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GSU Event Portal

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ABSTRACT

The Web-based systems have become very popular in recent software applications. Keeping in trend with the developments, it is proposed to have an event portal for browsing and creating the events in a web server.

The proposed system would include two levels, the Admin and the User.

Admin Controls: The admin has the authority to check the events posted by the user and can also manage and modify the different departments in the application like edit or delete the events, reviews registrations and administer user accounts.

User Controls: The user can log in to create or edit events, and can also review registrations and payments.

Compared to existing applications, we can find the proposed application more user-friendly with ease of access. Once the user registers in this application, they can also subscribe to find out the latest events happening around their respective places. They can even purchase tickets to the events through the application by using the payment gateway in the application. When subscribed, the users can receive the various promotional codes and offers to the various events.

This application would release by the end of August 2016.

Technical Details:

- UI: HTML5, CSS3, Bootstrap frameworks.
- Tool: Microsoft Visual Studio 2015
- Database: My SQL
- .Net C#

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1. Project Description

1.1 Competitive Information

In a modern day studies, use of computers and internet has become mandatory in almost all the aspects including in study. So our objective is to design a web-based application in which students will have their own login accounts so will the faculty members which is to know the events that are occurring around the college. Beyond the limitations of online delivery and student exchange to offer a more flexible, meaningful, and globalized learning experience. “GSU Portal” brings together geographically distant students through innovative curriculum and technology to create a student-centered community of inquiry neither bound by discipline nor countries. With the GSU event portal students can have the more flexible in knowing the daily events that are occurring in the campus. So that if they want to wanted them they can sign up early and attend the events. This will help in increase communication.

1.2 Relationships to Other Applications/Projects

This portal mainly contains the information of event like where, when and what event and also if there is any entry fee that information also provided. It ease the students more to know about any event going around the campus and if anyone interested to volunteer any social events so they can also go make and participate in the event and help them.

1.3 Future Enhancements

Presently we are developing an independent project which doesn't have any relationships with the other application. May be in future we will try relate with the other application

1.4 Definitions and Acronyms

User: The one who browses the events and registers, he can even create the event.

Admin: He can manage the events, edit and delete the events.

2. System Requirements

Hardware Requirements.

- Hard disk 250 GB
- Ram 4 GB and above
- Processor i3 and above.

Software Requirements.

- Microsoft Visual Studio 2015
- Operating System Windows 2008 and above
- C#
- Html and CSS

3. Project Technical Description

In this project we have 6 Web Pages which include a Login page, Signup Page, Browse Events, Create Events and Registration page and Checkout page. These web pages are designed to be responsive for every screen. The Database should be created containing all the tables which can store the User data like Name, Email id, Phone number, Address. Details about the Event Name, Location, Time, Price, Type, Image and Description are stored in the different database tables. Asp .Net framework is used to control the web application. Different modules are used in the application.

3.1 Project/Application Architecture

GSU Event Portal has two modules User and Admin. User module has several controls such as Browse Event, Create events and register for an event. Admin has controls such as Edit, Manage events and can review registrations. All these controls are developed using C# .Net framework.

