Fall 2017

GSU Event Portal

Mohammed Abdul Ghani
Governors State University

Minhajuddin Khaja
Governors State University

Jameel Khan Mohammad
Governors State University

FNU Neelofor
Governors State University

ABSTRACT

This is one of the Event portal web applications where it provides the registration facility for the organizations to register into it so that people can use the features or the tools which are present in this application. This application provides different features to the users like to create the events, to promote the events of the organizations, manage and sell out events of all types and sizes so that organizations can promote their organizations and make the organization to reach to the more number of customers. This application is a user-friendly application where people can easily navigate from one place of application to the other place, to use this application people does not need any kind of training. Any organization can create the event, they can upload the details of the events, post the photos, gives the information about the events, provide the facilities to book the tickets and allowing the user to purchase the tickets.

It also maintains different types of users and every user is having their own user console to do the operations. By this kind of implementation, we can implement the access restrictions, and provides the information to the guests also. It also allows the user to post any similar type of the events which are conducted in those events. User will be allowed to search the events and they can know the information about the events which are conducted in the city or in the other places.

Table of Contents

1   Project Description

Event management is one of the web application which is used to help the people and the customers to know the information about the events which are happening in different place. There will be three different types of users will be there like Admin, visitor and the organizer. Based on the functionalities each user responsibilities are clearly identified and implemented according. All the roles and responsibilities of the users are explained clearly in the functional requirements section. One can search the events, post the events and know the information of the events.

1.1   Competitive Information

To implement this application, we have gone through with various similar applications like peatix.com, eventbrite.com and eventbee.com. By seeing these web applications, we came to know what should be had in the application. Based on the available information within these sites, we framed the requirements which help the organization to give the tough competition for the similar business holders.

1.2   Relationship to Other Applications/Projects

As we said, we have gone through with the above-mentioned applications, then we came to a conclusion for finalizing the requirements. But the application which we are developing will not relate to any other application. It is an individual entity.

1.3   Assumptions and Dependencies

- There are no assumptions and no dependencies. All the requirements are precisely framed, the flow of the information is very clear and based on this the application is developed.

1.4   Future Enhancements

As all the requirements are finalized in advance and the total project development is started, it is completed project. We are not releasing the project in version to implement the future enhancements.

1.5   Definitions and Acronyms

No definitions and Acronyms used in this application.

2   Project Technical Description

Organizer console: This is the dashboard for the organizer to create the events, edit events, he can view the number of registrations, he can even view the payments made.

Admin console: He is the person who can administer the accounts, he can able to edit or delete the accounts, he can able to review the registrations etc.

Visitor: He should be able to view the information of the events; he should be able to search the upcoming events by city, time and event type. The result should be as per the search criteria like

if he selects the city, then total upcoming events should be displayed, if selects city and date then the results should be the upcoming events of that city on that date etc.

2.1 Application Architecture:

The following is a 3 – tier architecture which divides the functionality of the application into 3 layers. These layers include Client layer or presentation layer, Application service layer and the third one is database layer.
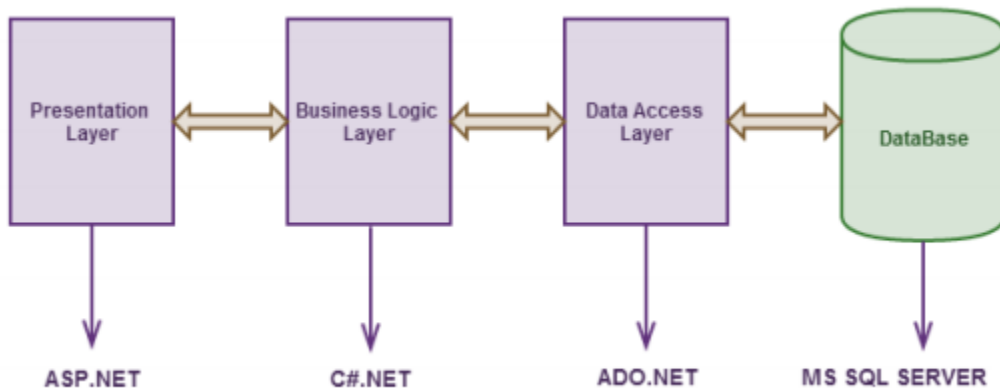
Figure: Database Architecture for Event Management System.
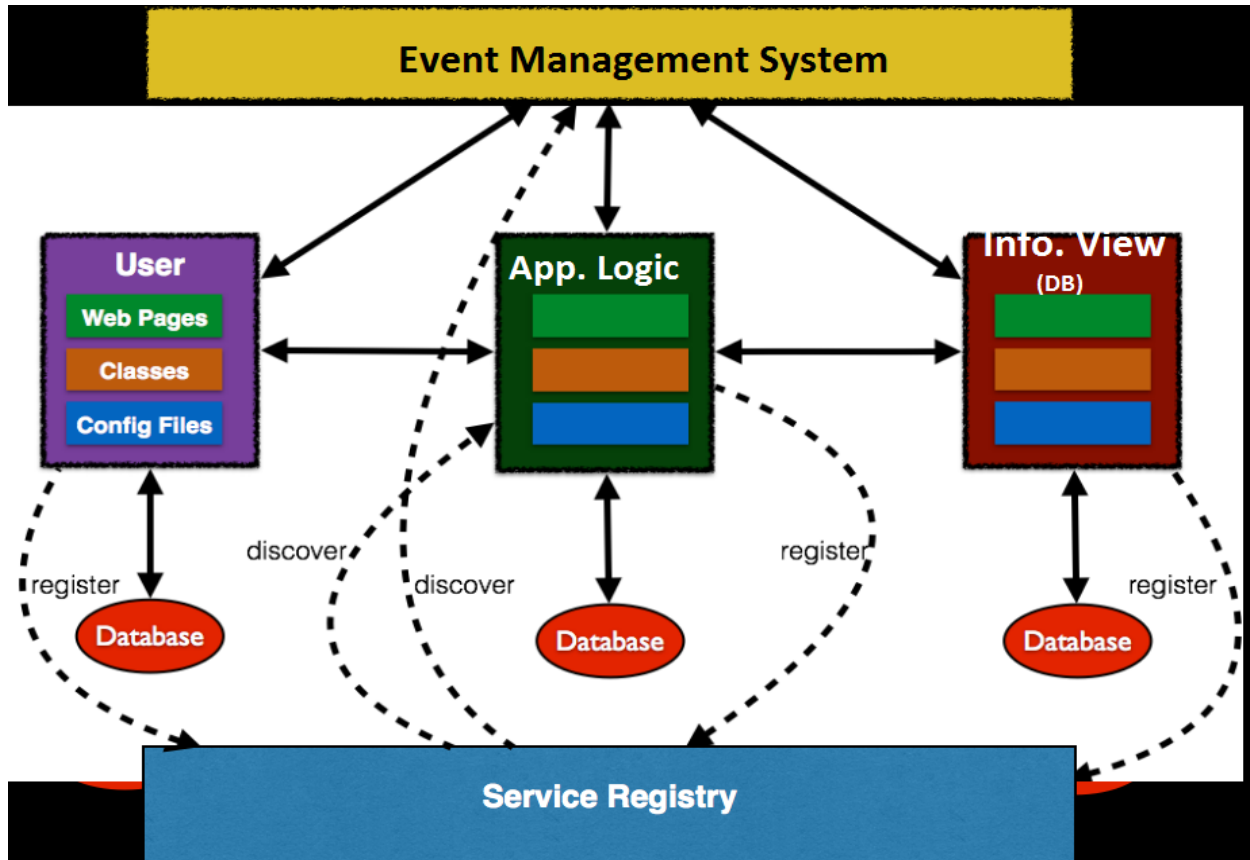
Figure: GSU Event Management System Architecture

2.2 Application Information flows

After clearly analyzing the functionalities of the application, the following information is gathered, and we are treating them as the functional requirements. While gathering the information, we came to know different roles of the people who are involved in usage of this application. This application is basically used by 3 different types of users, they are Admin, Organizer and the visitor. Let us have the functional requirements of each user.

Admin Requirements:

View user's login details: Admin can have the right to know the information about the users that when they are logging into their application and how much time they have spent with the application are recorded and they can be viewed by the Admin.

Edit/Delete Events: Admin is having the right to edit and delete the events. He can able to communicate with the organizers and convey the information.

Review the user's list: Whatever the registrations had with the application, all the registrations can be viewed by the admin.

View the organizers list: There are different organizers will be there for organizing the events. The list of organizers for the event can be viewed by the admin.

Location Information: The information related to the event and the location where this event is organized will be known to admin.

Organizer Requirements: He is the person who will be organizing the events. He is having the information related to the events, he can create the events, edit the events, he can know the information about the payments, he can view the events list created him.

To become an organizer, he has to register first with the application and then he can perform the organizer functionalities.

Registration: To become an organizer, he must register with the application by submitting the user credentials.

Login: After registering with the application, if the organizer wants to implement his roles and responsibilities then he has to login into the application. This is one sort of security that is provided to the application.

Create and Edit events: Organizer is having the right to create and edit events. All the necessary information which is related to the event will be given by the organizer.

Payments information: Organizer can know the details of the payments made by the user. All users' payment information can be viewed by the organizer.

View list of events: An organizer can create more than one event, he can view all the events information which is created by him.

Visitor Functionalities:

The following are the operations which can be performed by the visitor when he entered the application. These functionalities include

Profile creation: User can create his/her profile by signing up with the application.

Search Facility: He can search the information of the events and about the information which is present in the application.

View the events information: User can view all the information about the events along with the images, videos and any other information which is related to the events.

Payments: He can able to make the payment for any of the event. All this information will be stored and at the later stages the same information can be viewed by the user.

Booking History: He will be knowing the information of the events and their bookings.

2.3   Interactions with other Projects (if Any)

It is individual application and not running with any other application.

2.4   Interactions with other Applications

Currently there are no interactions with any other application. If needed, we can establish the interactions with different other services like payment gateways and others.

2.5   Capabilities

a. Registration page for the organizer and the visitor:

Visitor and the organizer should register, if the registration is completed successfully then all the details of the users will be stored in the database automatically.

b. Login page for the organizer and the visitor:

System establishes the security by providing the login and registration process. It checks whether the user is valid user or not.

c. Applying Filters:

users can apply filters in searching process. This will able to reduce the user burden as well as the search time.

d. Payments page.

