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GSU Event Portal

Mohammed Awais Governors State University

Zaki Ahmed Azmi Governors State University

Mohammed Hassan Liyakath Ali Governors State University

Abdul Wasey Waseem Mohammed Governors State University

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ABSTRACT

GSU Event portal is an application which deals with showing any post, ongoing and upcoming events on the website. From the application, user can be able to check all the events going on globally in multiple locations. This application has an option to opt for receiving the recordings of the event when registered and paid for it. This portal will display all the events in different categories such as cultural events, recreational events, ground events. This portal allows users to interact with all other registered members and get updates over the events regularly.

This application will have a home page where a panel for navigation will be available for users. Through this they have the various options to go through such as organizers, admin and visitors. organizers can create or edit events, view registrations or payments, etc. The administrator panel allows admin to administer accounts, edit or delete events, review registrations, etc. In the visitor's console visitors, can set up its profile and payment info, view log of history, etc.

This application will help the user to find any kind of events with the help of location, date and name of the project. There will be front page for different types of events. Login page form already registered members and sign up option for new users. Event page to show photos and full details of event and Web map if possible. Booking process will include the payment page and confirmation. The events page will show all the upcoming events and recommended events for you.

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1 Project Description

GSU Event portal is an application which deals with showing any post, ongoing and upcoming events on the website. From the application, user can be able to check all the events going on globally in multiple locations. This application has an option to opt for receiving the recordings of the event when registered and paid for it.

This portal will display all the events in different categories such as cultural events, recreational events, ground events. This portal allows users to interact with all other registered members and get updates over the events regularly.

This application will have a home page where a panel for navigation will be available for users. Through this they have the various options to go through such as organizers, admin and visitors. organizers can create or edit events, view registrations or payments, etc.

The administrator panel will admins can administer accounts, edit or delete events, review registrations, etc. In the visitor's console visitors, can set up its profile and payment info, view log of history, etc. There will be front page for different types of events. Login page form already registered members and sign up option for new users. Event page to show photos and full details of event; Web map if possible. Booking process will include the payment page and confirmation. The events page will show all the upcoming events and recommended events for you.

This application will be completed using HTML, CSS, Javascripts, Jquery, Bootstrap, Java, Springs, Spring Boot, Spring Mvc, Hibernate, JSP, Springs Security, Apache Tomcat Server. There will also be other tools involved which will be used according to the needs of the application. For database MySql will be used.

1.1 Competitive Information

There are various gsu events portals available in the market and some of which we have studied are like www.eventbrite.com, https://myevent.com/. We have studied all these websites and found out that these portals is not that much interactive and they are using some other security measures, whereas we have used the spring technology for the security purpose.

1.2 Relationship to Other Applications/Projects

When it comes to the relationship of our project to others, then we can say that the homepage will be different and the log in page and the dashboard may be similar to all the projects as anyone who needs to access the portal will be going through the login page.

1.3 Assumptions and Dependencies

• System should be available with internet all the time to access the portal, it should be strong.

- System should not be dependent on any other managerial system.
- System is not platform dependent. It will run on any system which has the minimal requirements to run any website.
- System uses the email functionality to email to the user incase hey forget the password and within the website to send the emails to each other.

1.4 Future Enhancements

- In future, we may provide the higher security by installing the fingerprint sensors so that only the employee of the organization will be able to access the system.
- We will be having more tabs which provides the blogs for the employees to write in case if they want to publish on the website regarding the organization modules.
- More security will be provided to the user data and the reports will be run more smoothly and accurately in future to enhance the portal.

1.5 Definitions and Acronyms

Portal: A website which allows the user to navigate through the different pages.

2 Project Technical Description

Admin

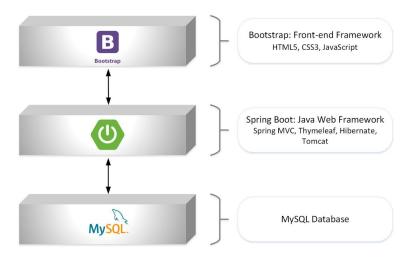
- Login: Login for the system, admin need to enter his/her email ID and password to access the system.
- View Dashboard: After successful login, admin will get the dashboard where he can view total activities count and users count. A navigation menu to access all the other functionalities.
- Manage Reports: From side menu Manage event function will list the total events in a grid, from where admin can edit the event details as well as delete the event. To add new event click on add event button and add all the details of event and add it. Newly added event will appear on the home page of user webpage.
- Manage Users: this functionality have two sub functions, i.e. activate or deactivate user and delete registered users.
- View Registered Events report: Registered event report will provide the list of events and after clicking on event details link, it will show the list of user who have registered for the event.
- Logout: system logout.