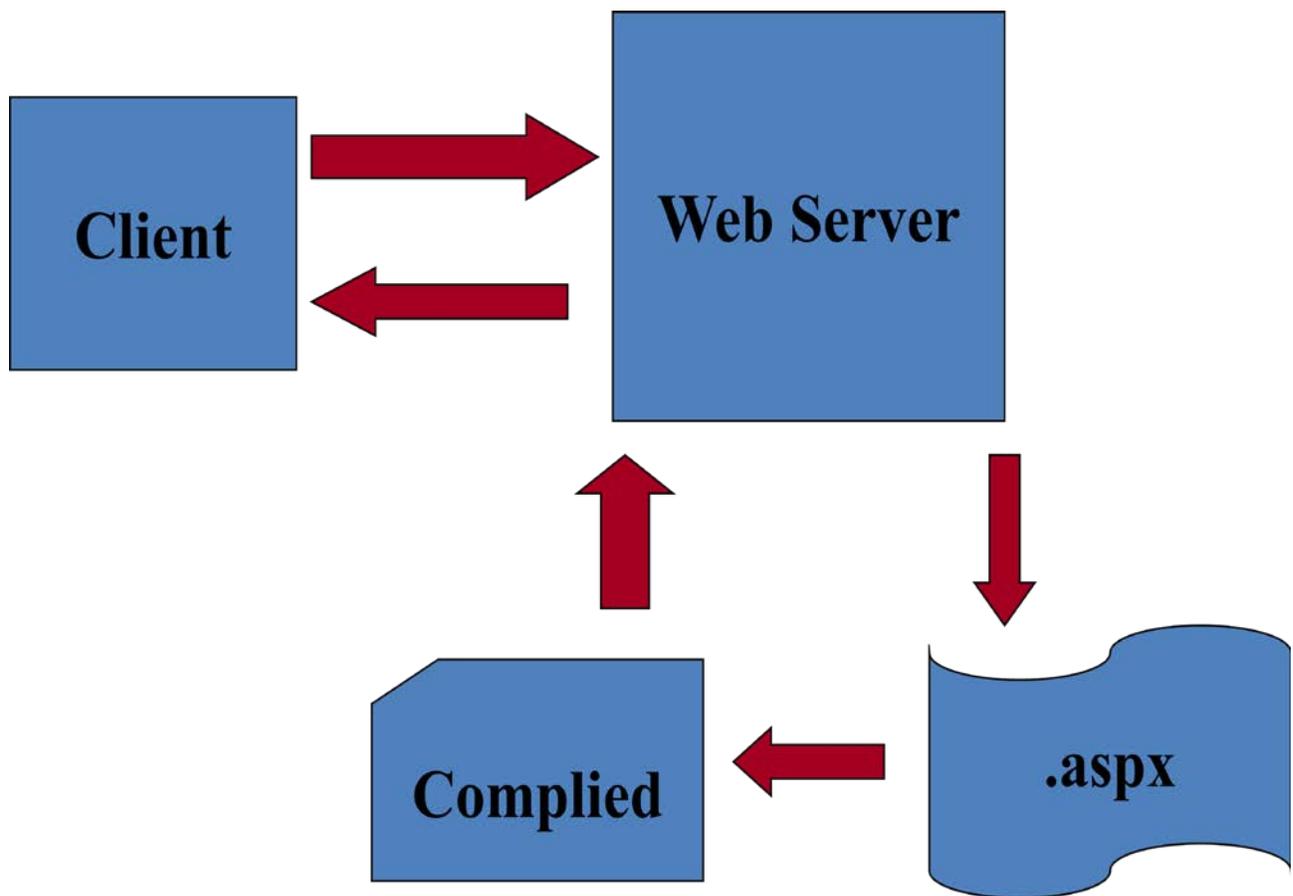


FIGURE 1: Application Architecture

3.2 Project/Application Information flows

The User main component of the architecture, the information flow is shown in the below diagram.

