|
| booking_id | NUMBER | 11 | Unique identifier |
| | | | for the booking |
| organizer_id | INT | 11 | Reference to the organizer making the booking |
| artist_id | INT | 11 | Reference to the artist being booked |
| package_id | INT | 11 | Reference to the package selected |
| occasion | VARCHAR | 50 | Type of occasion/event |
| event_date | DATE | - | Date of the event |
| event_time | TIME | - | Time of the event |
| event_location | VARCHAR | 50 | Location where the event will be held |
| participant_count | INT | 20 | Number of participants expected |
| event_description | VARCHAR | 225 | Description of the event |

| status | VARCHAR | 20 | Current status of the |
|--------------|---------|------|-----------------------|
| | | | booking |
| total_amount | DECIMAL | 10,0 | Total amount for the |
| | | | booking |
| paid_amount | DECIMAL | 10,0 | Amount already |
| | | | paid |
| due_amount | DECIMAL | 10,0 | Amount still due for |
| | | | payment |

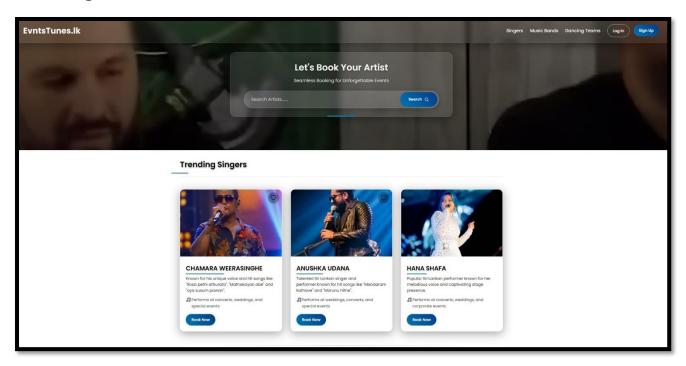
3.4. Chapter Summary

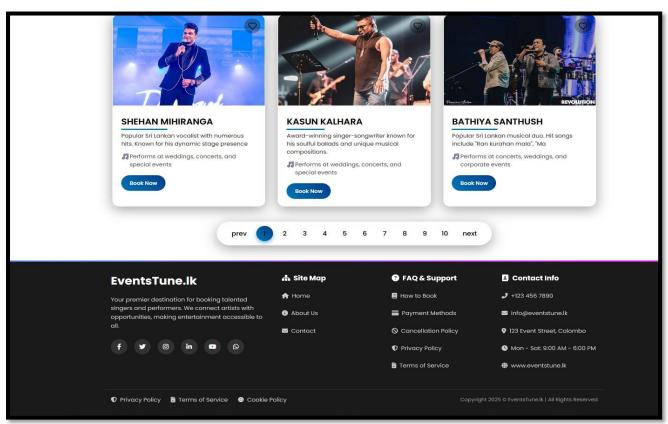
This chapter demonstrates all the diagrams designed including UML, ER, and file design starting from the uses case of the existing system. We have identified the problem within the existing system and create use case diagram for the proposed system. According to the proposed use case we have created class diagram, sequence diagram, and ER diagram.