User

- Search Event: This option provides the users to search a particular event by providing some criteria like, location of event, name of event, type of event etc. this will enlist the entire filtered event from where user can view the details of the event and register for the same.
- Register User: User need to register in a system to register for any event whether it is free of paid event.
- Login User: After successful registration in a system, user need to login and he can access all the other functionalities like, mail, registered event, register for event, create event etc.
- Register Event: on successful login, user can search the event and register the same by providing the No. of seats or tickets he wants to purchase.
- Mark Event as favorite: on the page of event details, there is option to mark event as a favorite for the future reference.
- View favorite events: This function required login to the system, after login user can view the favorite market event list.
- Mail to admin: if any user wants to communicate with system admin he can send an email to admin through mail option.
- Create Event: This function required login to the system, after login user can also create his own events and enlist it on the website for other users to view and register.
- View Registered Events: After successful login to the system user can view registered event list and details.
- Logout: system logout.

2.1 Application Architecture

In the development phase the first thing is design. The goal of the designer is to create a model or representation of the entity which will be built later. As soon as the requirements of the system are finalized then this phase will be designed soon.



2.2 Application Information flows

Here is the application flow of the user in the system.

- First the admin log in into the system.
- Then after login he can see the portal and can perform various tasks like manage users account, manage events, view registered user for the event.
- After effective login administrator can perform different undertakings like oversee clients account, oversee occasions, see enrolled client for the occasion.
- User oversee permits administrator to enact client account then no one but client can login to the framework. Administrator can likewise erase any client account which he appears to be invalid or sham.
- Managing portal will permit administrator to view every one of the organization in a framework and permit including new frameworks.

User

- User can search their assigned work and all the works that is going on in the portal.
- Searching the notes did not require registering and login to the system.
- After a successful login user can perform various tasks like, register and view for their notes.
- If any query arises, user can mail to the admin.
- User also can view the list of registered reports list and details.

2.3 Interactions with other Projects (if Any)

The proposed system is not interacting with any other project.

2.4 Interactions with other Applications

There is no particular interactions with the other applications, just the latest web browser which runs on the jsons and the public host which will run the database.

2.5 Capabilities

SQL Server is a total RDBMS database.

- It gives organized inquiry dialect and a support for XML.
- It gives simple establishment, information warehousing, sending and versatility.
- It permits three sorts of transect SQL proclamation like DLL, DDL and DML

2.6 Risk Assessment and Management

In this section we are talking about the risks which are associated with the system of ours like the connection between the database and the browser and the retrieval of the information which is stored in the database. Running all the scripts which are written to present the frontpage or the HTML.

3 Project Requirements

3.1 Identification of Requirements

- * Specific target a specific area for improvement.
- * Measurable quantify or at least suggest an indicator of progress.
- * Achievable specify what will be accomplished
- * **R**ealistic state what results can realistically be achieved, given available resources.
- * Time-related specify when the result(s) can be achieved.

<GSU-GS_Fall2016-1 User-Capability-0001>

- The portal should allow the CRUD operations on the users.
- It should allow the admin and users to add, update and delete notes
- Communication through email to admin

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

In this section, we are going to talk about the capabilities of the project which would be maintained to setup the portal.

user data backup: In this the backup of the system is made on the regular intervals of time.

Fault recovery: For this, we need to have the default backup which should run in the event system crash.

Routine maintenance: This maintenance is done routinely to make sure that everything goes good.

3.3 Security and Fraud Prevention

As we have used the spring security system, all the users need to log in or to register in the system portal to do something inside it.

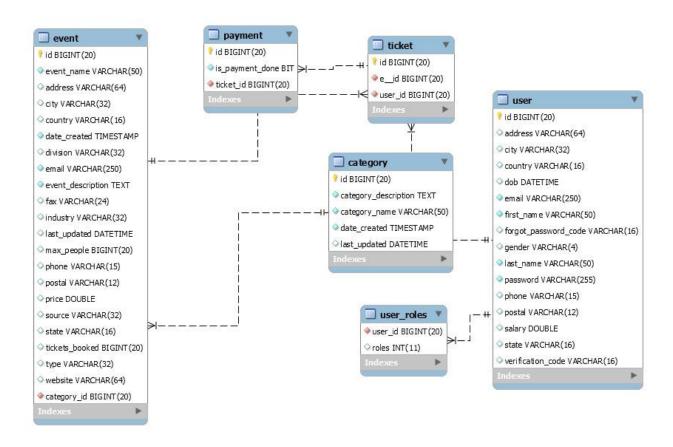
Unregistered users just see the dashboard and nothing else. They need to first register themselves and the admin authorizes them to enter into the system.