Application allows the user to make the payment by using the payment page. This type of payment is very secured, and the user can trust the payment system which is implemented.

To view the information based on the levels of the users.

To create and edit events.

2.6   Risk Assessment and Management

If there are threats, then there may be a chance of occurring vulnerability which may breakdown the running of application. To overcome such kind of threats, from the starting phase onwards one must concentrate on the risk management process, which will be taking care of such things. This

kind of risk management will be done for different sort of reasons, out of which the main 4 important reasons are given below.

1. There will be different disasters in the implementation of software like schedule slippage, cost increments, requirements missing etc., will occur. These things should be avoided by implementing RMM plan.

2. Requirements should be very clear before implementing the application. Once the application implementation is completed, then there should not be any rework to be done on the project. This may cause the increase of 50 percent of the cost.

3. One should avoid the win-win software solutions.

4. No need of implementing the error detection, prevention strategies when there is everything going well, this kind of implementation may lead to schedule slippage, cost over runs etc.

All these steps should be implemented in the risk management plan so that there won't be any errors or inconsistencies in the implementation of the application.

3   Project Requirements

3.1   Identification of Requirements

All the requirements have been gathered using SMART criteria. After knowing the domain on which the project should be implemented, then one must gather all the information related to the business of the organization.
The following format is an example:

<GSU-GS_SP2016-1 Admin-Capability-000100>
       The project must allow the admin to View user's login details:
       Implementation: Mandatory
<GSU-GS_SP2016-1 Admin-Capability-000101>
The project should allow the admin to Edit/Delete Events:

Implementation: Mandatory

<GSU-GS_SP2016-1 Admin-Capability-000102>

It should allow the admin Review the user's list:

Implementation: Mandatory

View the organizers list: There are different organizers will be there for organizing the events.

The list of organizers for the event can be viewed by the admin.

<GSU-GS_SP2016-1 Admin-Capability-000103>
It should allow the admin to find Location Information:

Implementation: Mandatory

Organizer Requirements:
<GSU-GS_SP2016-1 Organizer-Capability-000104>
It should allow the organizer to have the Registration

Implementation: Mandatory

<GSU-GS_SP2016-1 Organizer-Capability-000105>
It should allow the organizer to Login.

Implementation: Mandatory

<GSU-GS_SP2016-1 Organizer-Capability-000106>
It should allow the organizer to Create and Edit events:

Implementation: Mandatory

<GSU-GS_SP2016-1 Organizer-Capability-000107>

It should allow the organizer to know the Payments information:

Implementation: Mandatory

<GSU-GS_SP2016-1 Organizer-Capability-000108>

It should allow the organizer to the View list of events created.

Implementation: Mandatory

<GSU-GS_SP2017-1 Visitor-Capability-000109>

It should allow the user to create Profile

Implementation: Mandatory

<GSU-GS_SP2017-1 Visitor-Capability-000110>

It should allow the visitor to Search the events:

Implementation: Mandatory

<GSU-GS_SP2017-1 Visitor-Capability-000111>

It should allow the visitor to View the events information:

Implementation: Mandatory

<GSU-GS_SP2017-1 Visitor-Capability-000112>

It should allow the visitor to make the Payments:

Implementation: Mandatory

3.2 Operations, Administration, Maintenance and Provisioning (OAM&P)

This application provides different nonfunctional services like security, data maintenance etc. Security is implemented by using the user name and password which is created at the time of the registration by the user.

3.3 Security and Fraud Prevention

By providing the user name and password.

3.4 Release and Transition Plan

Project which is implemented is shown to the users until all the functionalities implemented are finalized. If the system which is developed is effective and is running properly then only it will be uploaded to the application server and kept for the usage for the users.
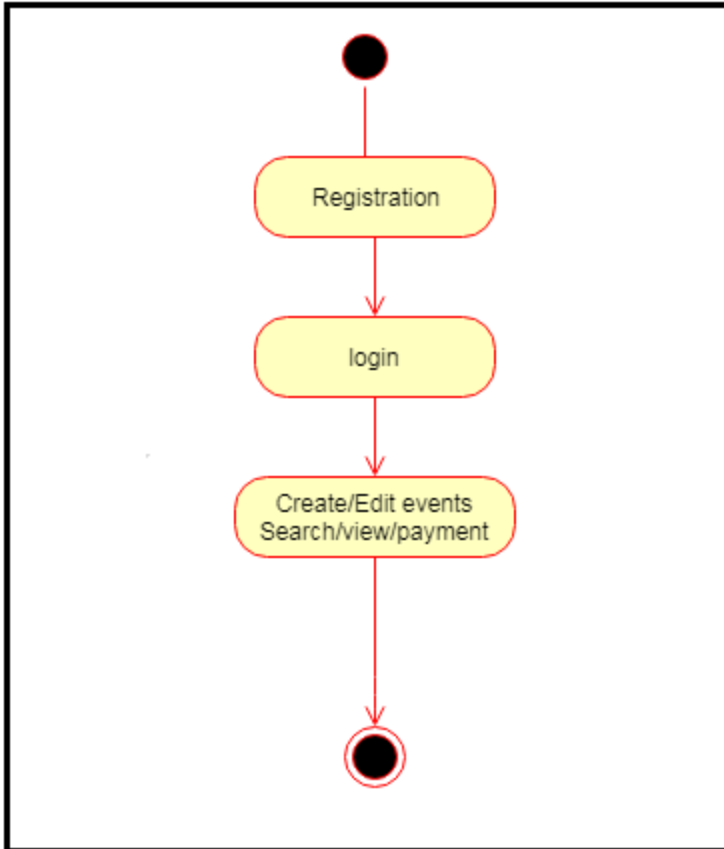
4 Project Design Description