Chapter 04

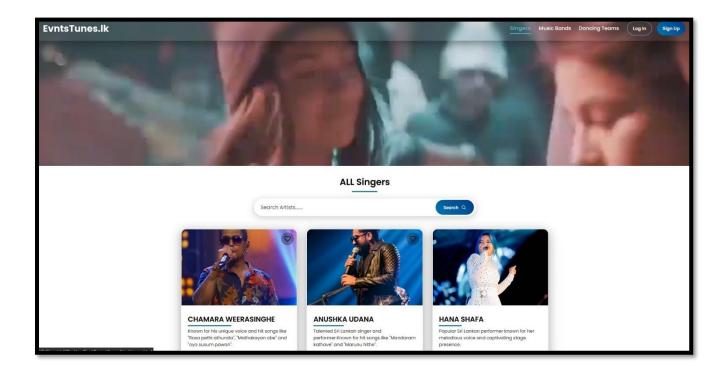
4. Interface Design

Home Page

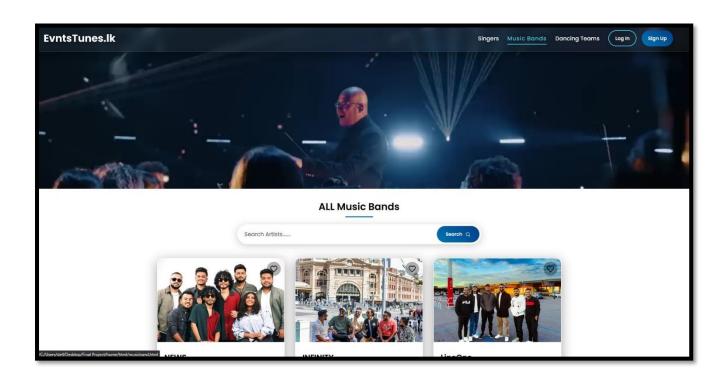




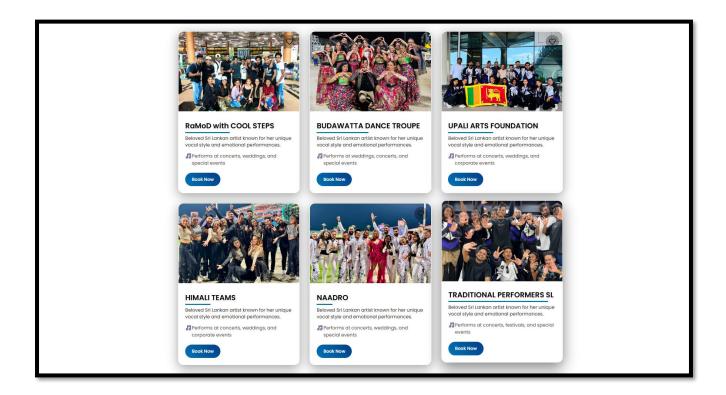
Singers Page



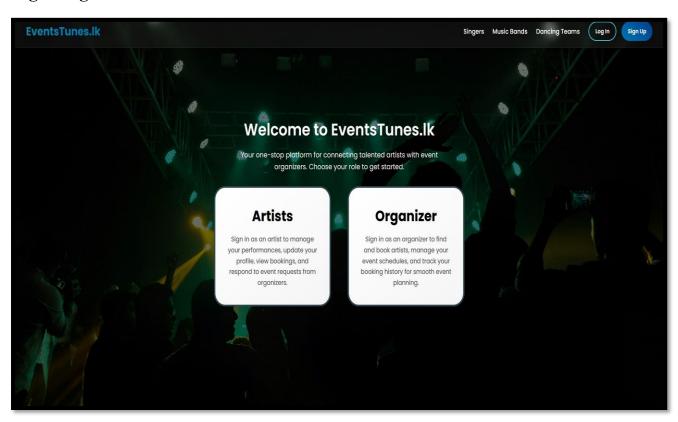
Music Bands Page



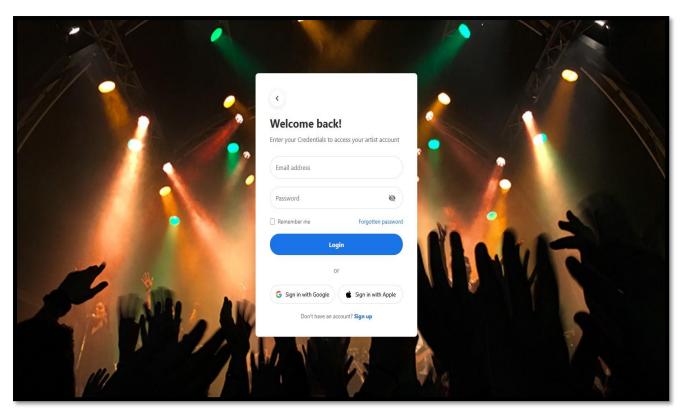
Dancing Teams Page



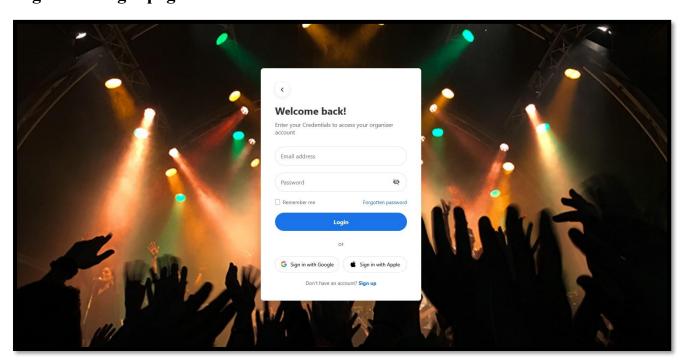
Login Page



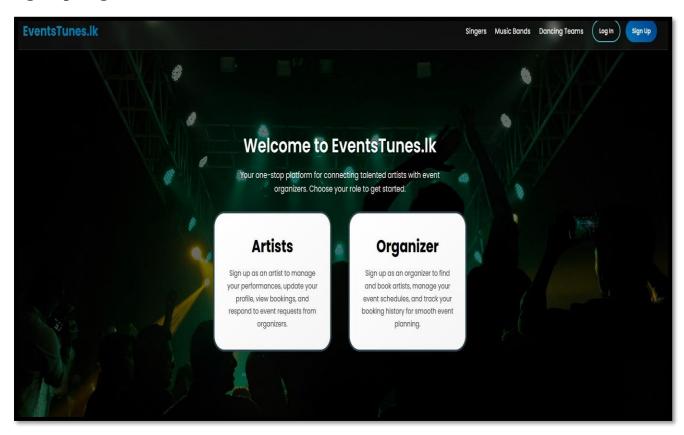
Artists Login page



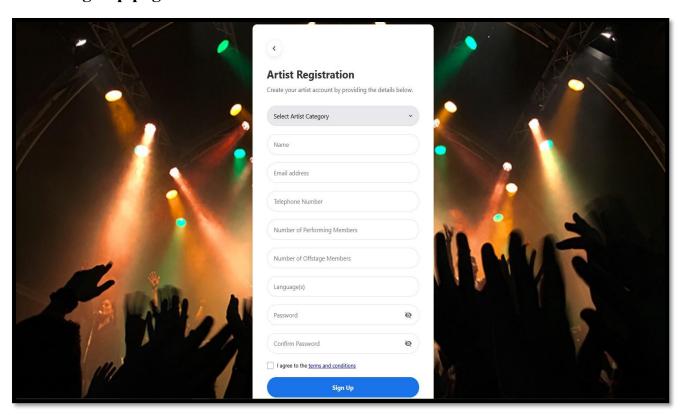