3.4 Release and Transition Plan

The whole system is deployed on the particular host server that will manage and take care of the database and can be run on any web browser and directly from the internet. There is no need to get any other apps to open it.

4 Project Design Description

The database diagram below shows the database structure and the relationships that are between different tables and entities.



As you can see that there are many tables which are related to each other and the main table is the user one which holds all the permission of the table. Its like the root user of the system and manages all the data. All these entities are given the title names and the roles performed by them in order to have a successful completion of work.

5 Internal/external Interface Impacts and Specification

System Source - I

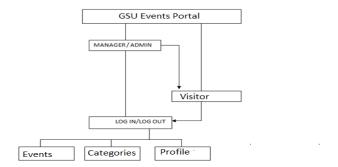
System Name	Gsu Event Portal
Description	This is used to book the events on the application
Source Contact	Database
Туре	Raw data
Source	MySQL and SQL Workbench
Platform	Any Platform

Interface Characteristics - I

Frequency	Every time user wants to update or retrieve something it needs to be calling the
	database
Timing	Cannot define, it is on user choice.
Sizing	It depends on the user on how much data it needs to be retrieved.
Format	Format is the same as the database and it will be updated on the browser.
Security	No security checks for the API

6 Design Units Impacts

The design unit consists of GSU event portal with two user roles as Admin and user with separate log in and log out page. The portal page will be listing about the events and categories of events which is designed in HTML and bootstrap on the front end.



6.1 Functional Area A/Design Unit A

6.1.1 Functional Overview

Here the functions of the users such as the Admin and the employees of the organization are mentioned and discussed.

6.1.2 Impacts

All these peoples have their own impacts and the responsibilities are divided and mentioned in the manual or the agreements which they do while deploying the project.

6.1.3 Requirements

Req. No. 1: Admin Functions

Sub. Req. No. 1: Login: Login for the system, admin/Manager need to enter his/her email ID and password to access the system.

Sub. Req. No. 2: View Dashboard: After successful login, admin/Manager will get the dashboard where he can view total number of events and users count and a navigation menu to access all the other functionalities.

Sub. Req. No. 3: Manage Sales: from side menu manage sales record function will list the total sales in a grid, from where admin can edit the user details as well as delete the events.

Sub. Req. No. 4: Manage Events: this functionality have two sub functions, i.e. activate or deactivate event and delete event.

Sub. Req. No. 5: View Registered sales report: Registered event report will provide the list of sales and after clicking on event details link, it will show the list of user who have registered for the work.

Sub. Req. No. 6: Logout: system logout.

Req. No. 2: User

Sub. Req. No. 1: Search Notes: This option provides the users to search a particular notes, this will enlist the entire filtered event from where user can view the details of the event and register for the same.

Sub. Req. No. 2: Register User: User need to register in a system to register for any project.

Sub. Req. No. 3: Login User: After successful registration in a system, user need to login and he can access all the other functionalities like, mail, all the notes etc.

Sub. Req. No. 4: Mail to admin: if any user wants to communicate with system admin he can send an email to admin through mail option.

Sub. Req. No. 5: Logout: system logout.

6.2 Functional Area B/Design Unit B

6.2.1 Functional Overview

Software Testing Definitions

1. Software testing is a process of analyzing or operating software for the purpose of finding bugs.

- 2. Testing is the process of identifying defects, where a defect is any variance between actual and expected results.
- 3. Software testing is the process used to help identify the correctness, completeness, security, and quality of developed computer software.
- 4. Testing is generally described as a group of procedures carried out to evaluate some aspect of a piece of software.
- 5. Testing can be described as a process used for revealing defects in software, and to establish that software has attained a specified degree of quality with respect to selected attributes.

