

# **Event Management System**

*In partial fulfillment of the requirements  
for the award of the degree of BACHELOR OF TECHNOLOGY*

**IN**

**COMPUTER SCIENCE ENGINEERING**

*By*

**Dantu Venkata Sai Kamal**

**(19E11A0562)**

*Under the guidance of*

**P. Kiranmai**

Assistant Professor,

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

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## *Certificate*

*This is to certify that the project work entitled "Event Management System" is the bonafide work done*

**By**

**D.V. Sai Kamal**

**19E11A0562**

*in the Department of Computer Science and Engineering, BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, Ibrahimpatnam is submitted to Jawaharlal Nehru Technological University, Hyderabad in partial fulfillment of the requirements for the award of B.Tech degree in Computer Science and Engineering during 2019-2023.*

**Guide:**

**P. Kiranmai**

Associate Professor,

Department of Computer Science Engineering

Bharat Institute of Engineering and Technology,

Ibrahimpatnam – 501 510, Hyderabad.

# Event Management System

**Dantu Venkata Sai Kamal**

**Abstract—** Event Management System is developed to assist students and faculties in handling college events such as Technical fests, and other events which involves registration of users to the events through a web application. The Event Management System is a responsive, dynamic web application with which the users can interact and register to events of their choice with ease. This will eliminate the need of unnecessary paperwork involved.

**Keywords:** Event Management System, Event handling, PHP, MYSQL

## 1.1 Introduction

Event Management System is a web application developed using PHP, MySQL that can be used in managing college events. With the pandemic struck, many colleges decided to host their events online. One such event that can be conducted online is the technical fest, which is an annual event looked up to by almost every university and college. Technical fests are conducted with great number of events and a number of students register to the events.

With most universities shifting to online mode of conducting events and fests, there involves a need of a medium, or a system to help management the events that are being conducted. The students as well as the faculties can make use of such system to display information about the various events are being conducted which allows interested users directly register to the event that fascinates them.

Event Management System is aimed to assist in the exact manner. Event Management System is a web application, which allows users access the system directly with the help of a browser without installing any mobile application. This increases the accessibility of the application. The web application is developed using PHP, MySQL, HTML and CSS. PHP is used for server-side scripting of the web application. And HTML, CSS, Styled Components are used for the frontend part of the application. The Event Management System is deployed in Heroku Cloud.

## 1.2 Purpose

The main purpose of Event Management System is to assist students and faculties in managing events with ease. It can further be used in:

- Handling college clubs effectively
- Handling charity events to raise funds for a cause
- Managing activities in Organizations
- Registering to events with ease
- Generating reports of registered users

## 1.3 Definitions, Acronyms, and Abbreviations

i. **UML**: The UML stands for Unified modeling language, is a standardized general-purpose visual modeling language in the field of Software Engineering. It is used for specifying, visualizing, constructing, and documenting the primary artifacts of the software system. It helps in designing and characterizing, especially those software systems that incorporate the concept of Object orientation. It describes the working of both the software and hardware systems. [2]

## 2. The Overall Description

### 2.1 Proposed System:

The proposed Event Management System is developed to assist students and faculties manage events with ease. It is further divided into modules such as:

- **Event tracking:**

The events created are stored in a MySQL Database in JawsDB server that is hosted by AWS. The event data is retrieved through SQL queries. This allows users to check all the listed Events in the web page. New events can be added with ease by storing event details such as Event Name, Event type, Event registration fee, and Event poster in the Database. These details are retrieved by the web application through SQL queries.

- **Registration of Users:**

Users can register to the event of their choice with the help of the Event Management System. The Web application contains a form which asks for user information such as Name, Email, Mobile, Event to register, Class, Section and Address. This information will help to analyze and prepare reports about the events and the users registered in the events.

- **Documentation:**

The Web application contains clear cut documentation of various events and the information about each of the events. This documentation will be useful for the users to get to know about the information that they are interested. The users can register to the events of their choice after going through the documentation provided in the web application.

- **Automated delivery of Reports**

Detailed reports can be dynamically generated by the web application and can be mailed to the admin. These reports include the details of the users registered. This will help in eliminating manual work in going through each registration to get analytics of the user registrations.