Organizer Login page



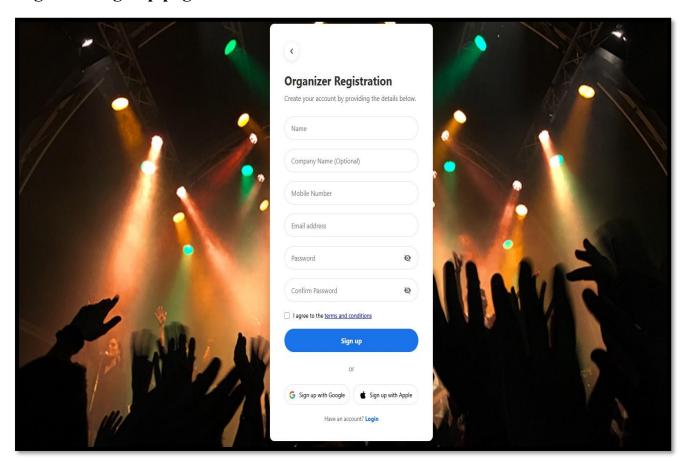
Sign Up Page



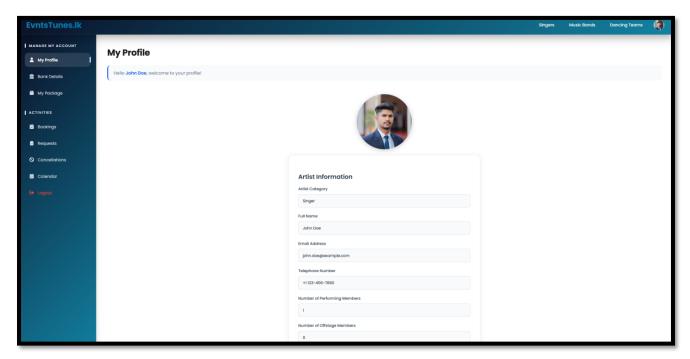
Artists Sign up page

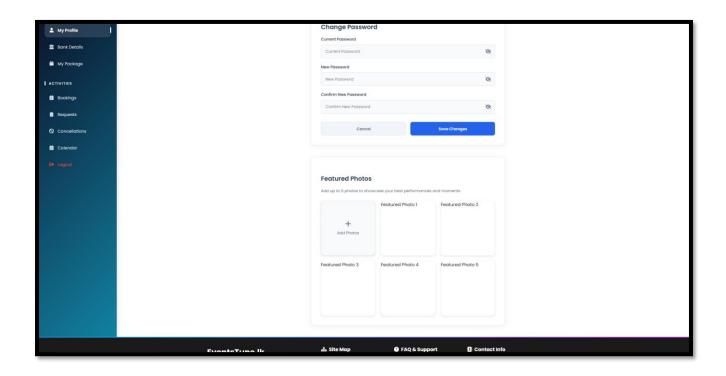


Organizer Sign up page

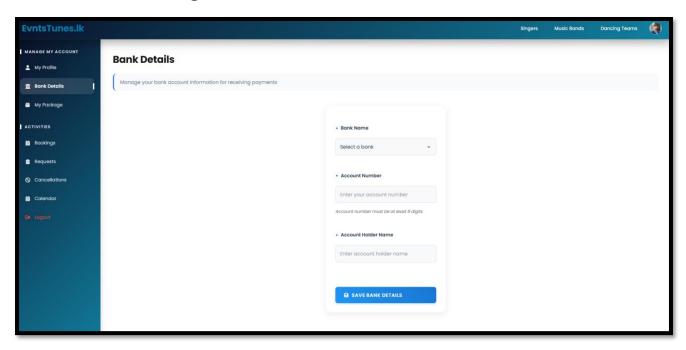


Artist Profile Page

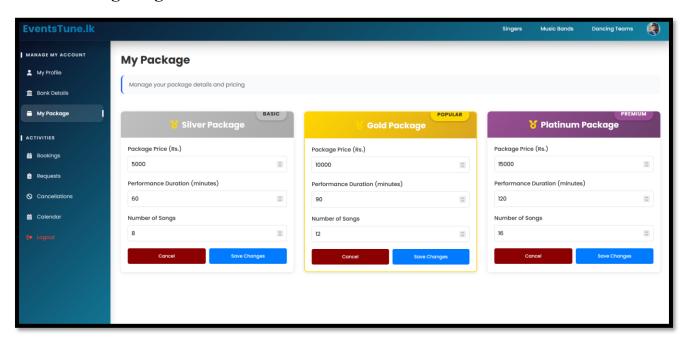




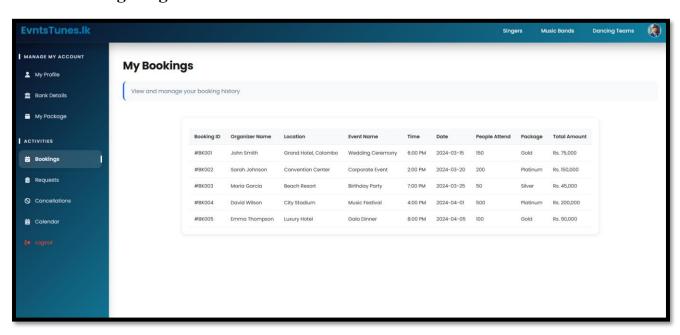
Artist Bank Details Page



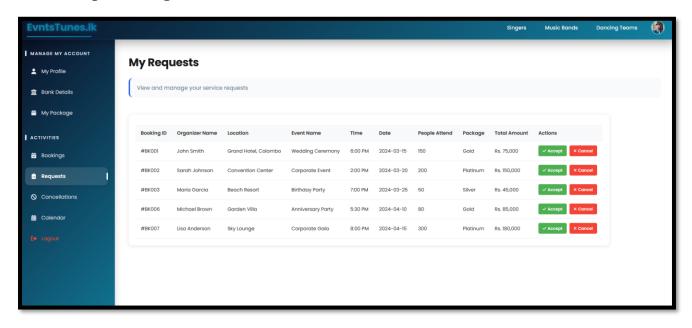
Artist Package Page



