Event Management System

1. Introduction

1.1 Overview of the project

"**Event Management System**" is a system for KGiSL to organize and execute all type of events like Hackathons, Workshops, and Technical Symposiums flawlessly. This software is supported to eliminate and in some cases reduce the hardships faced by the existing system like, this system is effective in reducing man power, save time and cost of the user. It stores the previous year events data that helps for future analysis.

1.2 Objectives of the project

The main objectives of the project is to:

- It is used to increase the efficiency of managing the Events.
- Quick and easy registration for the participants.
- Shows the information and description of the events.
- It can provide an option to update information's easily.
- It can add new supplier contacts with which future communication is expected.

1.3 The need for the project

The Event Management System (EMS) is a solution that assist event organizers in driving success through all aspects of their event from event registration and event check-in, to event promotion and reporting.

This system integrates all of the tools that an event organizer needs into one platform, its easy work quickly, securely and with more rich insights at a ready.

1.4 Overview of existing system and technologies

This existing system not provide any secure registration and profile management of all the users properly. This system doesn't provide tracking of users activities and their progress. This manual system gives us very less security for saving data

and some data may be lost due to mismanagement. This system is not providing event management through internet.

Main Technologies associated with this application

- Web programing technologies
    1. JS
    2. JSP
    3. HTML
    4. CSS
    5. SPRING BOOT
- MYSQL
- JENKINS – Development tool

1.5 Scope of the project

Main actors of this system is

- Admin
- Sponsors
- Coordinators
- volunteers
- Participants

Main use cases associated:

1. **Admin :**

    Admin module allows system administrator to set up back-end of the system and perform basic system configuration, mainly definition of predefined drop-down fields, definition of classes' time schedule, etc.

    Part of the admin set up is user's management which allows users to be set up with definable access level/roles, access to a single or multiple branches. Admin can also set up overall system security settings such as required password strength, inactive session time out, inactive accounts lock out, password reset period, etc. Important part of security is audit log – any changes in the system are logged here – so it's easy to check who changed/removed what, at what time, what was the original value and what is the new value set.

2. **Sponsors**

An event sponsorship can be defined as a critical source of funding for all kinds of events where companies, non-profits, give a certain amount of cash or incentives, in exchange for both visibility and brand awareness at an event.

3. **Coordinators**

The Event Coordinator oversees all aspects of event planning and management, including internal and external events. A successful candidate will be extremely organized and be able to manage the logistics of multiple events simultaneously.

4. **Volunteers**

Event Volunteers help to deliver a variety of different events at Wallington from planning and preparation to setting up and running activities on the day. It's about offering something fun and memorable for visitors and encouraging them to return and tell their friends about us.

5. **Participants**

Participants encompass all types of people who will "participate" in your event, such as students, presenters, panellists, workshop leaders or assistants, keynote speakers, supplier staff and attendees. You can enter information on potential participants, regroup people within invitation categories and view their status.

2. Feasibility Study

2.1 Financial Feasibility

Being a web application this project will have an associated hosting cost. Since the system doesn't consist of any multimedia data transfer, bandwidth required for the

operation of this application is very low. The system will follow the freeware software standards. No cost will be charged from the potential customers. Bug fixes and maintaining tasks will have an associated cost. At the initial stage the potential market space will be the local universities and higher educational institutes. Beside the associated cost, there will be many benefits for the customers. Especially the extra effort that is associated with paper making and marking will be significantly reduced while the effort to create descriptive statistical reports will be eliminated, since reports generation is fully automated.

2.2 Technical Feasibility

This Project is a complete web based application. The main technologies and tools that are associated with Event Organizing are

- HTML
- CSS
- JSP
- MySQL
- JS
- Net Beans

  Above mentioned technologies are freely available and the technical skills required are manageable. Time limitations of the product development and the ease of implementing using these technologies are synchronized.

  For Hosting the website, a web hosting space is needed with a sufficient bandwidth. And need a Development tool – Jenkins, which Supports continuous integration and continuous delivery. Jenkins is a Java-based program ready to run with Operating systems Like Windows, Mac OS X, and UNIX. Jenkins requires little maintenance and has built-in GUI tool for easy updates.

  From these it’s clear that the project EMS is technically feasible.

Requirements for Jenkins:

Minimum hardware requirements:

- 256 MB of RAM
- 1 GB of drive space (although 10 GB is a recommended minimum if running Jenkins as a Docker container)

Hardware configuration for a small team:

- 1 GB+ of RAM
- 50 GB+ of drive space

2.3 Resource and Time Feasibility

Resource feasibility Resources that are required for this project includes,

- Programming device (Laptop)
- Hosting space (freely available)
- Programming tools (freely available)
- Programming individuals
- Devops server for Jenkins
- Uploading in GIT (Free)

So it's clear that the project Event Organizing Application has the required resource feasibility.

2.4 Risk Feasibility

Risk associated with size:

Estimated size of the product in lines of codes:

Being a web application with many numbers of stakeholders, the project will contain significant amount of code lines. As the system doesn't contain any multimedia aspect, the file sizes and the complete project size will not exceed 500 MB.

Estimated size of the product in number of programs:

Though the application supports many students and lecturers, it will be constructed as a single web application with a single login page than having any number of pages for different users. Depending upon the access rights the contents will be shown or hidden.

Size of database created or used by the product:

Database size will not exceed the values supported by MySQL (65526 entries per table). Number of relations and entities are minimized by using best practices of normalization theories.

Users of the product:

- Admin
- Sponsors
- Coordinators
- volunteers
- Participants

Effect of this product on organization revenue:

The project can be implemented either as an individual system. Since it automates some key features associated in college placement process, the users can increase the recruitments.

Compilers or code generators are available and appropriate for the product:

JSP and Angular JS, will be used as the main scripting language. All the libraries and interpreters will be freely available.

Testing tools:

JUNIT is the main testing tool that will be used. JUNIT is freely available tool that supports automated testing. By default the base version of JUNIT files are automatically created, during the project setup (on SPRING project creation)

Software Configuration Management and Continuous deployment:

Configuration Management will be done using GIT initially, that is freely available. Jenkins will be used for continuous deployment and delivery.

The environment make use of a database or repository:

This is a database oriented system that will use MySQL.

Software tools integrated with one another:

Main deliverables will be packaged under a single project. All the lecturers and students will have a single login page, available for the application.