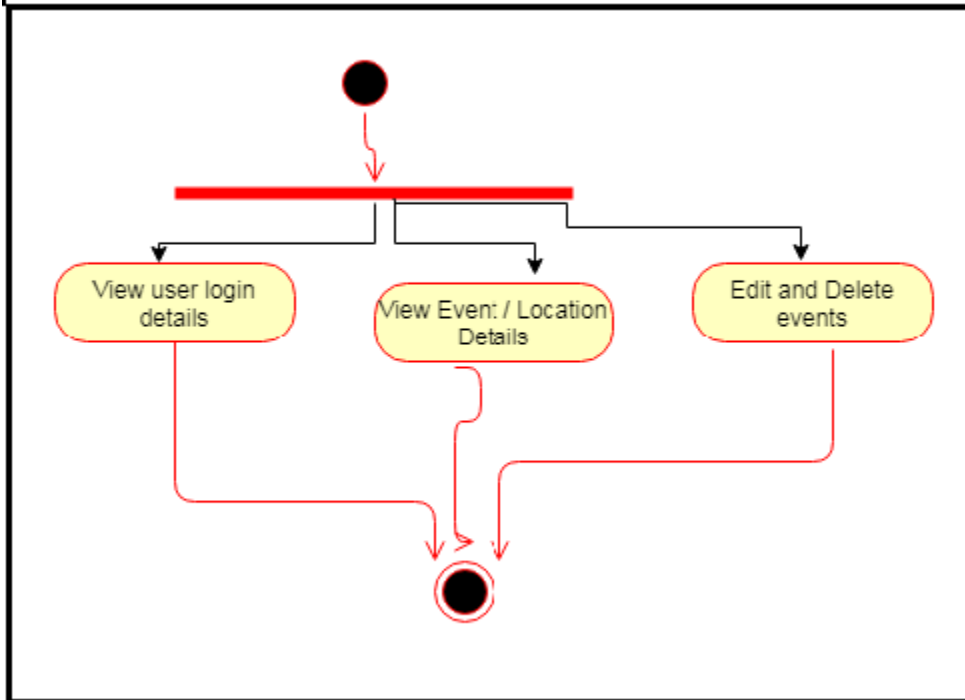**Design of the application:**
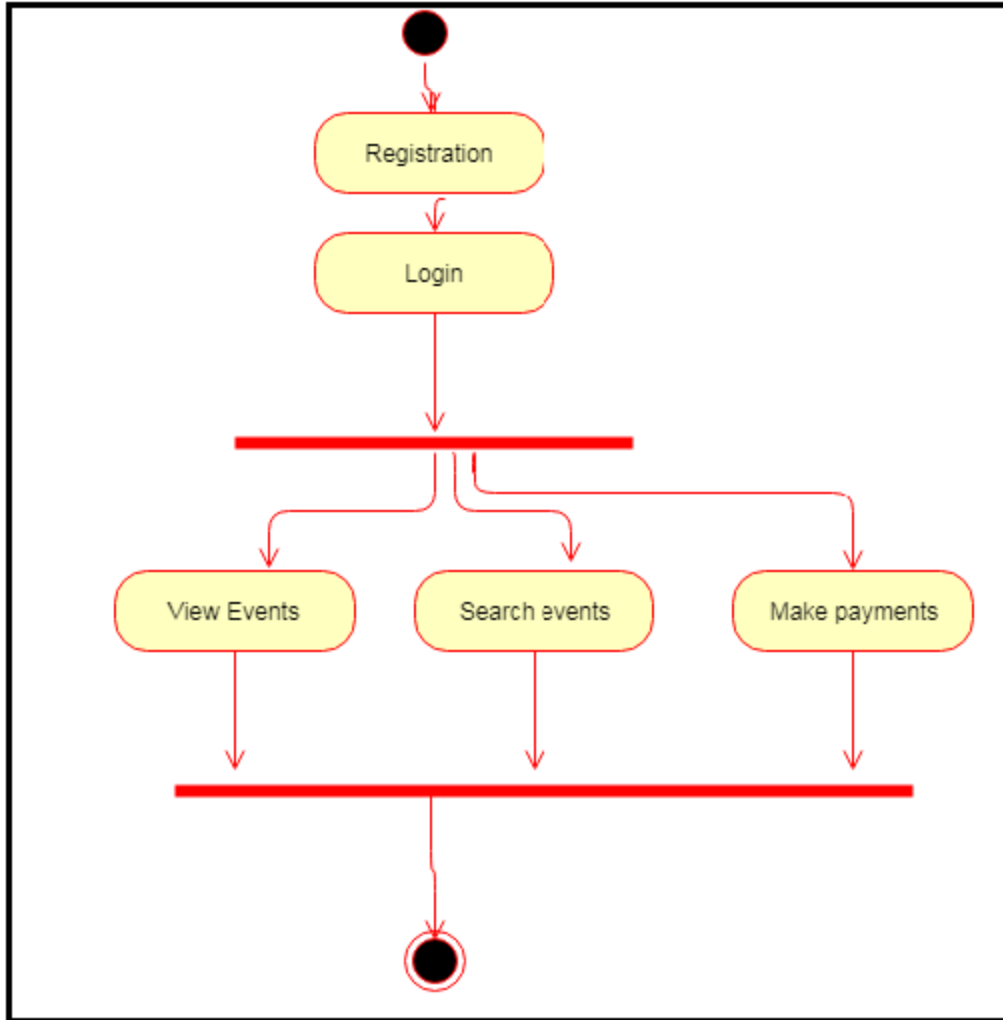Use case diagram:
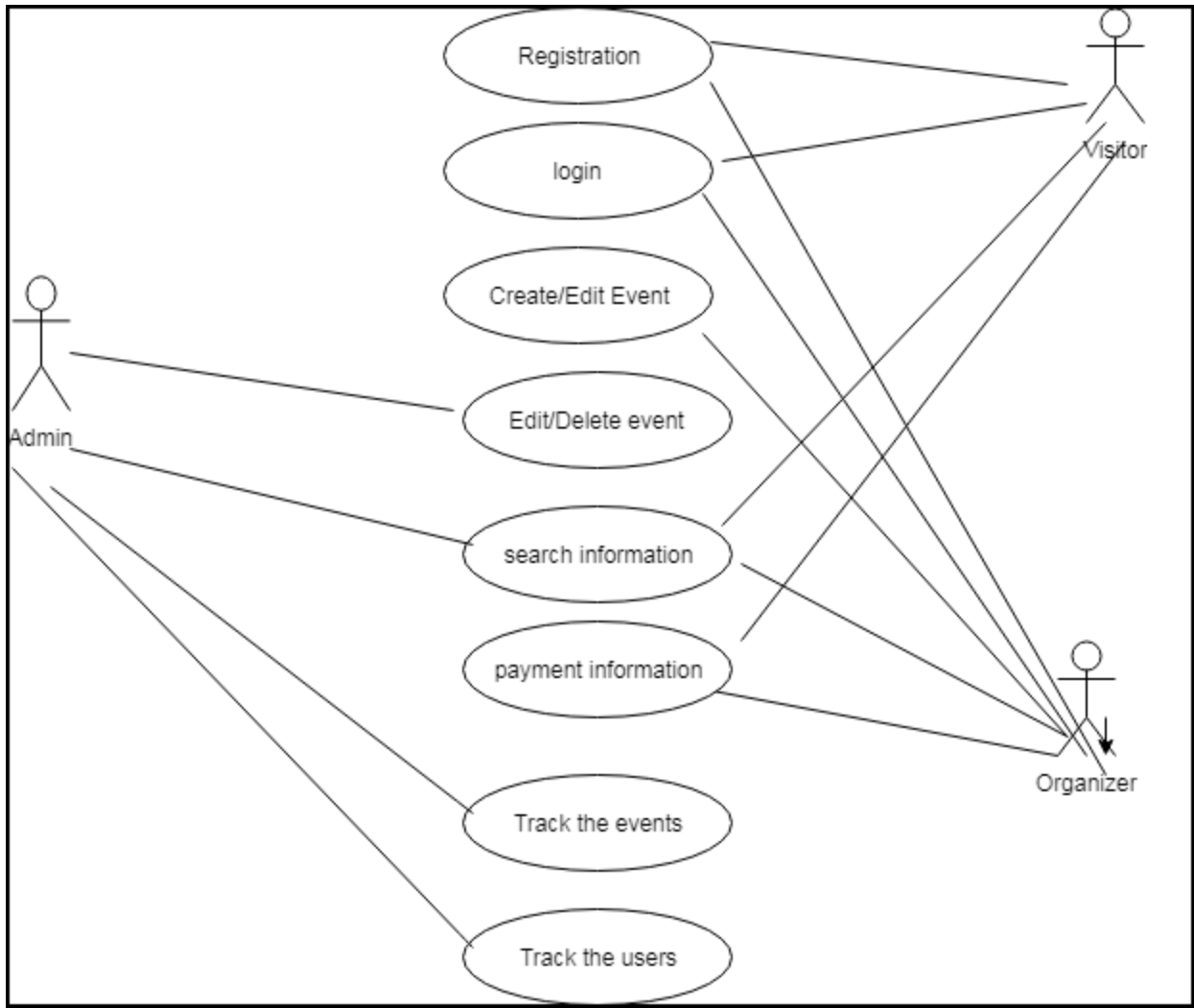
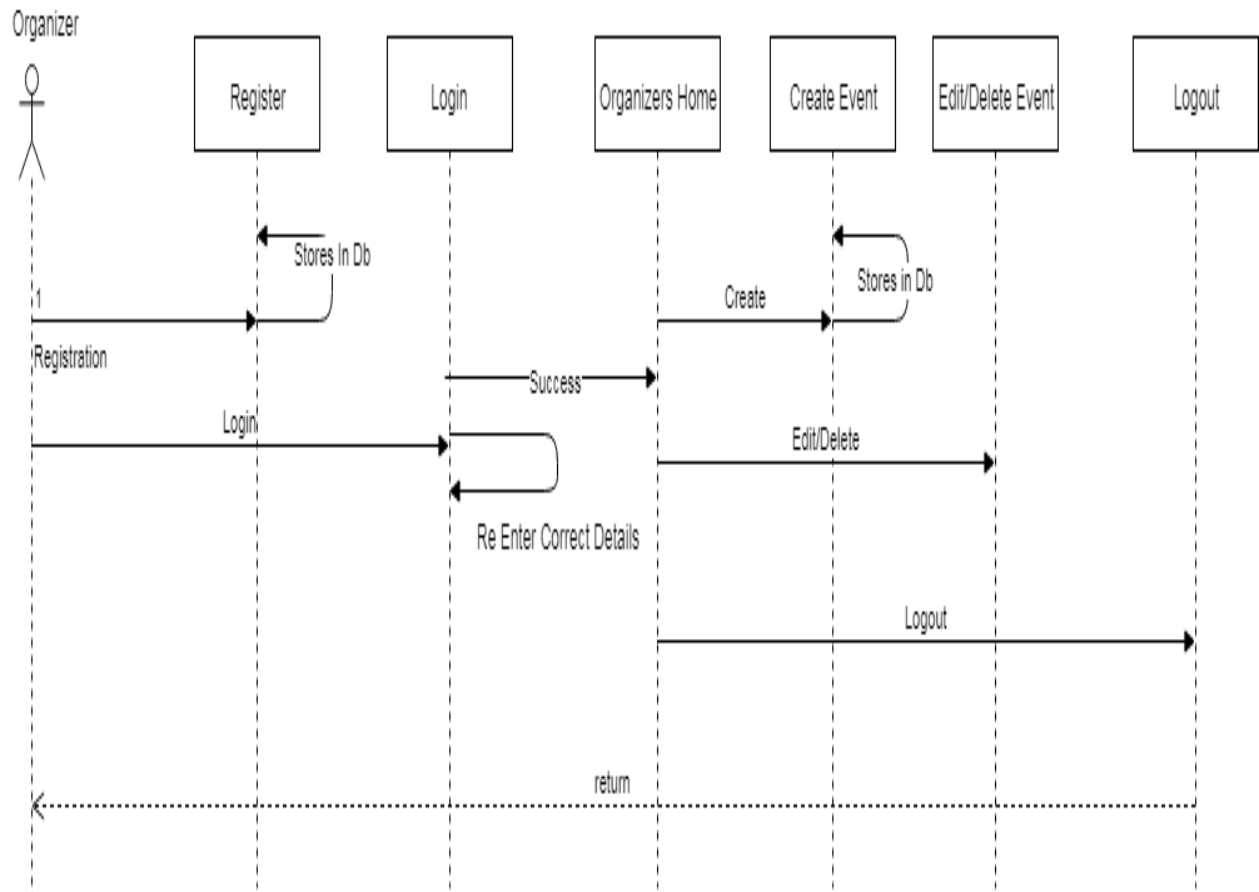Organizer Activity Diagram:

e

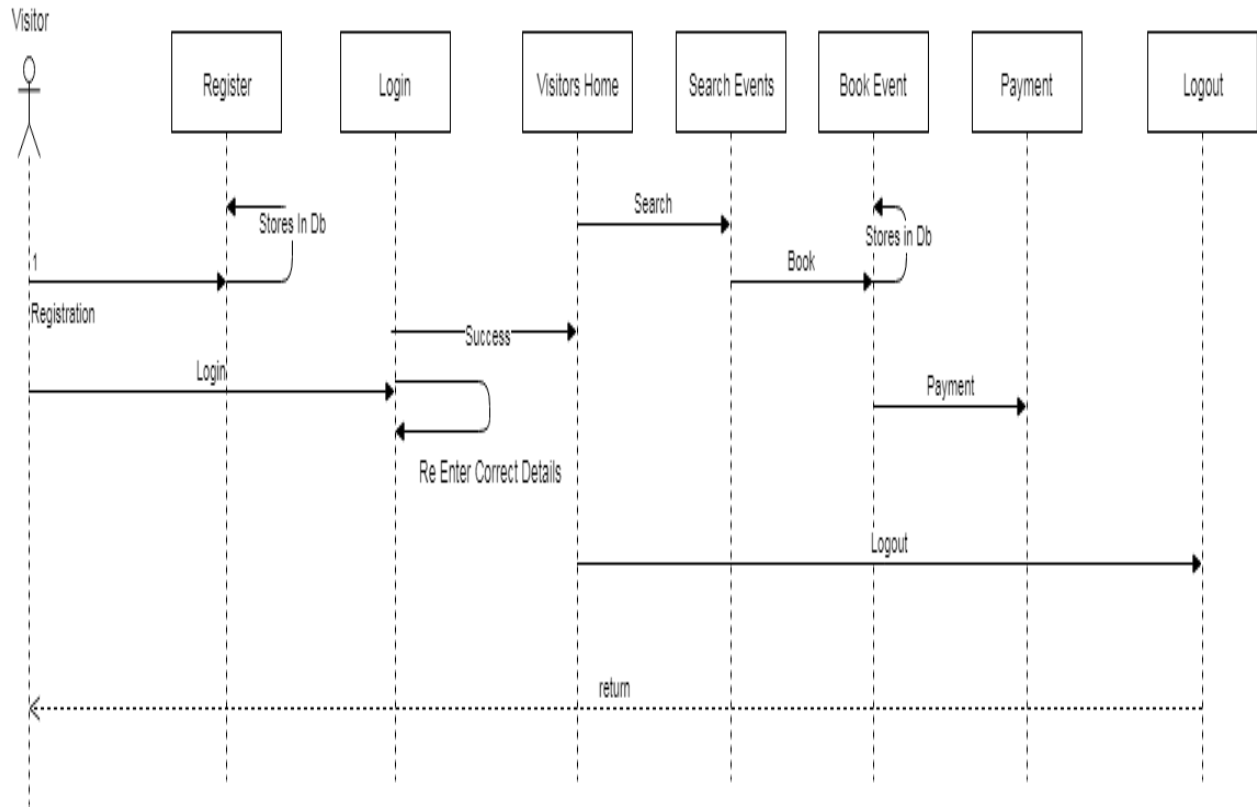Admin Activity Diagram:

Visitor Activity diagram:

Sequence diagrams: These diagrams use to show the sequence of events that will be occurring during the implementation of the operations.