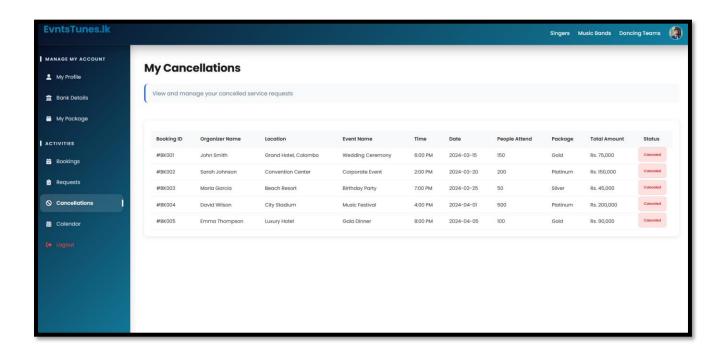
Artist Bookings Page



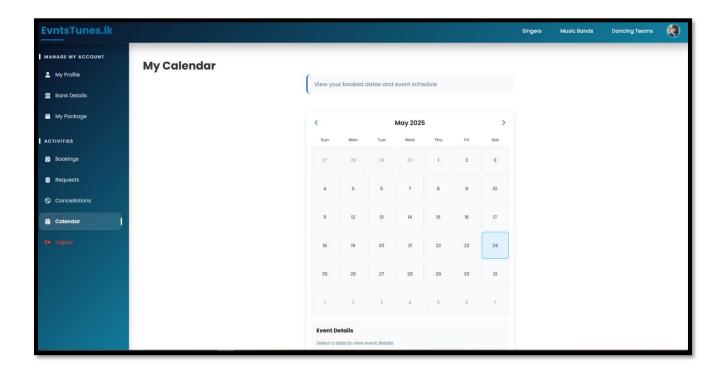
Artist Requests Page



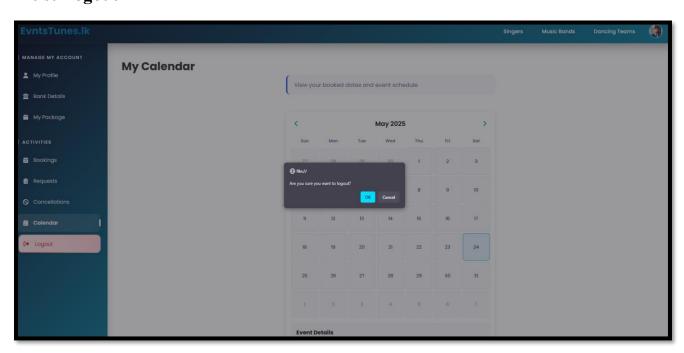
Artist Cancellations Page



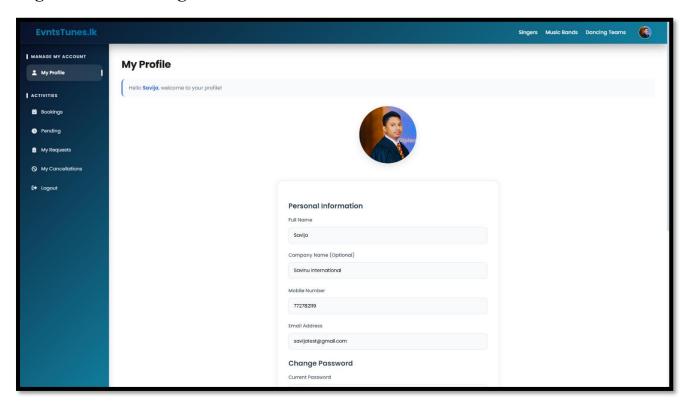
Artist Calendar Page



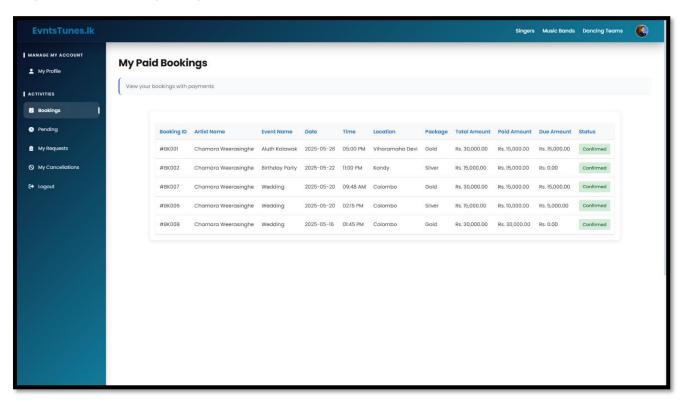
Artist Logout



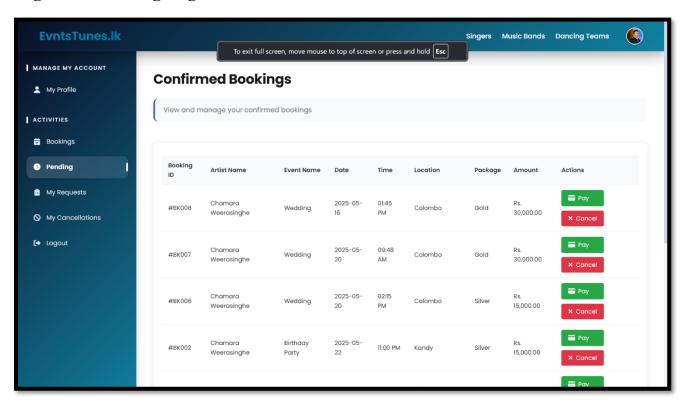
Organizer Profile Page



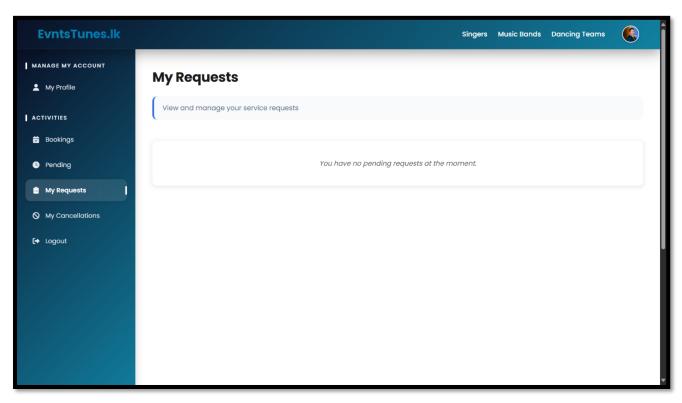
Organizer Bookings Page



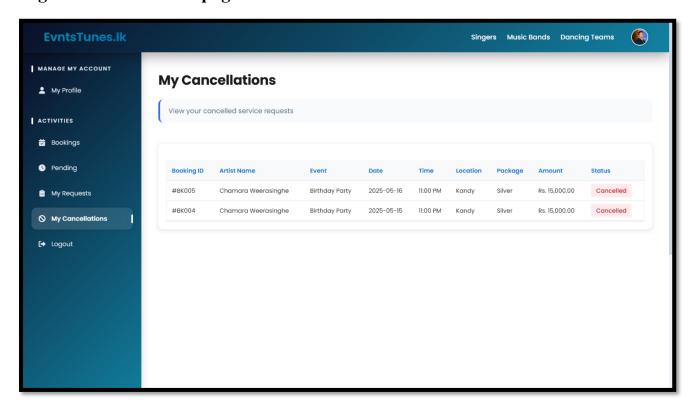
