EVENT MANAGEMENT SYSTEM: GROUP NO 6

PART 1 THE REQUIREMENT SPECIFICATION

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Reenal

1. INTRODUCTION

1.1 Purpose of the document

The purpose of the document is to gather and inspect various ideas that define the Event management software system and its requirements with respect to organizers and guests. We shall also understand and figure out how this software system will be used by all the entities to gain better insights of the software system, define ideas that may be used in the future scope, and log plans that are being considered, but may change as and when the software system develops.

In short, this document provides a detailed review of the software system, its parameters, requirements, limitations, and goals. This document describes the system's target audience and its user interface, hardware and software requirements and functionalities. It describes how our administrators, organizers, and guests view the software system and its performances. Nonetheless, it helps any designer and developer to assist in software delivery lifecycle (SDL) processes.

1.2 The scope of the product

Primarily, the scope pertains to the Event management software system to deliver maximum results using minimum resources. It emphasizes on the administrators, the organizers, guests and the software system, which allows for effective usability, functionality, and marketing of the event management system online.

- The **administrator of the system has full authority** and can perform any actions on the system such as view the users, delete users, make changes to the events and also edit the webpage.
- The **secure administrative portal** allows the users to log in/register either as a guest or as an organizer and then perform their respective functions.
- It also **helps to view details** of any guest or user who is logged into the system and administrator information too.
- It is **easy to maintain** all details any user can view details of events hosted or occurring anywhere using this service.
- Employees or another authorized person **can easily use this service anywhere**.
- The system can be operated easily and has a **user-friendly interface** to operate and with proper labels and hints.

2. GENERAL DESCRIPTION

2.1 Product Perspective

This project performs the task of developing a web application that enables the users to retrieve the data very easily. The main purpose of event management system is to provide a platform for the users to view the information about the events that took place in the past and the ones that are about to take place in the near future.

Functionalities of the project:

- The event organizer can create events, invite guests, schedule events, keep the record of attendance, retrieve events, cancel events, change events, etc.
- The guests can view events, accept invitations, deny invitations, and can also give suggestions for the event.
- The users must register to use the system as an event organizer, or event guest, or both.
- The system administrator has the full authority over the system, who can view all the registered users and have the access to delete them.

2.2 Feasibility Report

After thorough analyzation of existing and required functions of the project, we conducted a feasibility study where it includes the consideration of all the possible ways to provide a solution to the given problem. The proposed solution should be satisfying all the user requirements and should be flexible so that future updates can be made for its requirements. A feasibility study is the cost estimation, technical aspects of the proposed system and its benefits.

The feasibility study is very important because it is one of the important factors in determining the time taken to complete the project.

- **Operational Feasibility:** Operation of the proposed system depends on its users. Type of users present in the system are:
    1. Administrator
    2. Event organizer
    3. Event Guest (Customer)

The administrator has the authority to check the details of all the customers. An administrator can also change the dates of the event and restrict people to register into the particular event at any stage. Thereafter customers can enter their details, whereas organizers can able to create an event and guest can choose the event of their interest and may also register for the event. Organizers can also send invitations to the guests and the guest can accept or deny the invitation.

- **Technical Feasibility:** Technical feasibility is the study of resource availability that may affect the successful implementation of an acceptable system. This is an of evaluating whether the technology needed for the proposed system is available or not.
    1. Can the work for the project be executed using current equipment, existing software technology, and available experts?
    2. Is there a scope of upgrading the current software system?
    3. If new technology is used to implement then what other software and hardware are required?

It is majorly concerned with specifying equipment and software that successful satisfy the user requirement.

- **Economic Feasibility:** After the cost estimation and budget analysis the project was considered as economical because the development of the system is done only once, further updates can be made upon requirement with reduced cost. Basic computer skills are required to access the system, no expert skills are required.

2.3 User Characteristics

In this project we consider users in two types:

1. Event Organizer
2. Event Guest

Event Organizer has to login into our web-based application using his login credentials, thereafter one can create an event in available dates and in the designated time, and posts the event online. Hereafter the organizer can send the invitations to the registered guests.

Event Guest is the one who may able to accept or deny invitations among the received ones, they may also check the events showing its date and venue and can also be able to register into those events, first and foremost the guest has to login into the web application and then able to do the above procedure.