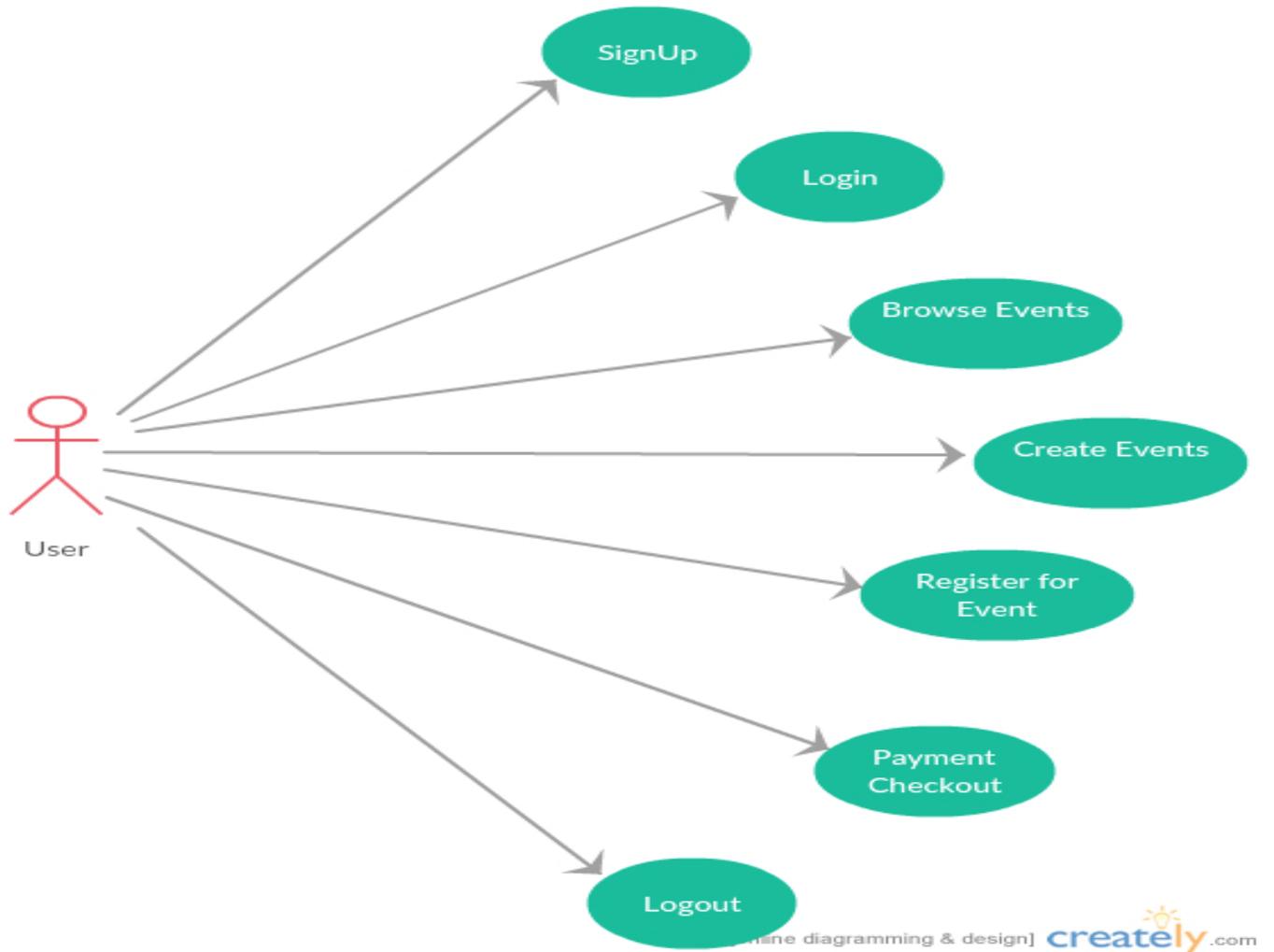


FIGURE 2: User Information flow

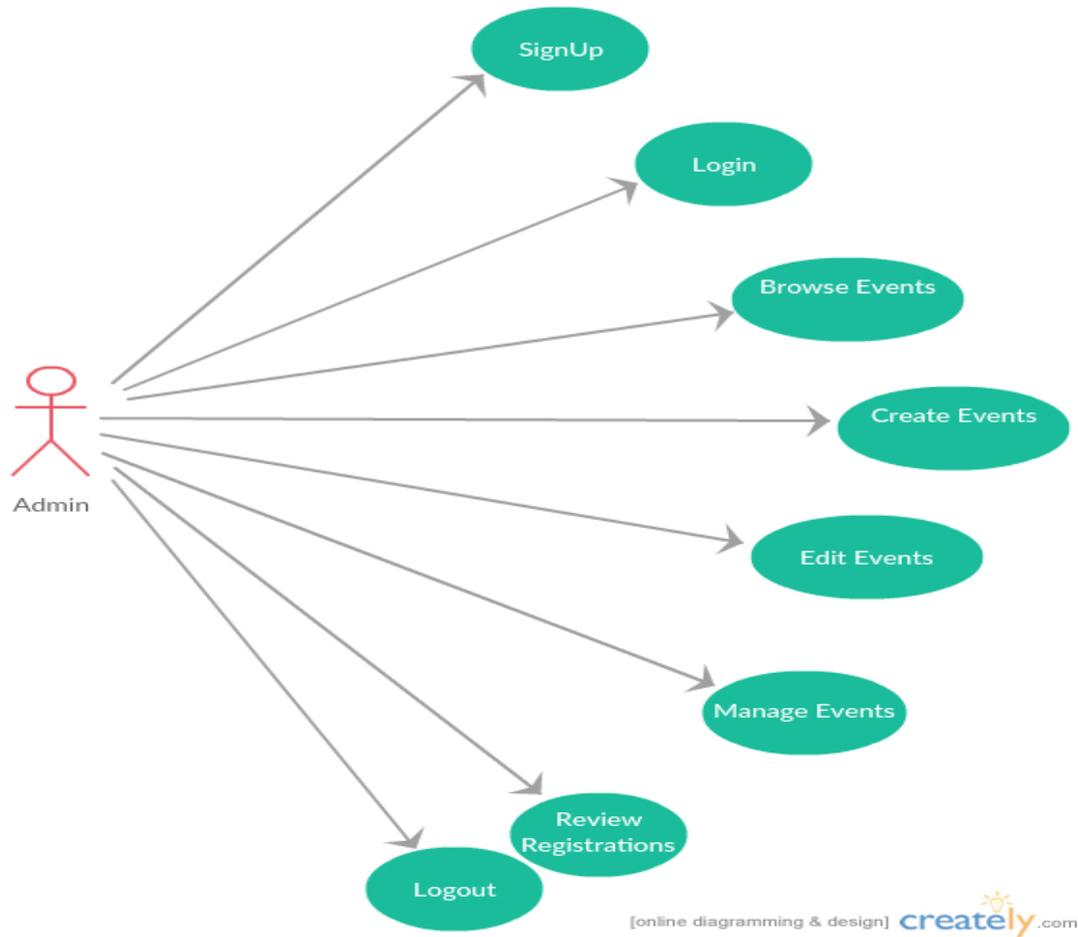


FIGURE 3 Admin Information Flow

3.3 Interactions with other Applications

Since we are developing a web based application which is indeed an independent application. As this an application developed for an organization, which helps the students to know about the current happenings in the college and let others know about the event they organize by creating an event. While coming to interaction with other application in the organization, this web application helps the admin to organize the events according to the different departments.

3.4 Capabilities

In this application we have Admin and the User. The Admin will have the capability add an event, manage and edit an event, and can also review the number of users who registered for a particular event. The database which we created has a capability of adding deleting, retrieving the event data and user information, and attribute values through front end. The front end has some capability to provide the validations. Validations are provided in all the web pages created using .Net framework. This application also has the capability of sending an email notification to the user for the event he registered for with the event details like Event name, Time, Location and Number of tickets purchased.

3.5 Risk Assessment and Management

Risks are common when we start any project. Identification of that risk at the requirement and designing stage will be very easy to handle. Maintaining the session for the use and implementing that through connecting through the database has a few risk.. The major risk to this application would be duplicates of the events, which can be eliminated by normalizing the database.

4. Project Requirements

4.1 Identification of Requirements

Every process involves listing out the requirements which is termed to be the key phase in developing the process. As, this is termed to be the most important, we've taken utmost care in listing out the requirements for this process. Here are few requirements for the process:

Functional Requirements:

<GSU-EPT-01 Home Page-100>

This is the default page where user can login, signup, browse events, signup and search for particular events.

<GSU-EPT-02 SignUp Page-101>

The signup page prompts the users to provide details such as First name, Last name, Date of birth, Phone number, and password.

<GSU-EPT-03 Login Page-102>

The Login page requires the users to enter their User ID and password.

<GSU-EPT-04 BrowseEvent Page-103>

This page consists of all the details regarding particular events such as browse events, create events, saved events, attended events, unattended events and also details such as change password and logout option.