- **Accessible/ Dynamic Web Application**

The Event Management System is a web application that can be accessed through any device such as a desktop computer, a mobile phone, a tablet, or even a smart watch. The web application requires a browser that can load web pages. Hence, the web application is accessible and dynamic.

## 2.2 Scope:

The scope of the project is to build an Event Management System without any issues that is designed to facilitate managing events without any trouble.

Benefits: It has various benefits:

- Manage College-level events with ease.
- Secured registration system
- Auto generate user reports
- Provide abstraction of implementation details.

Goals: The goal of this project is to deploy proposed project, that is Event Management System successfully.

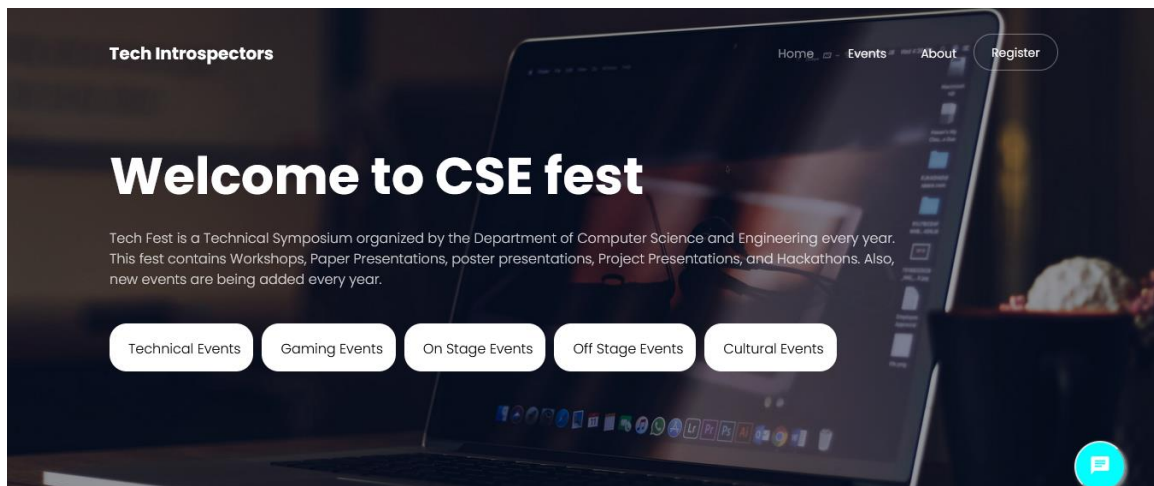
## 2.3 Module Description:

Event Management System is divided into following modules:

1. Landing module
2. Documentation module
3. Events module
4. Registration module
5. Admin module

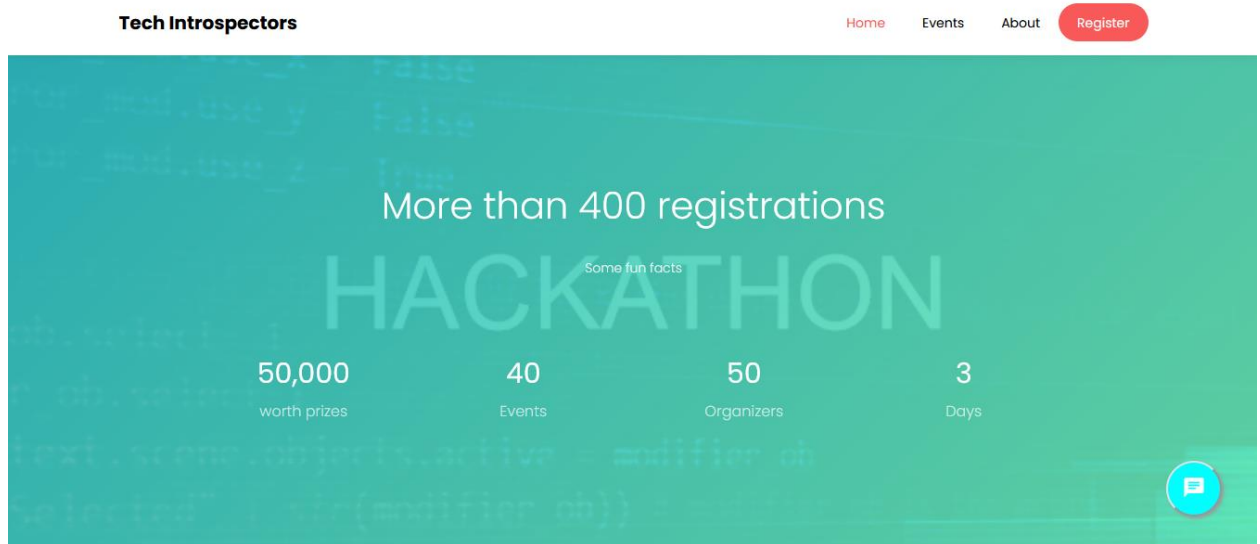
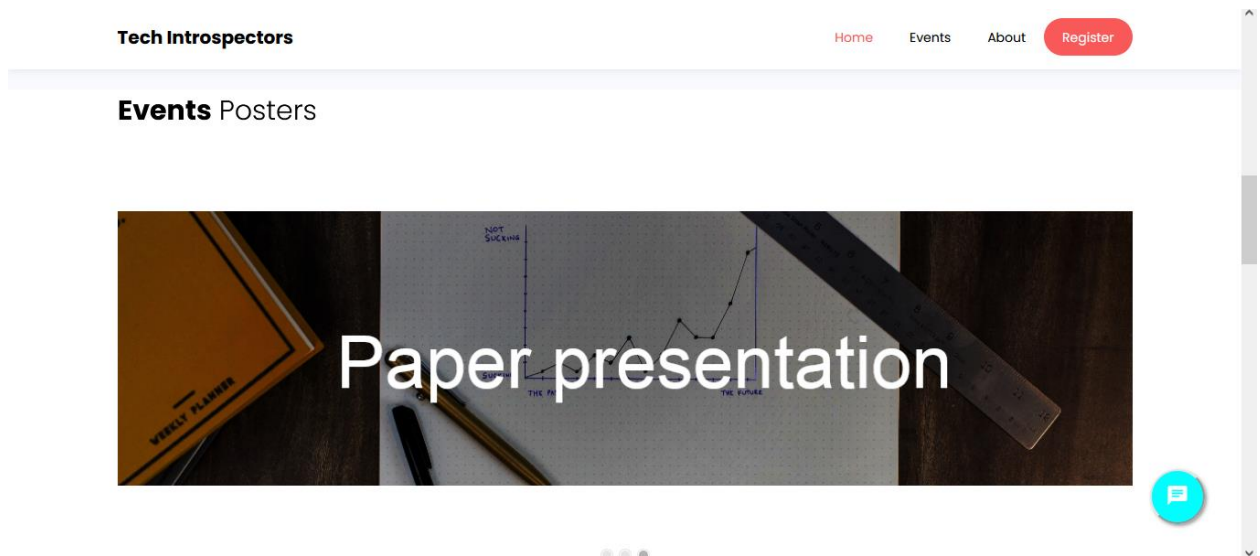
### 1. Landing module:

This module is the entry point of the Event Management System. It is the home page of the web application. It contains basic information of the Event being conducted. For example, if a Tech fest is being conducted in a college, The landing module can list information of the tech fest. Details such as name, posters, possible dates of the event can be displayed in the Landing module.



## 2. Documentation module:

Documentation module is developed to assist the users in registering to the events. It will contain information on how to register to particular event and will guide the users across the web application. Documentation module is solely to assist users in using the Event Management System.



### 3. Events module:

Events module contains in detailed information of various events that are added to the Database. Various categories or types of events such as the Technical, Non-Technical events, Cultural events, etc. can be listed in the documentation module. And the organized events can be listed under the type of events as per their category. This module will contain names of the events, registration links, price of registration (if applicable), posters of the events, and more information about each of the events.

**Tech Introspectors**HomeEventsAboutRegister

**Register** to your Favourite Events

Technical Events


Gaming Events

On Stage Events


Off Stage Events

Cultural Events

Technical Events



**tech quiz**  
50 RS  
More information will be added soon.  
Sai Book



**pair programming**  
50 RS  
More information will be added soon.  
Sai Book

#### 4. Registration module

The registration module is aimed to help the users register to the events of their choice. It is achieved by the help of a Registration form that asks users the information such as their Name, Email, Mobile, Event to register, Class, Section and Address. The user will submit the form after filling their details using the submit button. The submit button will trigger the back-end code and will store the user information in the user database. In this way, a user can successfully register in the events if their choice.