Organizer Sequence diagram:

Visitor Sequence Diagram:

Database Design: Based on the requirements, we have analyzed the attributes and the needed entities to store the information. To store the information, we need to have a database structure. Below given are the list of tables which has been designed to store the related information in completing the organizational functionalities.

Tables and Their Descriptions:

TblVisitor

Attribute name	Constraints name	Data type(size)
Name	Not Null	Varchar(50)
EmailId	Primary Key(PK)	Varchar(50)
MobileNumber	Not Null	Varchar(50)
Address	Not Null	Varchar(50)
Password	Not Null	Varchar(50)

TblOrganizer

Attribute name	Constraints name	Data type(size)
OrganizerName	Not Null	Varchar(50)
OrganizerEmailId	Primary Key(PK)	Varchar(50)
OrganizerMobileNumber	Not Null	Varchar(50)
OrganizerAddress	Not Null	Varchar(50)
Password	Not Null	Varchar(50)

TblEvents

Attribute name	Constraints name	Data type(size)
EventId	PrimaryKey	Varchar(50)
EventName	Not Null	Varchar(50)
Place	Not Null	Varchar(50)
OrganizerEmailId	Foreign Key(FK)	Varchar(50)
EventDate	Not Null	Varchar(50)
EventTime	Not Null	Varchar(50)

TblTickets

Attribute name	Constraints name	Data type(size)
EventId	Foreign Key(FK)	Varchar(50)
TotalNoOfTickets	Not Null	Varchar(50)
CostPerOneTicket	Not Null	Varchar(50)
TotalAmount	Not Null	Varchar(50)

TblVisitorsEvents

Attribute name	Constraints name	Data type(size)
EventId	Foreign Key(FK)	Varchar(50)
EmailId	Foreign Key(FK)	Varchar(50)
NoOfTickets	Not Null	Varchar(50)
TotalAmount	Not Null	Varchar(50)

TblAdmin

Attribute name	Constraints name	Data type(size)
AdminMailId	Not Null	Varchar(50)
AdminPassWord	Not Null	Varchar(50)

E-R diagrams: Based on the database design and the organizational functionalities, some of the relations has been established which are presented in the following sections.
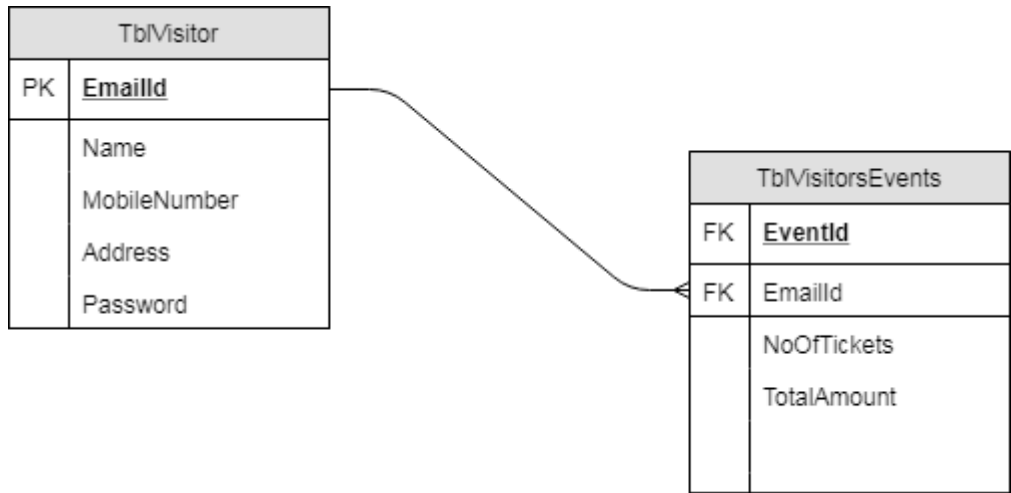**TblOrganizer and TblEvents: One to Many Relationship**

TblOrganizer

PK	**OrganizerEmailId**
	OrganizerName
	OrganizerMobileNumb
	OrganizerAddress
	Password

TblEvents|

PK	**EventId**
FK	OrganizerEmailId
	EventName
	Place
	EventDate
	EventTime
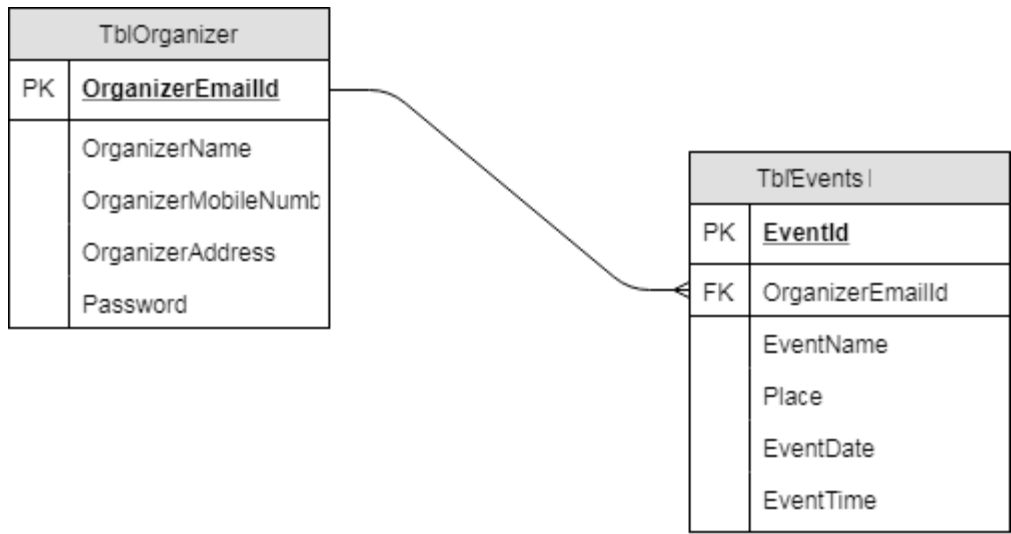
TblEvents and TblTickets: One to Many Relationship

TblEvents

PK	**EventId**
FK	OrganizerEmailId
	EventName
	Place
	EventDate
	EventTime

TblTickets

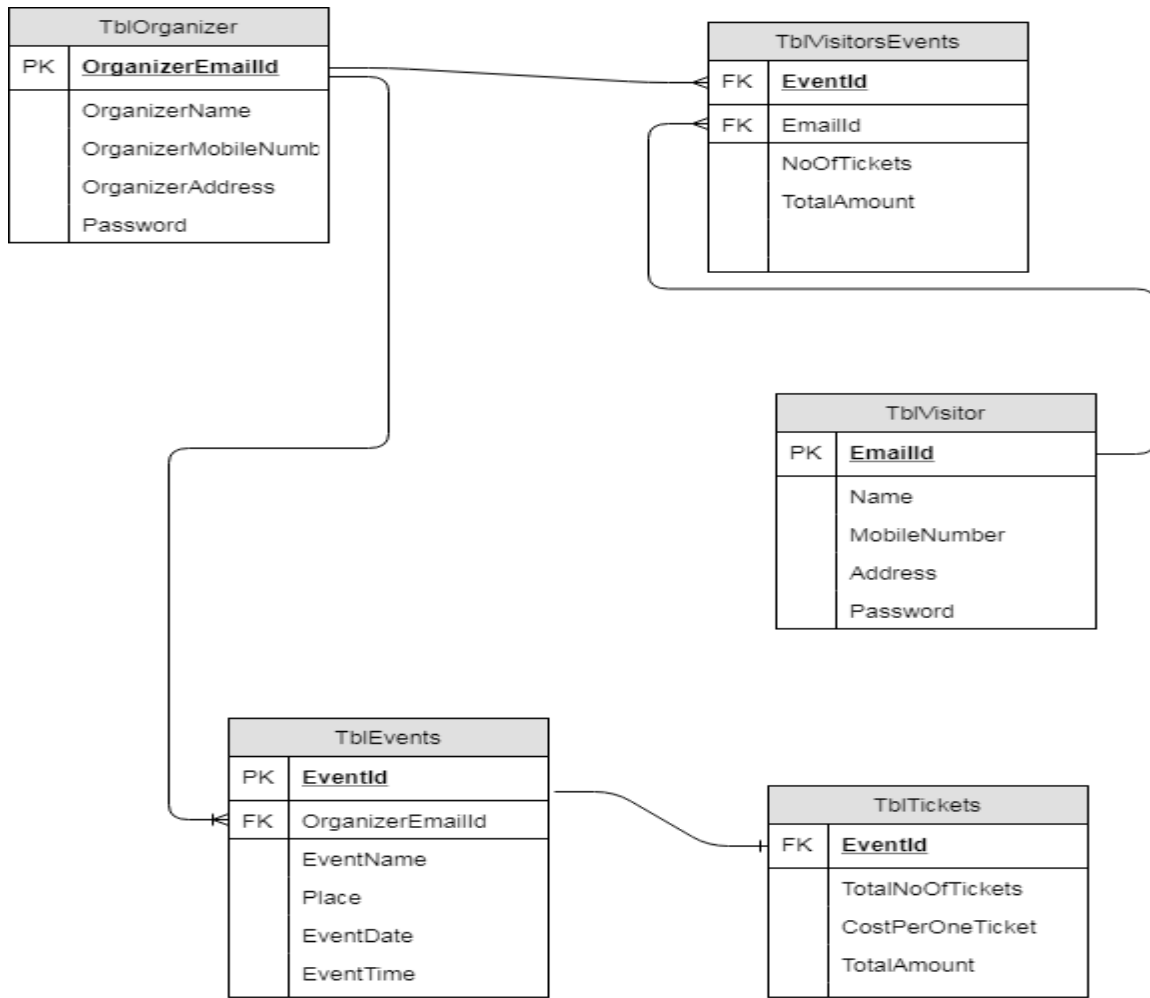|	
FK	**EventId**
	TotalNoOfTickets
	CostPerOneTicket
	TotalAmount
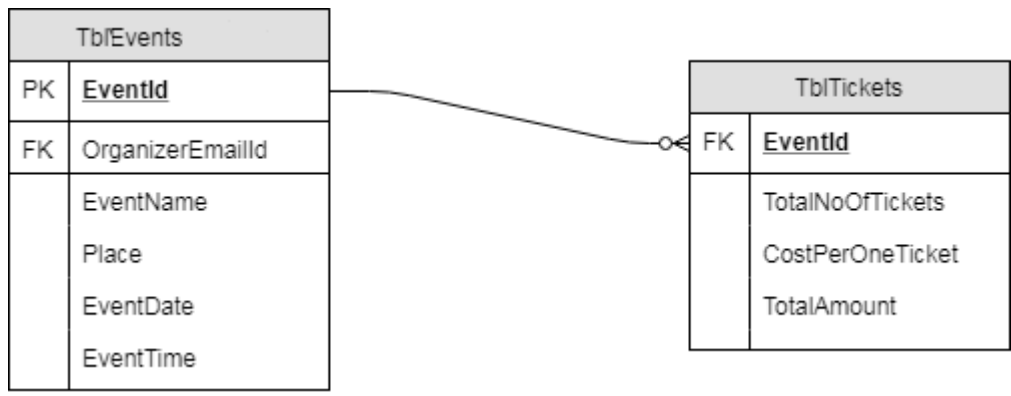
TblVisitor and TblVisitorsEvents: One to Many Relationship