<GSU-EPT-05 CreateEvent Page-104>

Using this page, any registered user will be able to create an event in the portal.

<GSU-EPT-06 Event Registration Page-105>

Through this page a user will be able to register through the event, purchase tickets and also obtain additional details about the event.

<GSU-EPT-07 Checkout Page-106>

The Checkout page prompts the user to verify details provided in order to register for a particular event like Event name, Order number, number of tickets, cost of event, total cost, tax etc.

Database Requirements:

<GSU-EPT-01 Admin Details-100>

In the database we should create an entity called "User" which holds the personal details of the admin like admin_id, first_name, last_name, email_id, mobile_number and his password.

<GSU-EPT-01 Admin Details-101>

Admin should be able to register and login in to the website with a valid password

<GSU-EPT-01 Admin Details-102>

Admin should provide a valid user id so that he can able to create a new one by clickin on the link provided to his email id.

<GSU-EPT-01 Admin Details-103>

Admin can be able to change his password only when he enters a valid user id or else it should prompt invalid user.

<GSU-EPT-02 Admin Functionalities-104>

Admin can have the rights to delete or block the fake users who are creating the fake events

<GSU-EPT-02 Admin Functionalities-105>

Admin can have the rights to add the new admin or he should have rights to terminate the current one.

<GSU-EPT-03 User Details-106>

User can view the events but he/she should register to the website to create an event or to go for an event

<GSU-EPT-03 User Details-107>

When he is signing up for the account all his details like his first_name, last_name, user_id, mobile_number, password, registration_date should be stored in the entity "User".

<GSU-EPT-03 User Details-106>

We should create unique_id for the users like user_id for the use of user differentiability.

<GSU-EPT-03 User Details-107>

User can retrieve his password by providing his valid email_id to which he receives a link

<GSU-EPT-03 User Details-108>

After clicking the link he/she will be redirected to the website where he/she can their password.

<GSU-EPT-03 User Details-109>

For every user system should create an user_id which is marked as a primary key.

<GSU-EPT-03 User Details-110>

He should get a conformation mail to his registered email address at the time of registration for user validation.

<GSU-EPT-04 Event Details-111>

Event id should be created by the system for every event organized by the user and it should be defined as a primary key.

<GSU-EPT-04 Event Details-112>

We should create an entity called "Event" which holds the details of the event like name of the event, event start date, event end date, event registration start date, event registration end date, capacity of the event, event description, event image, cost of the event, organizer id .

<GSU-EPT-04 Event Details-113>

Organizer ID should be defined as a foreign key reference to the user_id in the User entity.

<GSU-EPT-04 Event Details-114>

We should create an entity called EventAddress which holds the details of event address like street name, city, state, zipcode.

<GSU-EPT-04 Event Details-115>

In the EventAddress table we should create an attribute event_id and defined as a foreign with reference to the table Event ().

<GSU-EPT-04 Event Details-116>

An entity should be created to store the details of the event saved by the user as "Bookmarks". It should hold the details of events stored by the particular user, so we should maintain user_id and event_id as foreign with reference to the User and Event entities respectively.

<GSU-EPT-04 Event Details-117>

We should generate a bookmark_id for each event saved by the user and should be defined as a primary key.

<GSU-EPT-05 Order Details-118>

We should create an entity named "Order" to store the details of the user willing to pay for the tickets. It should hold the details of user_id, event_id, order_time, cost of the tickets, number of tickets, tax amount and total cost.

<GSU-EPT-05 Order Details-119>

In the order entity system should generate an order_id for every order place by the user which should be defined as a primary key which helps us to restrict the duplicate entries.

<GSU-EPT-05 Order Details-120>

In this table we should define event_id and user_id as foreign key to get the relations from User and Event entity.

<GSU-EPT-06 Payment Details-121>

We should create an entity for the payment gateway called "Payment", in which it holds the details of user card details at the time payment and we should define the user_id and order_id 's as foreign keys.

<GSU-EPT-06 Payment Details-122>

We should generate a composite key for defining the one to one relation between the order entity to payment entity and for user entity to payment entity, it also restricts the duplicate entries for the payment details.

<GSU-EPT-06 Payment Details-123>

For every payment gateway we should generate the transaction_id by the system which should be defined as a primary key.

<GSU-EPT-07 Invoice Details-124>

After the payment entity the details like user_id, transaction_id, event_id, amount_paid, number of tickets booked for the event should be stored in the payment entity.

<GSU-EPT-07 Invoice Details-125>

After the payment is done successfully the user will get his invoice to his registered email_id.

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

After the implementation of the system, we can see that there are two types of users in the system, one admin and the other is the normal user. Admin is responsible for all the maintenance like adding events, deleting events and manage events. Also, the admin will be responsible for adding or deleting any account from the event portal.

4.3 Security and Fraud Prevention

The security is implemented by prompting every user to enter their credentials each time they login to the page. Also fraud prevention can be easily maintained by comparing the user details in the database. Also, no single user can avail multiple accounts with the same credentials.

4.4 Release and Transition Plan

Once after the testing and debugging is performed, this application would be released. The release date would be August 8th 2016.

5. Project Design Description

System design is the process of defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. One could see it as the application of systems theory to product development. There is some overlap with the disciplines of systems analysis, systems architecture and systems engineering.