The screenshot shows the 'Tech Introspectors' website. On the left is a registration form with the following fields: 'Your Name', 'Your Email', 'Mobile', 'College', 'Branch', 'Section', and 'Event name'. Below these fields is a red 'Register' button. On the right is a map showing the location of 'Bharat' in Mangalpally (V), Ibrahimpatanam, Hyderabad, Telangana 501510. The map includes a search bar, a 'Directions' button, and a 'View larger map' link. Other landmarks visible on the map include Narmada Food Products, Indira Gandhi statue, Patel Guda, Pochamma Temple, Sivalayam Temple, Shubham convent hall, and Mangalpally Mahamayi.

#### 5. Admin module

The admin module is implemented by making use of the concept of abstraction. The admin module will not be visible to the end users. It can only be accessed by the admin and will contain information about the user analytics. The admin will be able to add new events and modify or delete the existing events. These changes will be reflected in the events module that is accessed by the end users. The admin module is important to make overall changes to the events directly from the web application and is used by the students or faculties who are in charge of organizing the events

The screenshot shows the MySQL Admin tool interface. The top bar displays the server name 'Server: 127.0.0.1' and the database name 'Database: eventsite'. Below the top bar is a menu bar with options: Structure, SQL, Search, Query, Export, Import, Operations, Privileges, Routines, and Events. The main area shows a table structure for the 'eventsite' database. The table structure is as follows:

Table	Action	Rows	Type	Collation	Size	Overhead
events	Browse Structure Search Insert Empty Drop	6	InnoDB	latin1_swedish_ci	16.0 K	1 B
event_type	Browse Structure Search Insert Empty Drop	5	InnoDB	latin1_swedish_ci	16.0 K	1 B
participants	Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16.0 K	1 B
3 tables	Sum	12	InnoDB	utf8mb4_general_ci	48.0 K	0 B

At the bottom of the table structure, there is a 'Filters' section with a search bar 'Containing the word:' and a 'Check all' button. Below the 'Check all' button is a dropdown menu 'With selected:'.



### **3. Specific Requirements:**

#### **3.1 Hardware Requirements**

CPU: Intel® i3 processor or higher.

RAM: 4 GB

GPU: Not necessary

Disk Space: 80 GB

#### **3.2 Software Requirements**

Operating System: Windows 7 or higher

Browser: Google Chrome v89.0.4389

Integrated Development Environment: VS Code

Server: XAMPP v7.4.9 (Apache Localhost)

Additional Technologies: PHP 7.4.9, Composer v 2.0.12, MySQL

Database: MySQL (JawsDB instance)

Cloud: Heroku

#### **3.3 Functional Requirements**

1. Registration: The user must correctly fill the registration form
2. Admin: The admin must enter only the admin username and password to access the admin module.
3. Event management: Only admin should be able to make changes to the events. Users should only be able to view the listed events that were added by the admin.

#### **3.4 Non-Functional Requirements**

1. Security:  
App users should check the performance of the secure shell [https] at URL  
It is recommended that you update the plugins in the Internet agent before the program is launched
2. Availability: The Event Management System should never be down and should always be accessible.
3. Accuracy: The accuracy of the information published about the events in the application is guaranteed, the admin or event organizers are responsible for it.
4. Flexibility: The Event Management System is flexible to develop new models and changes.
5. Maintability: The Event Management System is easy to maintain and should be easy to fix bugs incase any issues arise.
6. Reliability: The application website guarantees the integrity of the data so it should be reliable.

## 4. Model Applicable:

Considering the basic needs of each module, the waterfall model is the most popular solution for managing the workflow intelligently & digitally: in particular, this is based on SLDC (Software Development Life Cycle) and module development based on the participants involved in the services.