TblEvents and TblTickets: One to One Relationship
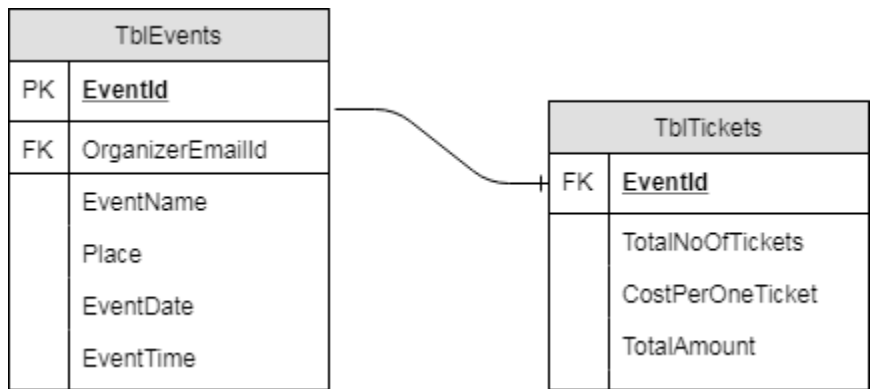
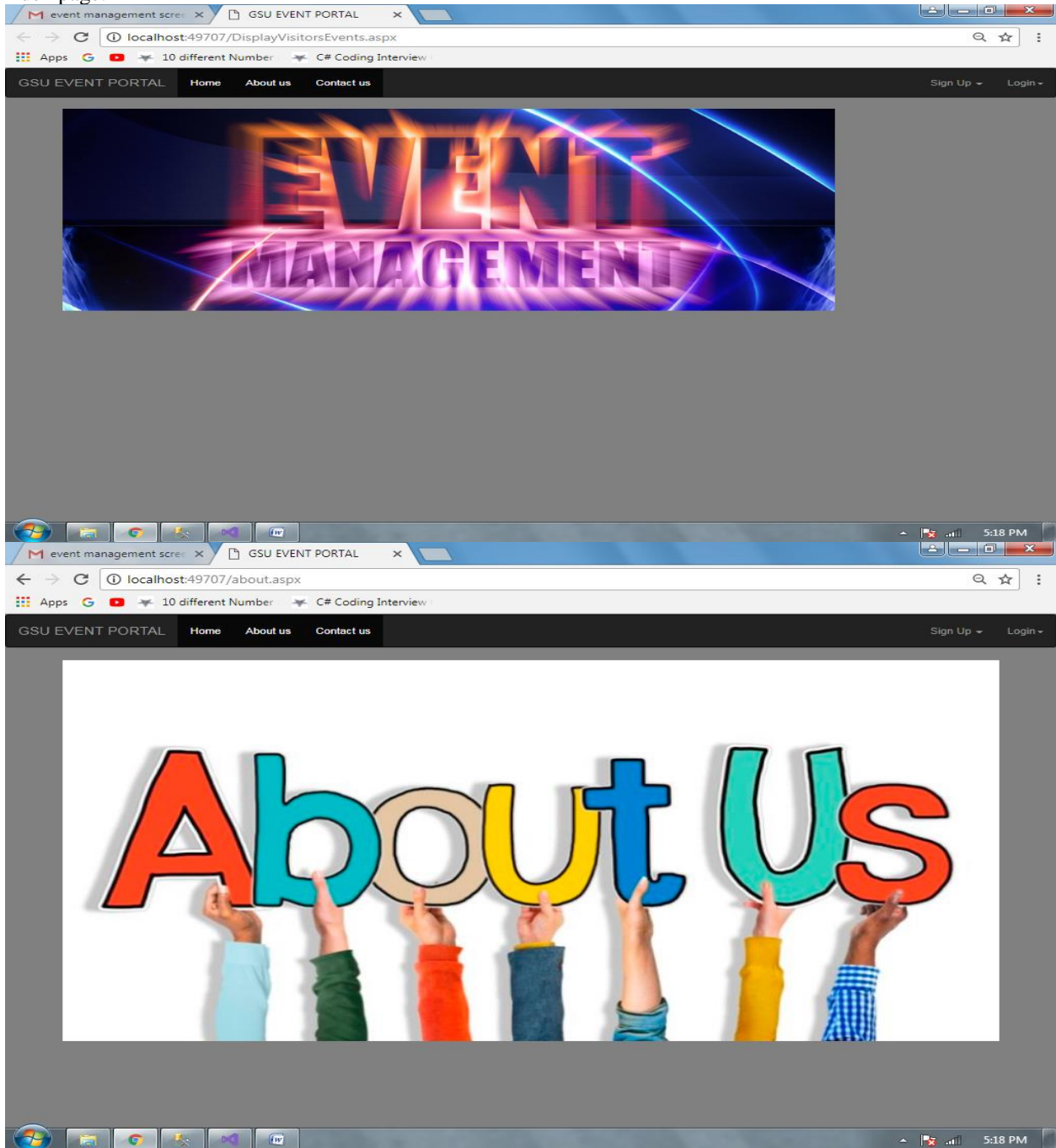**Overall E-R diagram of the application:**

```
┌─────────────────────────┐                              ┌─────────────────────────────┐
│       TblOrganizer      │                              │       TblVisitorsEvents     │
├────┬────────────────────┤                              ├─────┬───────────────────────┤
│ PK │ OrganizerEmailId   │──────────────────────────┬──<│ FK  │ EventId               │
├────┼────────────────────┤                          ┌──<│ FK  │ EmailId               │
│    │ OrganizerName      │                          │   ├─────┼───────────────────────┤
│    │ OrganizerMobileNumb │                         │   │     │ NoOfTickets           │
│    │ OrganizerAddress   │                          │   │     │ TotalAmount           │
│    │ Password           │                          │   │     │                       │
└────┴────────────────────┘                          │   └─────┴───────────────────────┘