Software design sits at the technical kernel of the software engineering process and is applied regardless of the development paradigm and area of application. Design is the first step in the development phase for any engineered product or system. The designer's goal is to produce the model or representation of an entity that will later be built. Beginning, once a system

requirement have been specified and analysed, system design is the first of the three technical activities – design, code and test that is required to build and verify software.

After the requirement collection phase when we started the designing phase we have divided the project into parts like developing the Front End pages using Html and CSS. These pages are designed responsive so that the page will display accordingly to the size of the screen. The second part of the development phase is designing the Database of the project. We have Used Visual Studio Database to develop the database. The total database consists of tables which are interconnected to each other using the foreign key relation. In the database we can store the user's data, Event details.

For designing the front end we have designed six responsive web pages which also have the validations created. These pages are linked with each other, so that the user can be redirected from one page to another by clicking the respective Button controls.

The following is a diagram which shows the design of the application

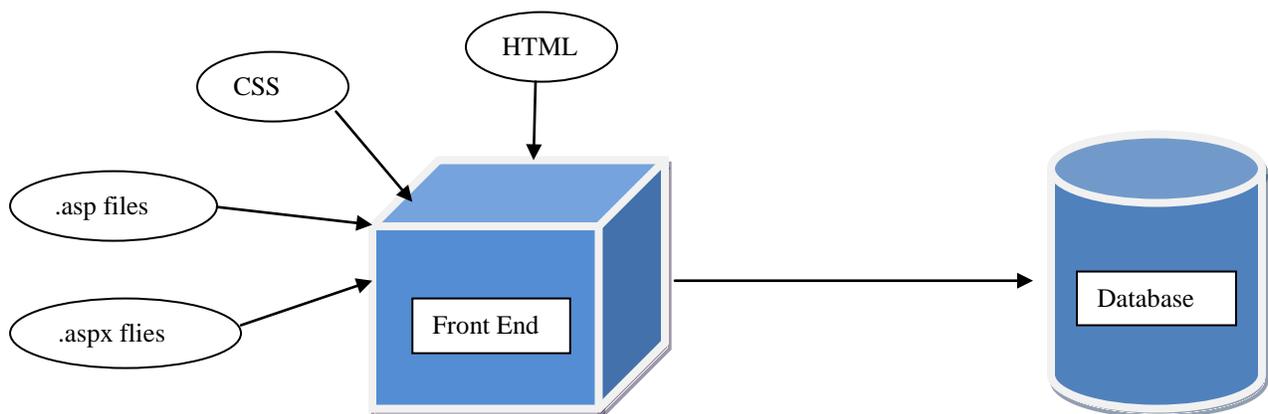


FIGURE 4: System design

The proposed design for the project:

HomePage:

This is the default page, when an user browses the application he get home page as default page