- Detailed user needs analysis
- Planning to design modules
- Application implementation.
- Test modules to run the application

## 5. Modelling Tables:

### 5.1 Database Schema:

Following are the Tables that are included in the Database. The Database is created by using MySQL and is named 'eventsite'

eventsite events
event_id : int(100)
event_title : text
event_price : int(20)
participants : int(100)
img_link : text
type_id : int(100)

eventsite participants
p_id : int(10)
event_id : int(10)
fullname : varchar(100)
email : varchar(300)
mobile : varchar(10)
college : varchar(300)
branch : varchar(11)

eventsite event_type
type_id : int(10)
type_title : text

DB overview:

Server: 127.0.0.1 > Database: eventsite							
Structure SQL Search Query Export Import Operations Privileges Routines							
Filters							
Containing the word:							
Table	Action	Rows	Type	Collation	Size		
<input type="checkbox"/> events		6	InnoDB	latin1_swedish_ci	16.0 K	16.0 K	
<input type="checkbox"/> event_type		5	InnoDB	latin1_swedish_ci	16.0 K	16.0 K	
<input type="checkbox"/> participants		1	InnoDB	latin1_swedish_ci	16.0 K	16.0 K	
3 tables Sum		12	InnoDB	utf8mb4_general_ci	48.0 K	48.0 K	
<input type="checkbox"/> Check all With selected: <input type="text"/>							

## 5.2 Events Table:

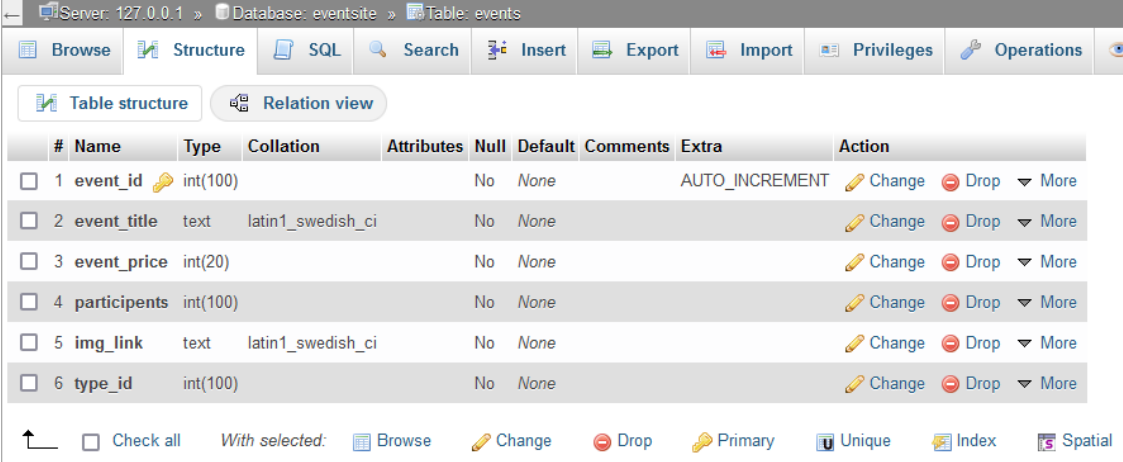
The Events Table contains the information of various events that are added to the Database.

### Creating table:

```
CREATE TABLE `events` (  
  `event_id` int(100) NOT NULL,  
  `event_title` text NOT NULL,  
  `event_price` int(20) NOT NULL,  
  `participants` int(100) NOT NULL,  
  `img_link` text NOT NULL,  
  `type_id` int(100) NOT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

### Inserting data:

```
INSERT INTO `events` (`event_id`, `event_title`, `event_price`, `participants`,  
  `img_link`, `type_id`) VALUES  
(1, 'pubg', 50, 4, 'cs01.jpg', 2),  
(2, 'tech quiz', 50, 2, 'cs02.jpg', 1),  
(3, 'counter strike', 50, 1, 'cs01.jpg', 2),  
(4, 'pair programming', 50, 2, 'cs01.jpg', 1),  
(5, 'seminar', 50, 1, 'cs02.jpg', 3),  
(6, 'multiple choice', 50, 1, 'cs01.jpg', 4);
```



The screenshot shows a database management interface with the following components:

- Top bar: Server: 127.0.0.1, Database: eventsite, Table: events
- Navigation tabs: Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, Operations
- Sub-tabs: Table structure (selected), Relation view
- Table structure table:

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	event_id	int(100)			No	None		AUTO_INCREMENT	<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
2	event_title	text	latin1_swedish_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
3	event_price	int(20)			No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
4	participants	int(100)			No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
5	img_link	text	latin1_swedish_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
6	type_id	int(100)			No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>

Bottom bar: [Check all](#) With selected: [Browse](#) [Change](#) [Drop](#) [Primary](#) [Unique](#) [Index](#) [Spatial](#)

### 5.3 Event\_type Table:

The event\_type table contains the categories or types of events such as the Technical, Non-Technical events, Cultural events, etc.

#### Creating Table:

```
CREATE TABLE `event_type` (  
  `type_id` int(10) NOT NULL,  
  `type_title` text NOT NULL  
)  
ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

#### Inserting data:

```
INSERT INTO `event_type` (`type_id`, `type_title`) VALUES  
(1, 'Technical Events'),  
(2, 'Gaming Events'),  
(3, 'On Stage Events'),  
(4, 'Off Stage Events'),  
(5, 'Cultural Events');
```

The screenshot shows a database management interface with a toolbar at the top containing buttons for Browse, Structure, SQL, Search, Insert, Export, and Import. Below the toolbar, a status bar indicates "Showing rows 0 - 4 (5 total, Query took 0.0009 seconds.)". The SQL query editor displays "SELECT \* FROM `event\_type`". Below the query editor, there are links for Profiling, Edit inline, Edit, Explain SQL, Create PHP code, and Refresh. A control bar shows "Show all", "Number of rows: 25", "Filter rows: Search this table", and "Sort by key:". Below this, a table with 2 columns, "type\_id" and "type\_title", displays 5 rows of data. Each row has checkboxes for Edit, Copy, and Delete. At the bottom, there are links for Check all, With selected, Edit, Copy, Delete, and Export.

	type_id	type_title
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	Technical Events
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	Gaming Events
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	On Stage Events
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	Off Stage Events
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	Cultural Events

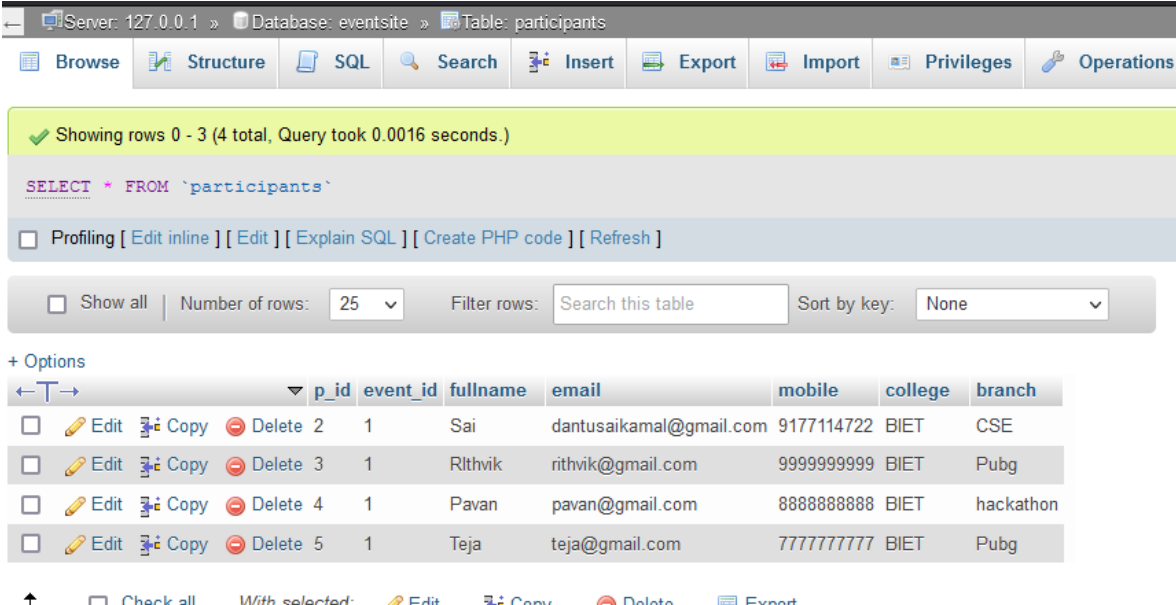
## 5.4 Participants Table:

The participants table will contain the list of registered users who submitted the registration form after filling the details.

```
CREATE TABLE `participants` (  
  `p_id` int(10) NOT NULL,  
  `event_id` int(10) NOT NULL,  
  `fullname` varchar(100) NOT NULL,  
  `email` varchar(300) NOT NULL,  
  `mobile` varchar(10) NOT NULL,  
  `college` varchar(300) NOT NULL,  
  `branch` varchar(11) NOT NULL ) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