                                                      │
                                                      │        ┌─────────────────────────┐
                                                      │        │        TblVisitor        │
                                                      │        ├─────┬───────────────────┤
                                                      │        │ PK  │ EmailId           │
                                                      │        ├─────┼───────────────────┤
                                                      │        │     │ Name              │
                                                      │        │     │ MobileNumber      │
                                                      │        │     │ Address           │
                                                      │        │     │ Password          │
                                                      │        └─────┴───────────────────┘
            ┌─────────────────────────┐
            │        TblEvents         │
            ├─────┬───────────────────┤
            │ PK  │ EventId           │──────┐     ┌─────────────────────────┐
            ├─────┼───────────────────┤      │     │        TblTickets        │
            │ FK  │ OrganizerEmailId  │      │     ├─────┬───────────────────┤
            │     │ EventName         │      └────<│ FK  │ EventId           │
            │     │ Place             │            ├─────┼───────────────────┤
            │     │ EventDate         │            │     │ TotalNoOfTickets  │
            │     │ EventTime         │            │     │ CostPerOneTicket  │
            └─────┴───────────────────┘            │     │ TotalAmount       │
                                                   └─────┴───────────────────┘
```
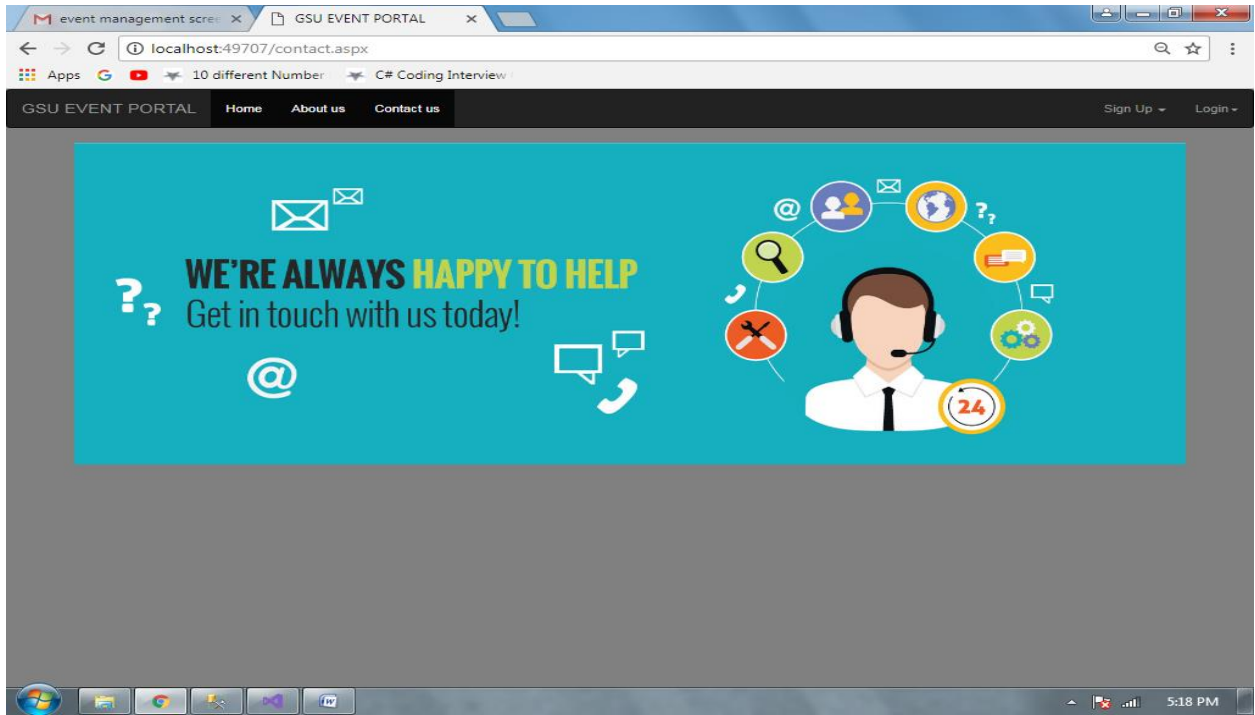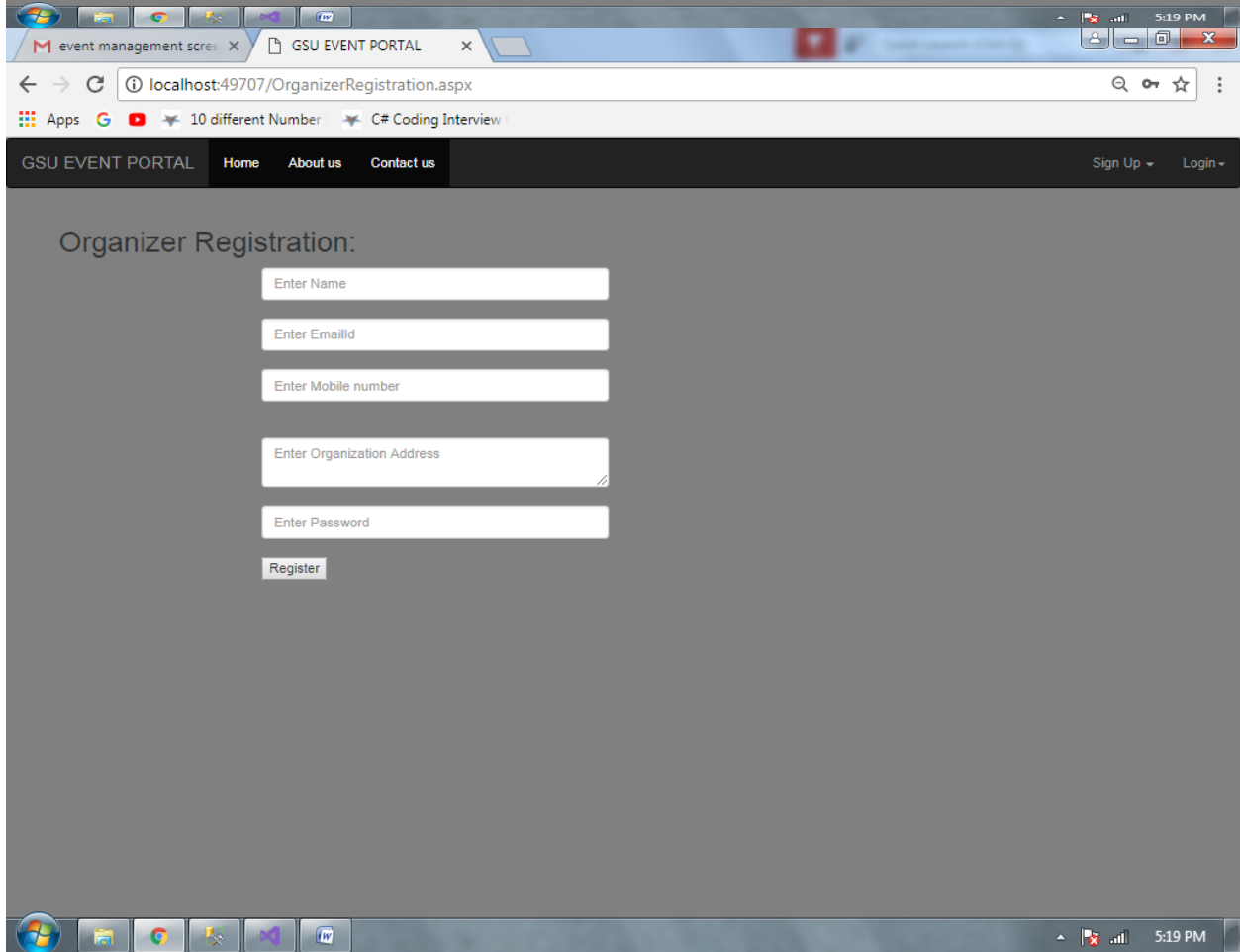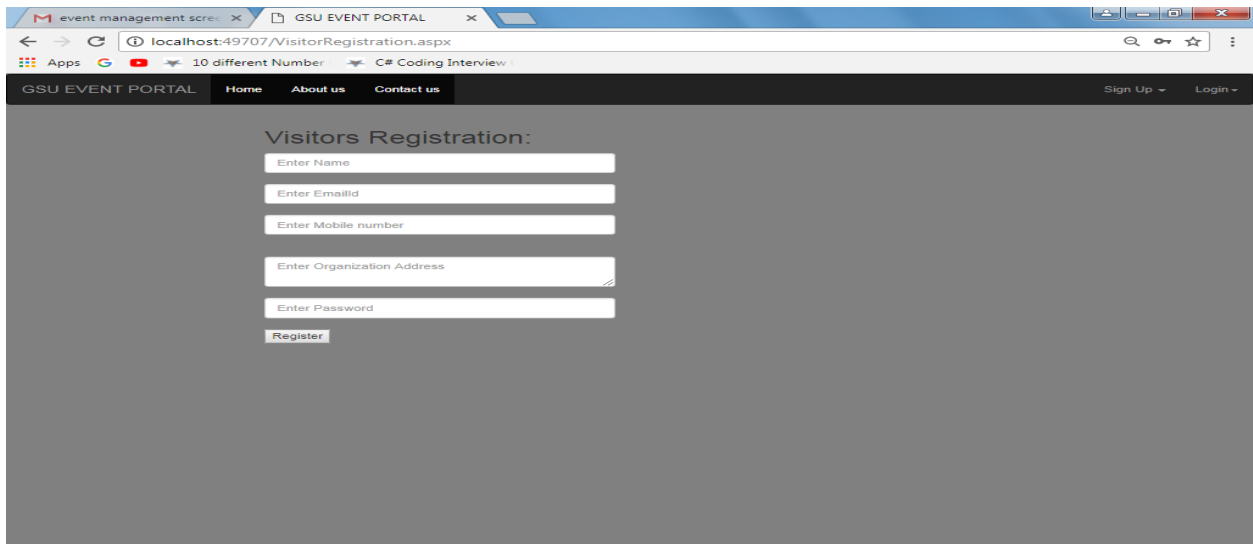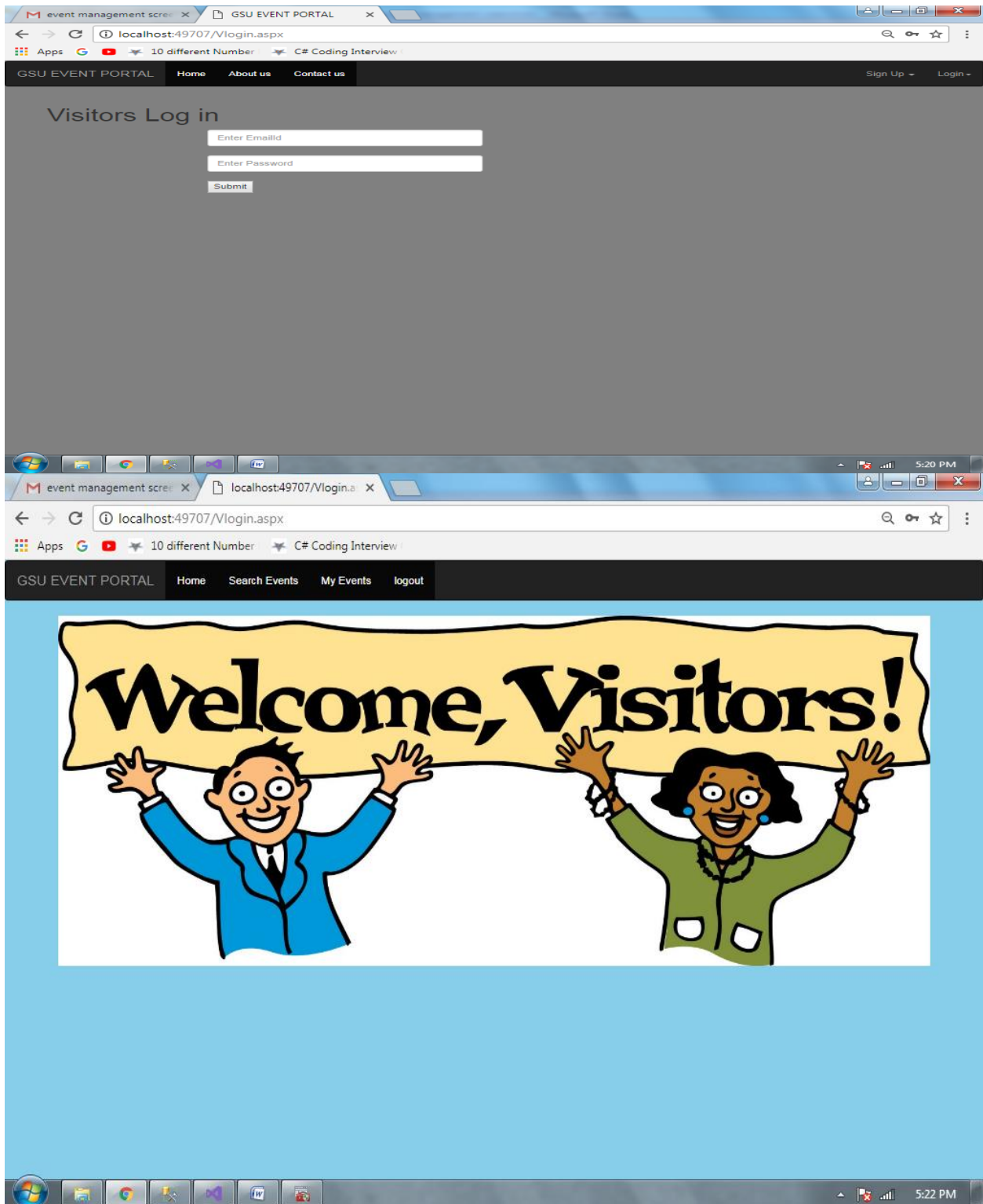
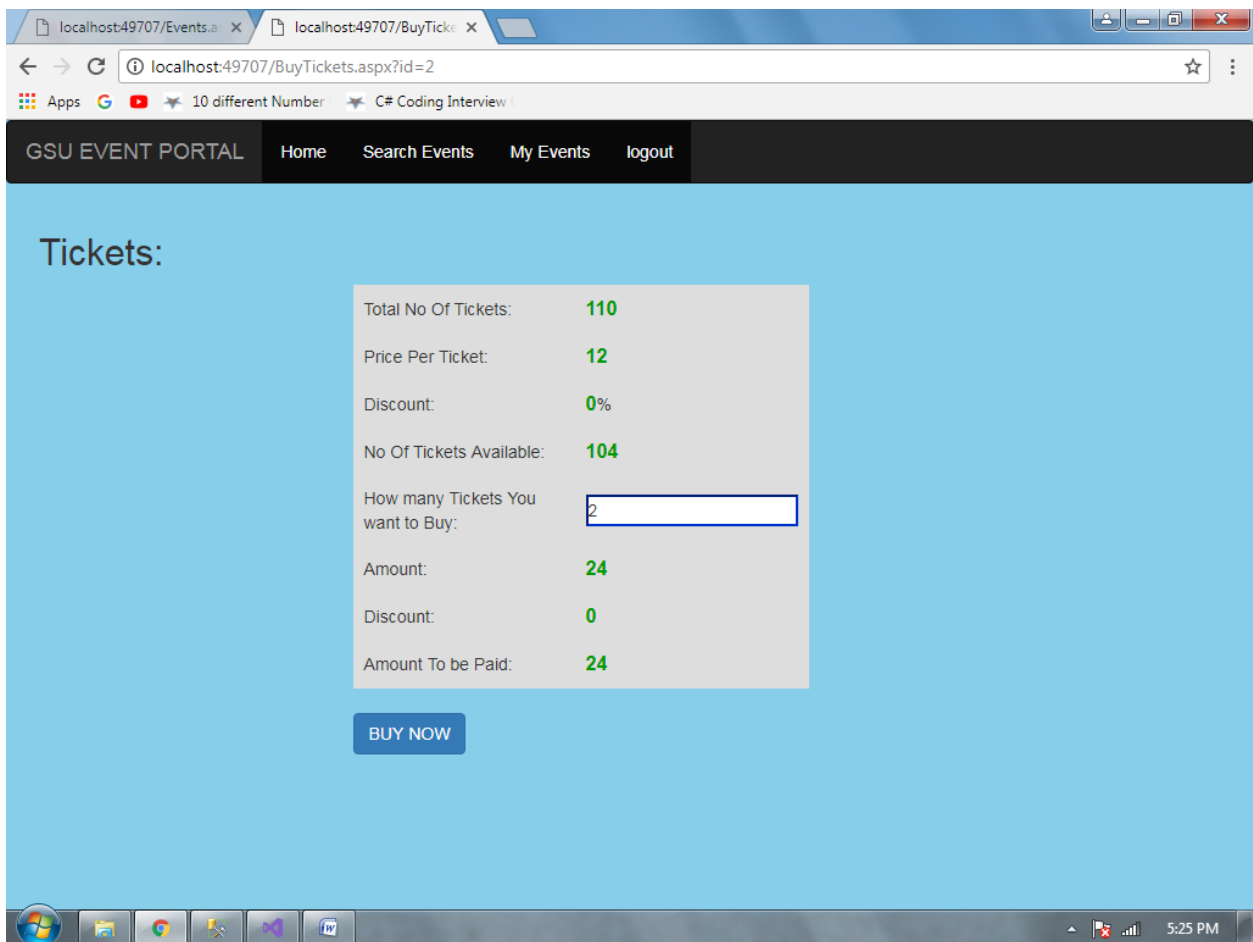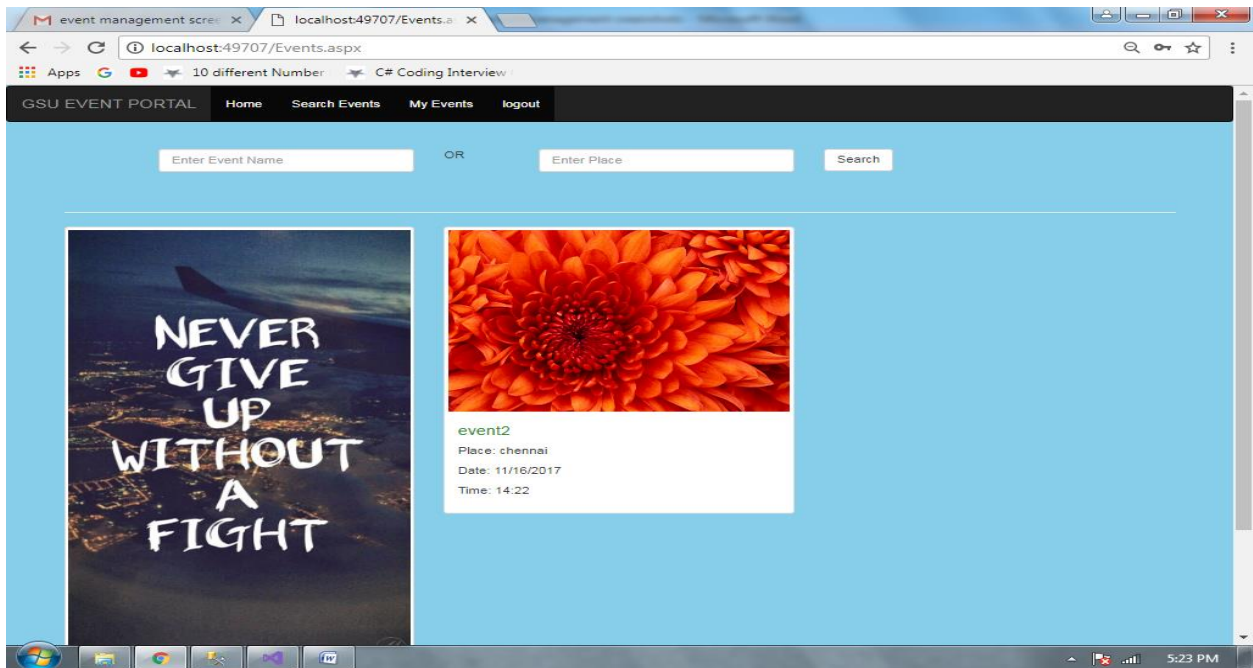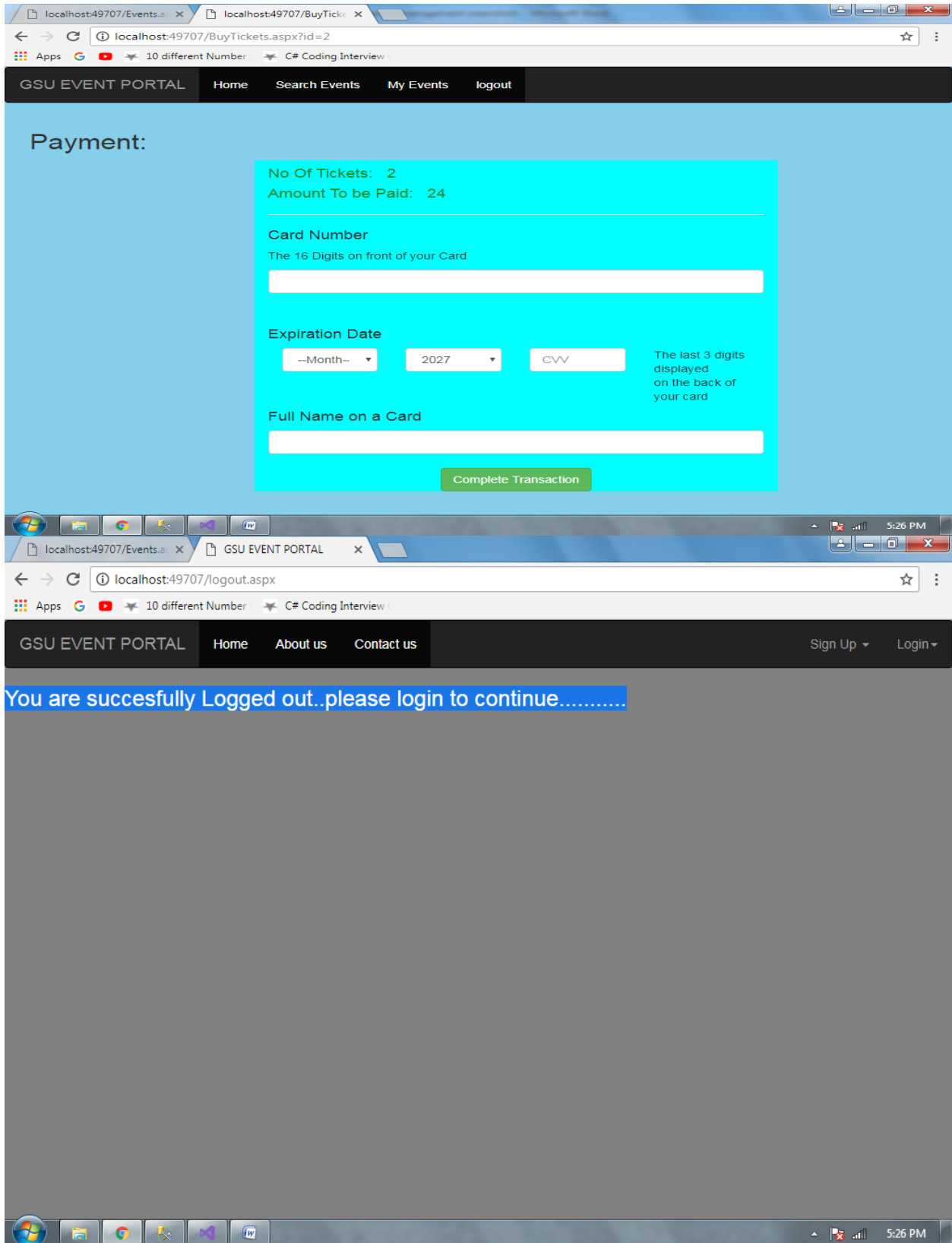## 5   *Internal/external Interface Impacts and Specification*