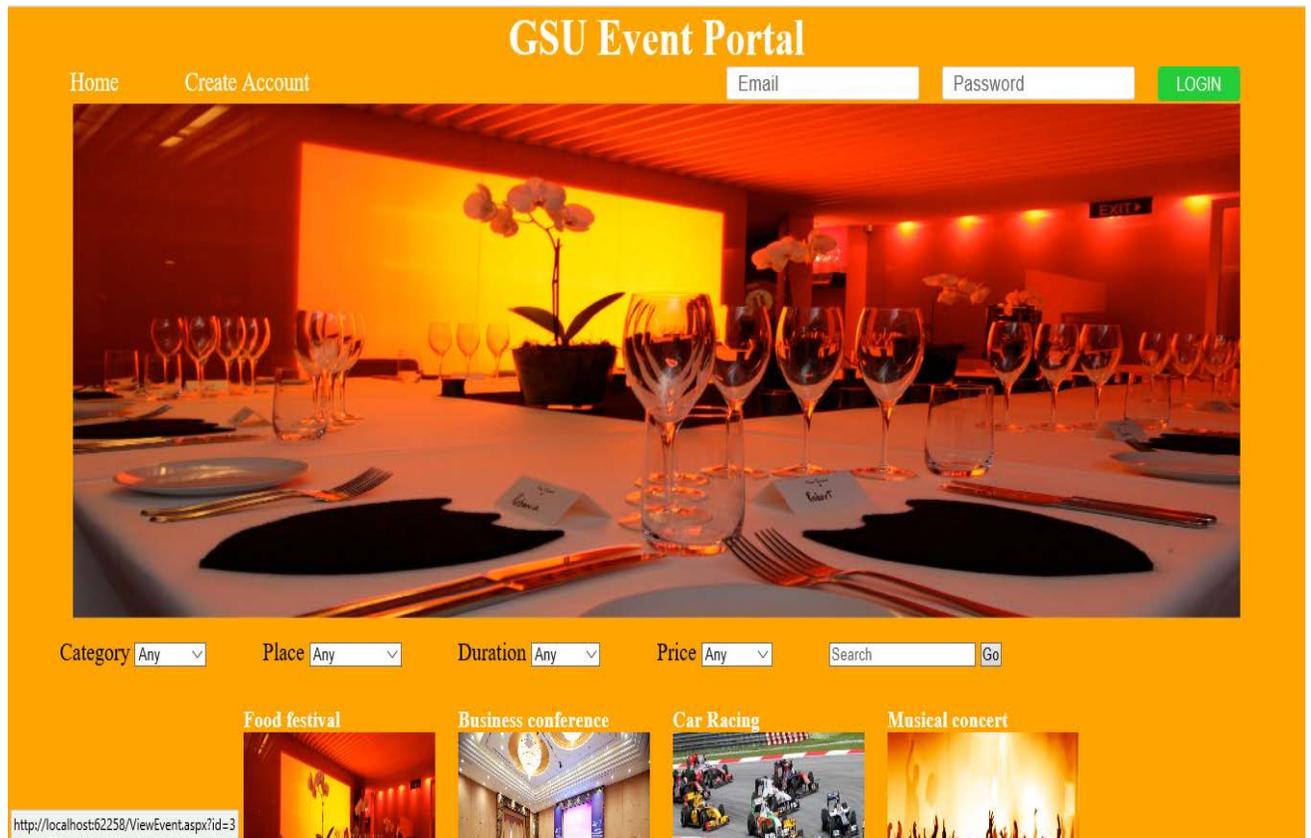


FIGURE 5: Home Page

Registration Page:

For the user to get through the event details or any other information regarding this application, one needs to sign up for providing the details of his own.

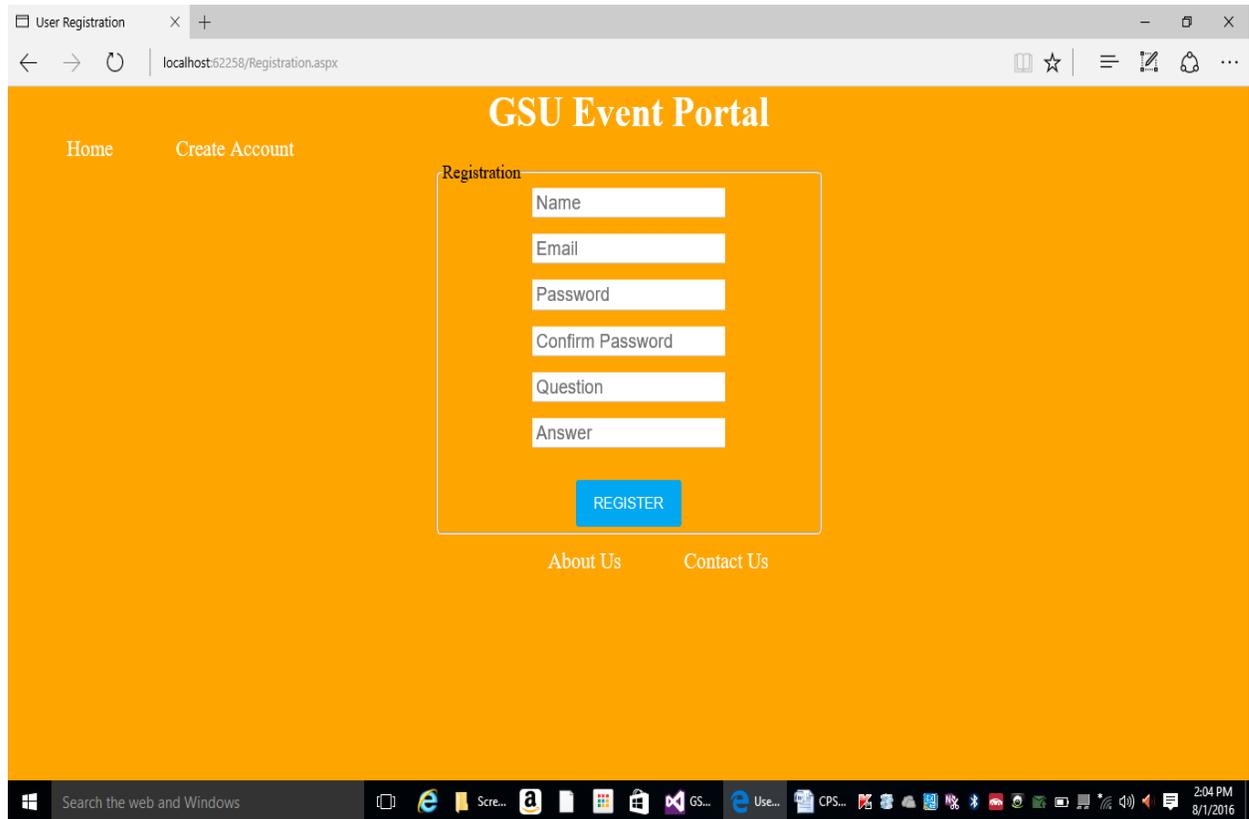


FIGURE 6: Registration page

User Page:

GSU Event Portal
Hello demo

Home Create Event My Events My Bookings Logout

Category Any Place Any Duration Any Price Any Search Go

| Food festival | Business conference | Car Racing | Musical concert |
|---|---|--|---|
|  |  |  |  |
| Category: Others Place: Chicago Date: 2016-09-06 Time: 11:30 Duration: 120 Min Price: 50 | Category: Others Place: Indianapolis Date: 2016-10-05 Time: 10:0 Duration: 90 Min Price: 0 | Category: Others Place: Ohio Date: 2016-09-15 Time: 7:15 Duration: 30 Min Price: 20 | Category: Charity Place: Newyork Date: 2016-09-08 Time: 20:30 Duration: 90 Min Price: 60 |

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FIGURE 7: User Page

Admin Page:

The screenshot shows a web browser window with the address bar displaying 'localhost:62258/PendingEvents.aspx'. The page title is 'GSU Event Portal' and it says 'Hello Admin'. There are navigation links for 'Home' and 'Logout'. The main content is a table titled 'Pending Events' with the following data:

| Name | Description | Category | Place | Date | Time | Duration | Price | Cover | Approve | Reject |
|----------|-----------------|----------|------------|------------|------|----------|-------|---|-------------------------|------------------------|
| Marathon | A running event | Health | California | 2016-09-08 | 8:0 | 120 Min | 0 |  | Approve | Reject |

The Windows taskbar at the bottom shows the search bar, taskbar icons for various applications, and the system tray with the time 2:47 PM and date 8/1/2016.