Organizer Pending Page



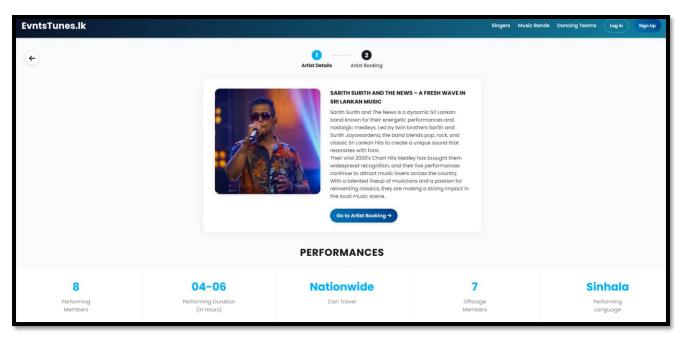
Organizer Requests Page

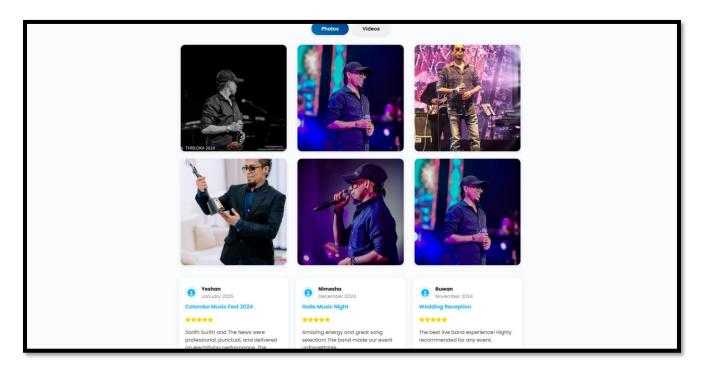


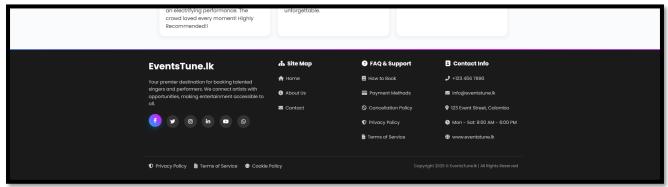
Organizer Cancelation page



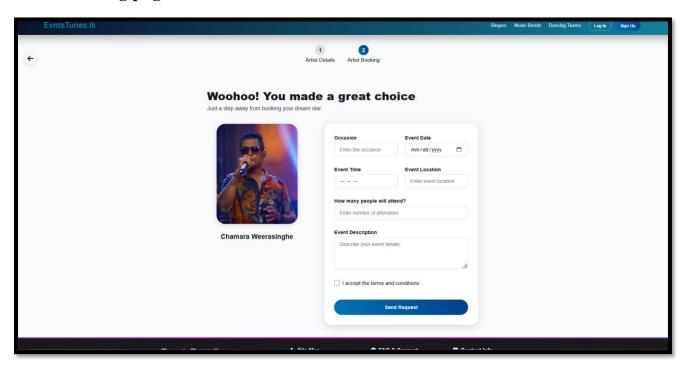
Artist Details page



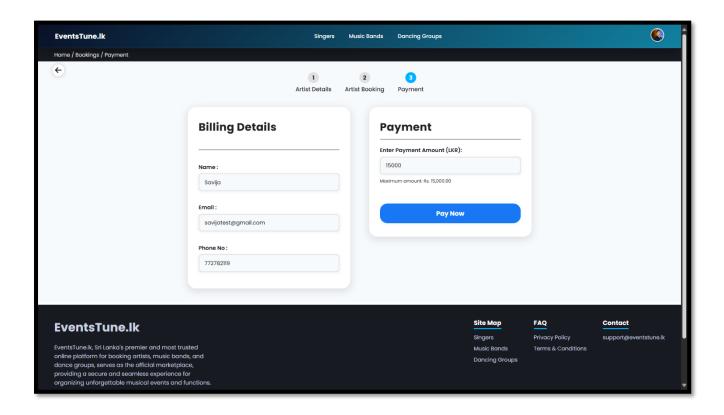


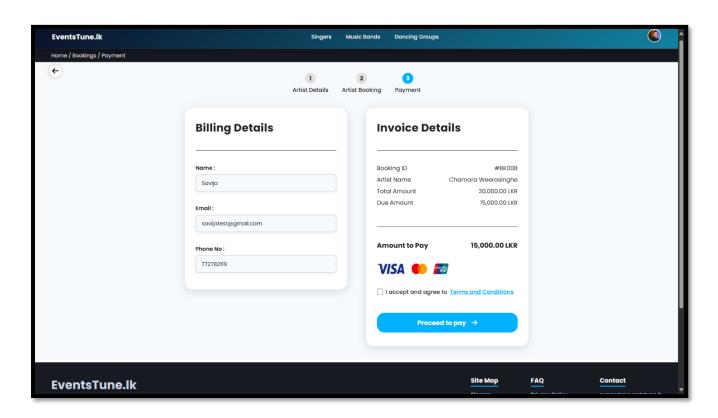


Artist Booking page



Payment Page





Chapter 05

5. Conclusion

The EventsTunes.lk address the growing need of a user-friendly online platform for seamless artists, bands, and dance groups booking in a competitive market. We have used user-centric design by leveraging modern technologies. This platform offers a comprehensive solution to streamline event booking, planning, and management processes. The design of the interfaces done by Figma and the use case diagrams, class diagrams, and ER diagrams were designed by draw.io tool. This proposed website will enable the users to reduce problems in event management and carry out the booking processes efficiently and effectively.

References

List and articles, books, lecture notes, websites or other documents used to obtain information to carryout succeed your project.

- Cardinality in ER Diagram | DBMS
 https://www.gatevidyalay.com/cardinality-in-er-diagram/
- Entity-Relationship Diagram Symbols and Notation
 https://www.lucidchart.com/pages/ER-diagram-symbols-and-meaning

Thank You!