Front-end pages:

Index page:
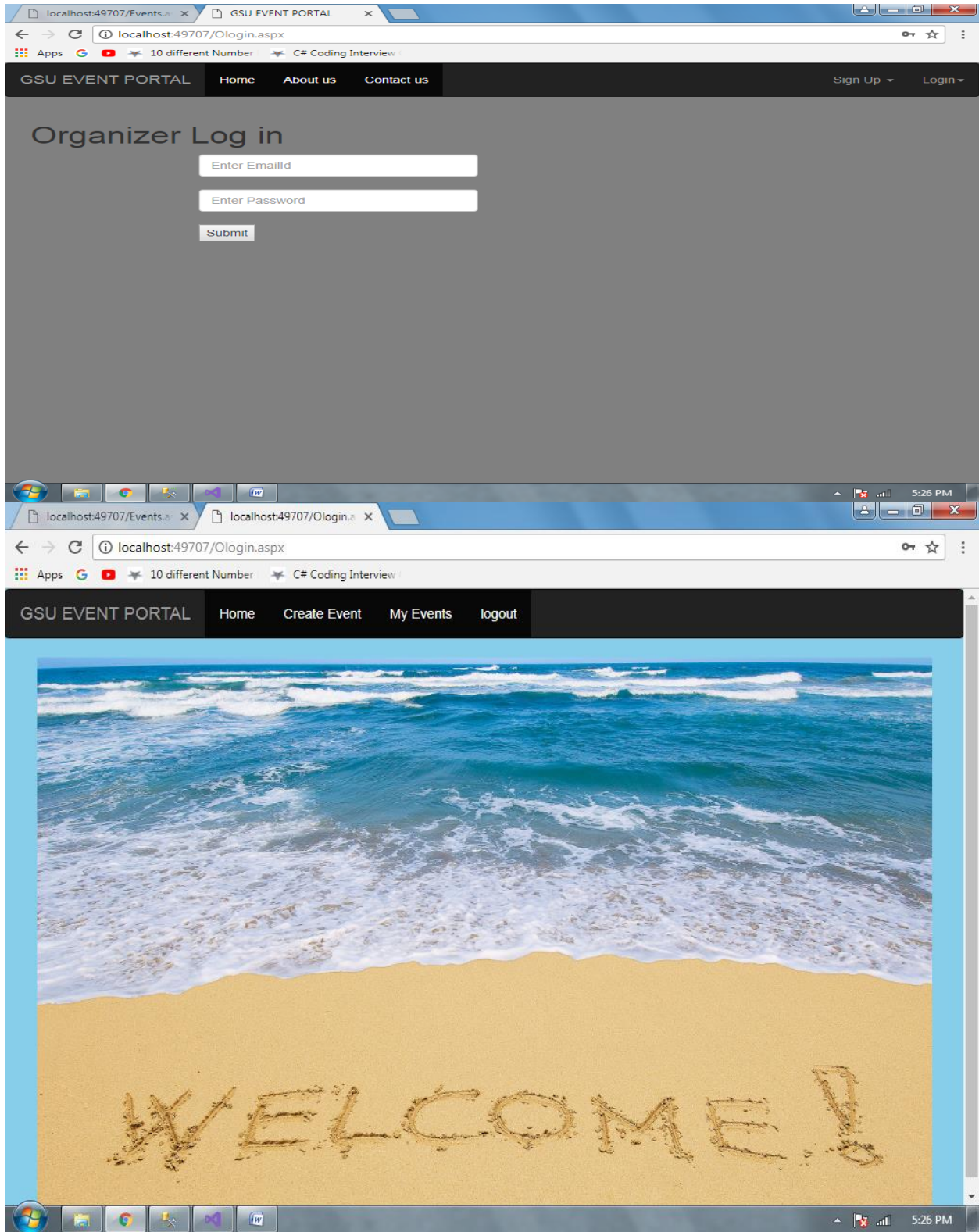
Visitors Log in

Enter EmailId

Enter Password

Submit

GSU EVENT PORTAL   Home   About us   Contact us   Sign Up   Login

GSU EVENT PORTAL   Home   Search Events   My Events   logout

Welcome, Visitors!

Event Registration:

Enter Event Name   Time: --:-- --

Enter Event Date   Enter Event Place

Event Description:

Select Cover Photo:

Choose File | No file chosen

Create

GSU EVENT PORTAL   Home   Create Event   My Events   logout

My Events

Event Id	Event Name	Date	Time	Place	select
1	event1	11/09/2017	11:11	hyd	select
2	event2	11/16/2017	14:22	chennai	select

Activity Log:

Email Id	Activity	Date and Time
visitor@gmail.com1	Logged-in	11/14/2017 12:13:31 PM
visitor@gmail.com1	Bought Tickets	11/14/2017 12:21:02 PM
visitor@gmail.com1	Logged-Out	11/14/2017 12:44:00 PM
visitor@gmail.com1	Logged-in	11/14/2017 12:57:26 PM
visitor@gmail.com1	Bought Tickets	11/14/2017 1:50:05 PM
visitor@gmail.com1	Logged-in	11/15/2017 10:05:45 AM
visitor@gmail.com1	Bought Tickets	11/15/2017 10:06:42 AM
visitor@gmail.com1	Logged-in	11/23/2017 3:02:28 PM
visitor@gmail.com1	Bought Tickets	11/23/2017 3:04:11 PM
visitor@gmail.com1	Bought Tickets	11/23/2017 3:07:59 PM
visitor@gmail.com1	Logged-in	11/23/2017 3:43:52 PM
visitor@gmail.com1	Logged-in	11/23/2017 3:57:31 PM
visitor@gmail.com1	Logged-in	11/29/2017 5:22:44 PM

Organizers List:

Name	Mobile Number	Email Id	Address	View Track	DELETE ORGANIZER
organizer	9632587410	org@gmail.com1	xx	Track Organizer	DELETE

6 Design Units Impacts

The project development has started in a well-organized way. Initially we completed all the requirements then we started designing the application. While starting the design then we encounter different requirement clarity issues to state them in the design. Designing the application helped us a lot in knowing the flow of the information from one table to the other, one interface to the other. Even we had a clarity in the navigation of the application that from which place to which place the user must navigate etc.
We have used the use-case diagrams, activity diagrams, sequence diagrams to know the functionalities and to know the flow of information. Apart from this we had even completed the database designs which helped us to know what kind of information we are storing in the application and how that will be helpful for the organization in the future.

6.1 Functional Area A/Design Unit A

6.1.1 Functional Overview
Replace this section with a brief overview of the impacts to the functional area.

6.1.2 Impacts
Replace this section with the description of the project impacts on this functional area. If there are no known impacts, state that accordingly. Sufficient detail should be provided to allow for developers to change functional area documentation as well as the associated software or hardware design.

6.1.3 Requirements

Functional Requirements: After clearly analyzing the functionalities of the application, the following information is gathered, and we are treating them as the functional requirements. While gathering the information, we came to know different roles of the people who are involved in usage of this application. This application is basically used by 3 different types of users, they are Admin, Organizer and the visitor. Let us have the functional requirements of each user.

Admin Requirements:

View user's login details: Admin can have the right to know the information about the users that when they are logging into their application and how much time they have spent with the application are recorded and they can be viewed by the Admin.

Edit/Delete Events: Admin is having the right to edit and delete the events. He can able to communicate with the organizers and convey the information.

Review the user's list: Whatever the registrations had with the application, all the registrations can be viewed by the admin.

View the organizers list: There are different organizers will be there for organizing the events. The list of organizers for the event can be viewed by the admin.

Location Information: The information related to the event and the location where this event is organized will be known to admin.

Organizer Requirements: He is the person who will be organizing the events. He is having the information related to the events, he can create the events, edit the events, he can know the information about the payments, he can view the events list created him.

To become an organizer, he must register first with the application and then he can perform the organizer functionalities.

Registration: To become an organizer, he must register with the application by submitting the user credentials.

Login: After registering with the application, if the organizer wants to implement his roles and responsibilities then he has to login into the application. This is one sort of security that is provided to the application.

Create and Edit events: Organizer is having the right to create and edit events. All the necessary information which is related to the event will be given by the organizer.

Payments information: Organizer can know the details of the payments made by the user. All users' payment information can be viewed by the organizer.

View list of events: An organizer can create more than one event, he can view all the events information which is created by him.

Visitor Functionalities:

The following are the operations which can be performed by the visitor when he entered the application. These functionalities include

Profile creation: User can create his/her profile by signing up with the application.

Search Facility: He can search the information of the events and about the information which is present in the application.

View the events information: User can view all the information about the events along with the images, videos and any other information which is related to the events.

Payments: He can able to make the payment for any of the event. All this information will be stored and at the later stages the same information can be viewed by the user.

Booking History: He will be knowing the information of the events and their bookings.

All the above requirements are framed with the requirement number in the previous sections. These numbers can be used when the requirements will get updated.

7   Acknowledgements

This section should include a reference to prior authors, etc. and others who have assisted in the generation of this document.

8   References

Peatix: Tools for Communities and Events. (2017). *Peatix*. Retrieved 5 December 2017, from
http://www.peatix.com

Eventbrite. (2017). *Eventbrite*. Retrieved 5 December 2017, from http://www.eventbrite.com
www.eventbee.com

Best Event Management Software | 2017 Reviews of the Most Popular Systems.
(2017). *Capterra.com*. Retrieved 5 December 2017, from
https://www.capterra.com/event-management-software/

Event Management Software | Cvent. (2017). *Cvent.com*. Retrieved 5 December 2017, from
http://www.cvent.com/en/event-management-software/

Online Event Registration & Event Management System with Evenesis. (2017). *Online Event Registration*. Retrieved 5 December 2017, from https://www.evenesis.com/