FIGURE 8: Admin Page

Create Event Page:

GSU Event Portal

Hello demo

Home Create Event My Events My Bookings Logout

Create Event

Name

Description

Category Comedy ▾

Place

Date

Time Hours 0 ▾ Minutes 0 ▾

Duration 30 Min ▾

Price

Cover Image Browse...

CREATE

FIGURE 9: Create Event page

Checkout Page:

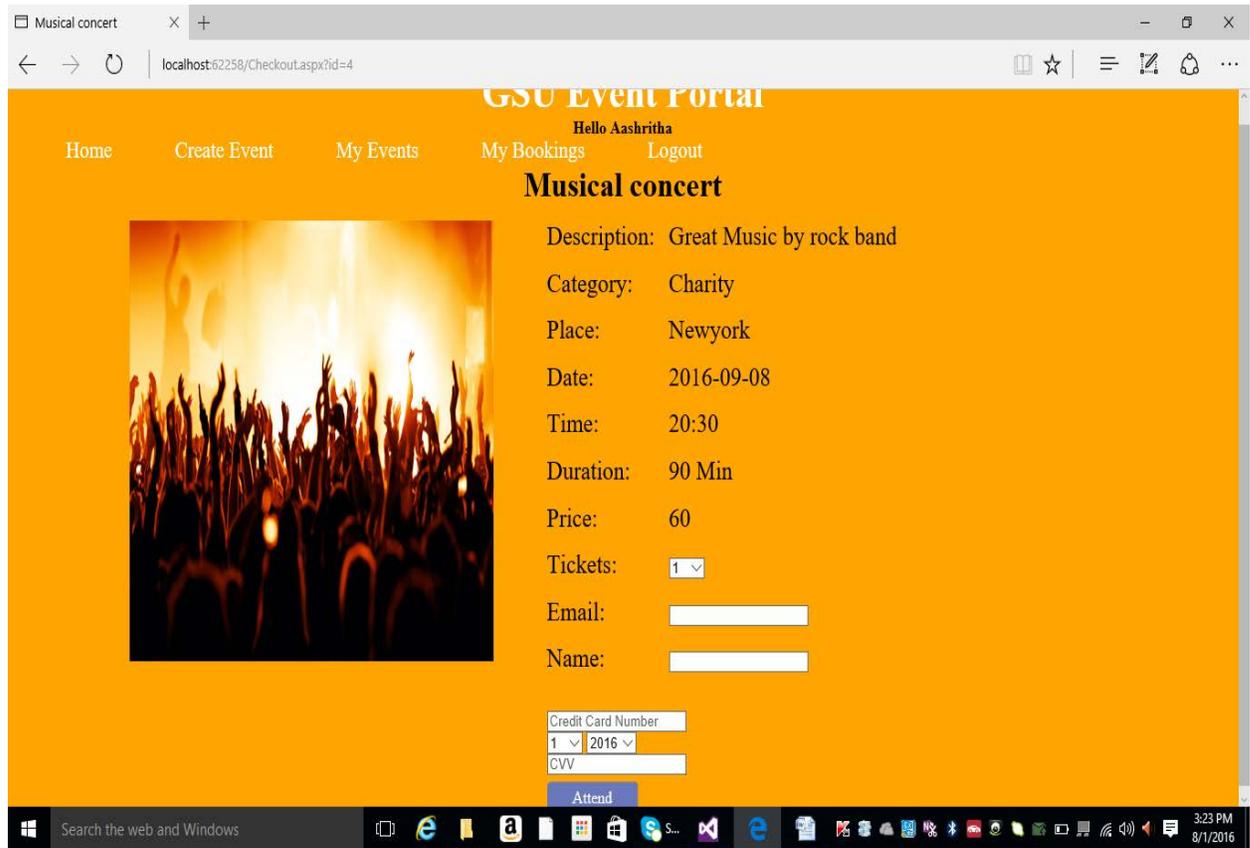


FIGURE 10: Checkout page

Database design:

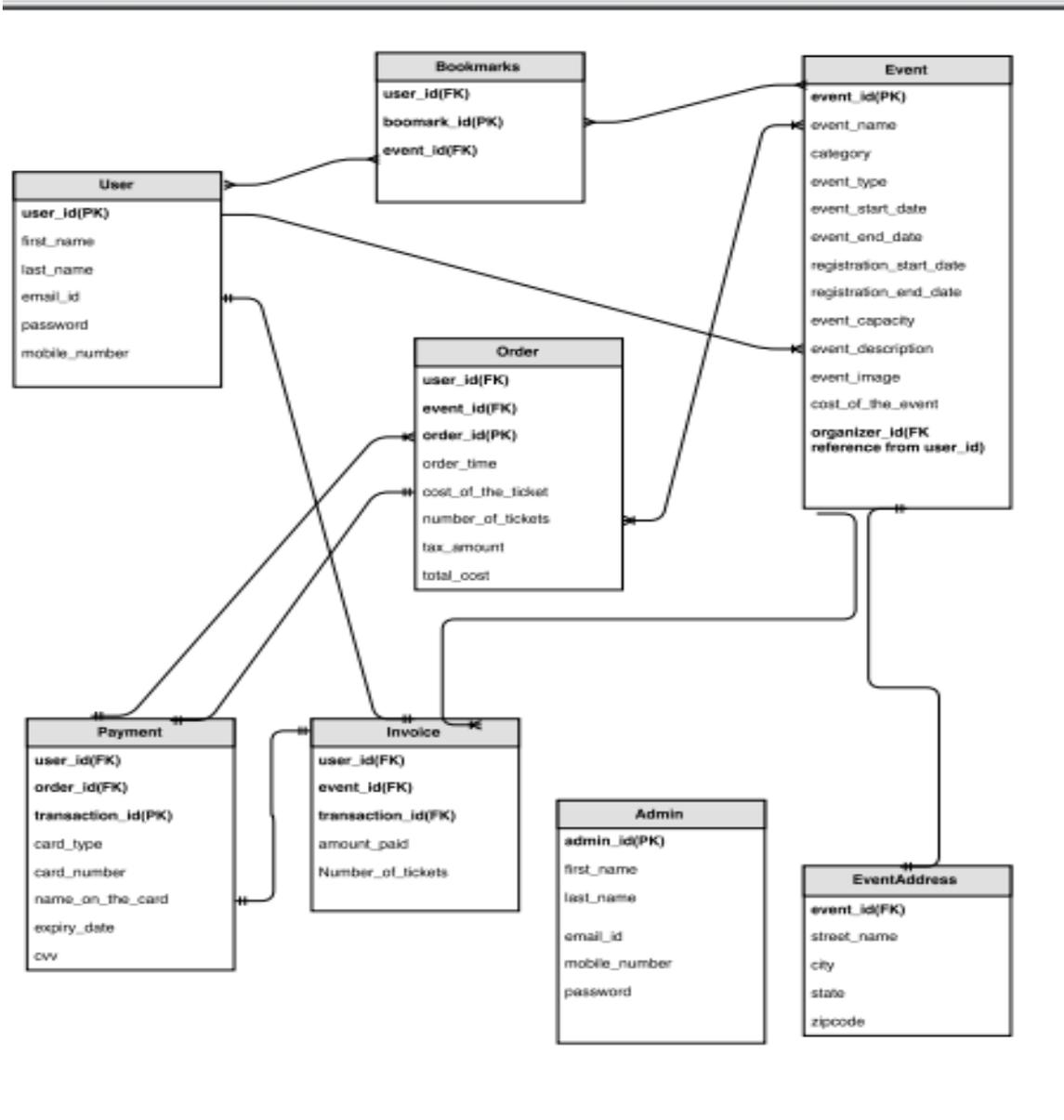


FIGURE 11: Database design

6. Project Internal/External Interface Impacts and Specifications

The project we are creating is a GSU Event Portal for which we need design and develop a website for the event portal. For this we need to design a website for the user input and we need to maintain a database for storing those user input data, we also need to control the data which the user inputs. Basically we need to design the event portal by going through three phases which are User Interface, Database Connections and maintaining the Database. This design will totally cover all the requirements of the customer and fulfils the project. We are designing the User interface (Front end) by using the HTML5 and CSS3 sheets. We are doing the design in a responsive which gives user providing optimal viewing and interaction experience by using Bootstrap. The controller will be giving the database connections by using the C# which will control the data and it will helps the data to store in the database. This web design is maintain a database which is going to store the user inputs and we are going to create a database model in My SQL work bench tool. The database which we created is totally normalized. Below we have attached the screen shots of the Enhanced Entity Relationship of the data model.

7. Project Design Units Impacts

The three main phases for the development unit are present in this design unit. Requirements are written accordingly by considering the impacts.

7.2.1 Impacts

The complete project of the GSU event portal depends up on the impact because we have only one design unit. In this design unit we have three phases in which we are creating a user friendly web design, developing a database and connecting the web design to the database. Designing the website and the database and making connections in between them are the Challenging task in this design.

7.2.2 Requirements

We have totally 45 requirements and all the requirements are written accordingly to the design unit. We have already listed the requirements in the above section. Please go through the requirements at section .

8 Open Issues

The major issue that portal may face is too much users at a time. When there are so many users login at a time it overloads the portal server and may cause down of the portal.

Regular maintaining and updating the portal is very important thing to do because if we forget to update any event it will be not noticed to the students.

Using customization and personalization.

In the developing stage cost may also become one of the issue to the design because it needs to be maintained after the development

9 Acknowledgement

We take this opportunity in thanking all the people who have supported us throughout the project by sharing their knowledge and valuable time with us. We thank Dr. Alex liu for guiding us throughout the project work. He has supported us right through the beginning till the end by sharing his ideas, knowledge and time and also correcting us in the areas which needed improvement. We also take this opportunity to thank College of Arts and Science and Computer Science Department, for giving us an opportunity to proceed with our project.

We also thank Governors State University for sharing with us resources which help in completing the project. Also, we as team are thankful to us in successful completion of the project through complete team work and dedication toward our field.