```
INSERT INTO `participants` (`p_id`, `event_id`, `fullname`, `email`, `mobile`,  
  `college`, `branch`) VALUES  
  
(2, 1, 'Sai', 'dantusaikamal@gmail.com', '9177114722', 'BIET', 'CSE'),  
(3, 1, 'Rithvik', 'rithvik@gmail.com', '9999999999', 'BIET', 'Pubg'),  
(4, 1, 'Pavan', 'pavan@gmail.com', '8888888888', 'BIET', 'hackathon'),  
(5, 1, 'Teja', 'teja@gmail.com', '7777777777', 'BIET', 'Pubg');
```

In the participants table, data is not entered by the admin through SQL. But the data is fetched from the registration form after the user submits the form.



The screenshot shows a database management interface with the following components:

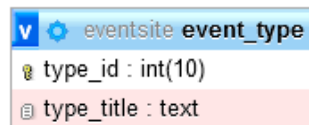
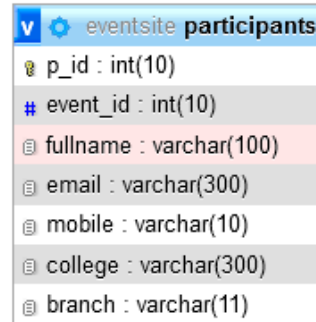
- Header: Server: 127.0.0.1 » Database: eventsite » Table: participants
- Navigation bar: Browse, Structure, SQL, Search, Insert, Export, Import, Privileges, Operations
- Status bar: Showing rows 0 - 3 (4 total, Query took 0.0016 seconds.)
- Query editor: `SELECT * FROM `participants``
- Options bar: ☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]
- Filter bar: ☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None
- Table view:

			p_id	event_id	fullname	email	mobile	college	branch
<input type="checkbox"/>	Edit	Copy	Delete	2	1	Sai	dantusaikamal@gmail.com	9177114722	BIET CSE
<input type="checkbox"/>	Edit	Copy	Delete	3	1	Rlthvik	rithvik@gmail.com	9999999999	BIET Pubg