Principles of Software Testing

- 1. Testing Is Risk-based
- 2. Analysis, Planning, And Design Are Important
- 3. Time And Resources Are Important
- 4. Timing Of Test Preparation Matters A Lot
- 5. Measuring And Tracking Coverage Is Essential

Best Practices of Testing

- 1. Establish an early, integrated master testing and evaluation plan
- 2. Make preventive testing part of all specification work
- 3. Inventory test objectives and design for testability
- 4. Test early, Test often
- 5. Measure test costs, coverage, results, and effectiveness

Challenges in Testing

- 1. Testing considered late in the project
- 2. Requirements not testable
- 3. Integrate after all components have been developed
- 4. One step forward, two steps backward
- 5. Test progress hard to measure

Essentials of Software Testing

• It is risky to develop software and not test it.

- High pressures for delivering software as quickly as possible: test process must provide maximum value in shortest time.
- Testing is no longer:
 - After-programming evaluation
 - o Adjunct to the SDLC
- It is:
 - Key integral part of EACH phase of SDLC
- Highest benefits comes from detecting defects early or preventing defects:
 - Avoid incorrect design and coding so as to Avoid correcting defects later
- Aim is to reduce the time wasted in removal of defect: concentrate on defect prevention.
- Misconceptions:
 - o Anyone can test software: no particular skill is required!
 - Testers can test for quality at the end of a project!
 - o Defects found mean blaming the developers.

Testing Methods

- **Black box testing**(also called functional testing):
 - Test the specs Don't look into code
 - o Approach to testing where the program is considered as a "black-box".
 - Testing based only on analysis of requirements (specification, user documentation, etc.).
 - Also called functional testing or data-driven or I/O-driven testing.
 - The test cases are based on specifications.
 - Black-box testing techniques apply to levels of testing (e.g., unit, component and system).
 - o Test planning can begin early in the software process.
 - Black box testing is practiced widely.

Using black box technique we are going to test the application and for that we have design the test case as below and we also recorded the result of that cases;

- White box testing (structural / glass box testing):
 - Test the code

- Aspects missed out in black box testing are tested
- Testing that takes into account internal mechanism of a system or part, types include branch testing, path testing etc.
- o Disadvantages:
 - O Does not ensure that user's requirements are met
 - Does not establish if the decisions / conditions / paths / statements are insufficient

While developing the app debugging process perform a White Box Testing as debugging is looking for any error found in code and we can find its location by tracing code line by line.

Types of Testing

Static Testing

- o A form of verification that most of the times does not require execution of software.
- o Ex. Inspecting documents/artifacts
- While developing this portal code is verified once by reading lines of code to find any error or defect in it.
- o All documents and diagrams are verified once without any execution.

• Dynamic Testing

- o Requires the execution of the software.
- o Ex. Output Validation
- After completion of code development or completion of every module, testing is done dynamically or by executing the code to find out the variance between actual and expected result.

Levels of Testing

- Unit Testing done by the developer at unit level.
- Integration Testing conduct by the project team integrating the modules
- System Testing Conducted by project team or by testing team if any
- Acceptance Testing Conducted by client either in developer's site or at his site.

Unit Testing

- The smallest piece of software that is tested in isolation
- It is procedure used to validate that individual piece of source code is working properly.
- Unit Testing performed when each component is completed, like in Parental tracking app, setting alerts for location.
- Approaches
 - Black Box
 - White Box
- Benefit
 - o Ensures code meets the requirements
 - Simplifies integration

Integration Testing

- Starts at module level when various modules are integrated with each other to make a sub system or system
- More stress is given on interfaces between the modules
- Focuses on design and structure of the software architecture.
- After completion of module, integration is performed and tested again for interface performance.
- Four Basic Approaches To Testing While Integrating Modules
 - o Bottom Up
 - o Top Down
 - Critical Part First
 - o Big Bang

System Testing

- System testing is testing conducted on a complete, integrated system to evaluate the system's acquiescence with its specified requirements.
- Validates that the system meets its functional and non-functional requirements
- It is intended to test up to and beyond the bounds defined in the software/hardware requirements specifications.

• Final phase of testing before delivery

Acceptance Testing

- Final stage of testing before the system is accepted for operational use.
- Done with data supplied by the client
- Validates
 - o User Needs (Functional)
 - o System Performance (Non-Functional)

Alpha Testing

- Tested at developer site by customer
- Developer "looks over shoulder" and records errors and usage problems
- Tests conducted in controlled environment

Beta Testing

- Beta testing conducted at one or more customer sites by end user of application.
- Live application environment not controlled by developer.
- Customer records all problems encountered, reports to developer at regular intervals

7 Open Issues

- There is no open issue in the application
- Application requirements are implemented successfully.

8 Acknowledgements

• Professor Soon Ok Park.

9 References

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10 Appendices