<input type="checkbox"/>	Edit	Copy	Delete	4	1	Pavan	pavan@gmail.com	8888888888	BIET hackathon
<input type="checkbox"/>	Edit	Copy	Delete	5	1	Teja	teja@gmail.com	7777777777	BIET Pubg
- Footer: ☐ Check all | With selected: Edit Copy Delete Export

## 6. UML Diagrams:

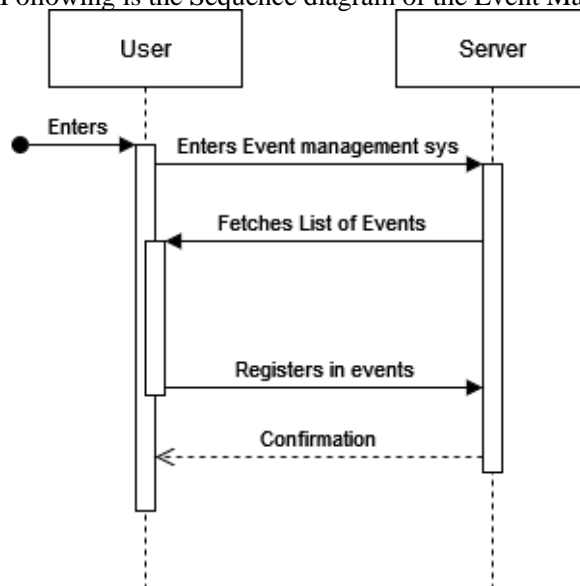
### 6.1 Class Diagram:

Following is the class diagram of the Event Management System.



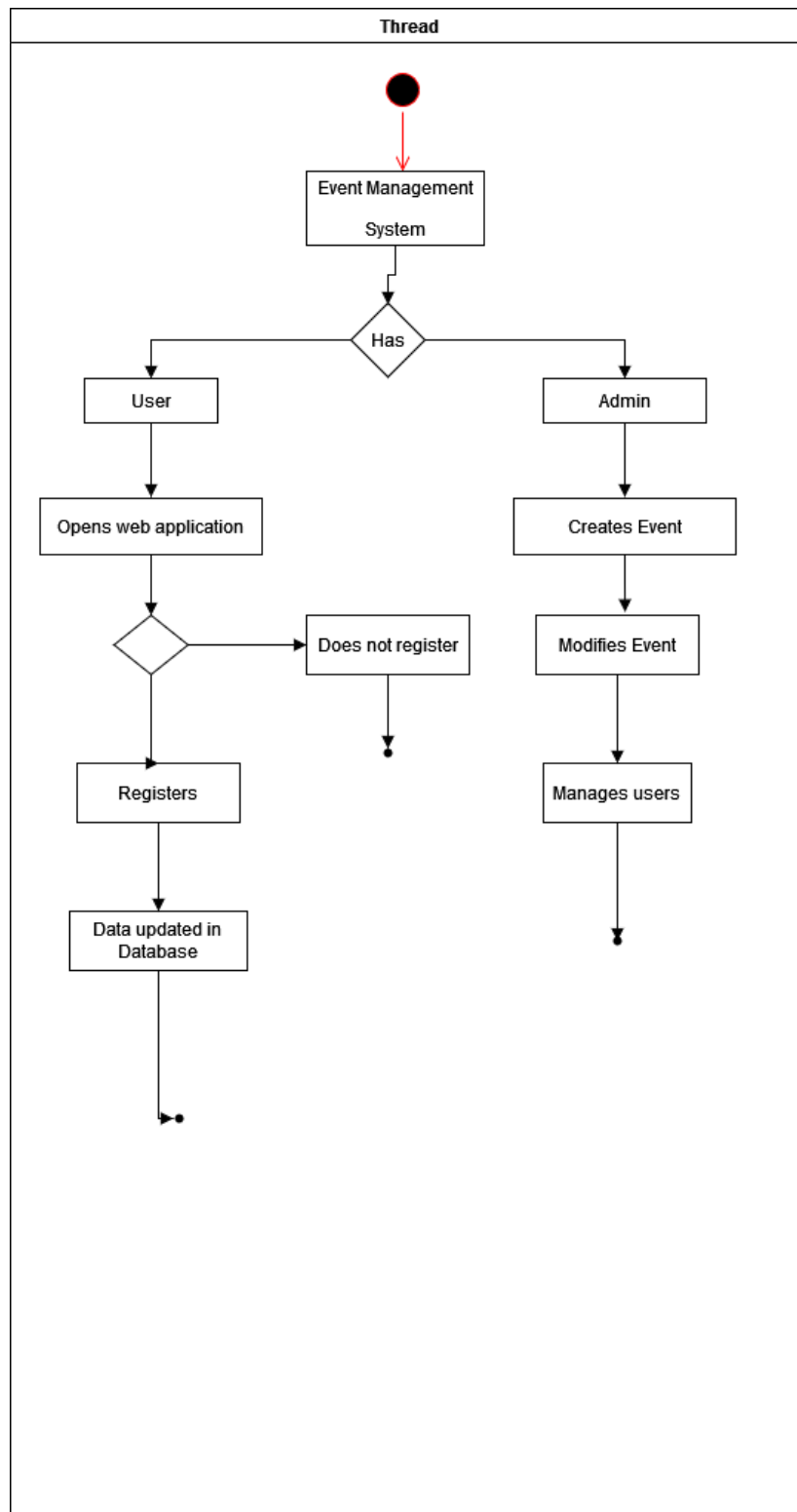
### 6.2 Sequence Diagram:

Following is the Sequence diagram of the Event Management System.



### 6.3 Activity Diagram:

Following is the Activity diagram of the Event Management System.



## **7. Conclusion:**

Event Management System has many advantages and uses. It can be definitely used in managing college fests and other events.

With most universities shifting to online mode of conducting events and fests, there involves a need of a medium, or a system to help management the events that are being conducted. And our Event Management System is the perfect solution with which the students as well as the faculties can display information about the various events are being conducted which allows interested users directly register to the event that fascinates them.

## **8. References:**

1. <https://github.com/Dantusaikamal/Event-management-web> (My code)
2. <https://www.javatpoint.com/uml>
3. <https://eventmanagement-system.herokuapp.com/> (My Web application)