2.4 General Constraints

1. **Time Constraint:** The response time of the system, to retrieve data as per requirement and too much traffic jeopardizes the projectability to meet its current commitment to its customers.

2. **Money Constraint:** If the system needs to update repeatedly, even though the project was built in agile the budget always increases.

3. User Requirements Definition

There are various specific requirements that the user needs to fulfill in order to run the software system on the user/client end. The two types of requirements are hardware and software requirements. The software system requirements are classified into two categories:

a.) Functional Requirements and

b.) Non-Functional Requirements.

3.1. Functional Requirements

Functional Requirements are the requirements that the system should fulfill, i.e. the services that the system should perform. These requirements tell how the system should react to particular inputs and particular situations. These requirements most importantly suggest what the system should do or not do.

i. Registration Module:

Description	To access the website, a new user will have to register first by entering his details.
Input	User details
Output	Filled registration details
Processing	The user details are stored in the database and the password is validated.

Table 3.1.1 Functional Requirements-Registration Module

ii. User Login Module:

Description	The registered users will log in to the system with their login details.
Input	Username and Password
Output	Profile Page of the user
Processing	The system will check if the user has entered the correct login details. If not, it will ask the user to enter his correct details again.

Table 3.1.2 Functional Requirements-User Login Module

iii. Admin Module:

Description	The Admin can view, delete or edit the data in the database or webpage.
Input	Changes that are to be made in the database or webpage
Output	Updated database or webpage
Processing	The system will make the necessary changes.

Table 3.1.3 Functional Requirements-Admin Module

iv. Organizer Module:

Description	The Event Organizer can create, schedule, retrieve, cancel or change the events. He can send invitations to the guests and generate monthly reports of the events.
Input	Main Event
Output	Added event in the database, Monthly reports.
Processing	The system will add the event to the database. The system will use the data from the database to generate monthly reports.

Table 3.1.4 Functional Requirements-Organizer Module

v. Attendee Module:

Description	The attendee can accept or deny an invitation to the events. He can view past or upcoming events. He can give feedback on the events.
Input	Accept or deny invitation or Give feedback.
Output	Invitation accepted/denied or Feedback given.
Processing	The system will add the user's answer to the invitation and the given feedback into the database.

Table 3.1.5 Functional Requirements-Attendee Module

vi. Password Module:

Description	If the user forgets his password, a reset password link will be sent to his registered email-id
Input	Email-id
Output	Reset Password link to the registered email-id
Processing	The system will update the new password set by the user in the database.

Table 3.1.6 Functional Requirements-Password Module

vii. Logout Module:

Description	The users can log out from the website after his use.
Input	Select logout option
Output	The user is logged out of the system.
Processing	The system will exit the user from the site.

Table 3.1.7 Functional Requirements-Logout Module

3.2 Non-Functional requirements

The non-functional requirements do not directly affect the overall architecture of the system but it impacts the individual components of the system.

Non-functional requirements are based on the requirements of the user, due to cost constraints, organizational policies and agreements, there is a need for interoperability between the hardware and the software system.

The product requirement specifies the software behavior. Organizational requirements are the policies and operational processes within the organization which need to be followed during the development process. External requirements are derived from external factors which directly or indirectly impact the software system.

Following are the properties that we used to measure the non-functional properties of our system

Properties	Measure
1. Speed	It essentially measures the response time of the system for the retrieval of the data from the repository.
2. Reliability and Robustness	The system will successfully be able to organize the events and schedule it and hence is **very reliable**. The failure rate of the system is very low which makes it robust.
3. Portability	Due to inter-portability, some part of the **software can be ported** into a new environment to ease the process of software development, hence it is portable.
4. Usability	The software system is developed so that it can be used by the end user, which does not require any special skills hence it **very easy to use** it and can be operated by anyone.
5. Performance	The software uses the **latest technology**; hence the performance of the system will be at its peak to give the **best performance.**

Table 3.2 Non-Functional Requirements

3.3 Software Developer Requirements

Besides the user's requirement, the software developer also needs to fulfill some basic requirements to develop the software on the system.

- Following are the minimum hardware requirements that the developer needs to fulfill to develop the software system;

HARDWARE REQUIREMENTS

Ram	4GB
Processor	Pentium 3
Hard Disc	500GB

Table 3.3.1 Hardware Specification

- Following are the software requirements that the developer needs to fulfill to develop the software system:

SOFTWARE REQUIREMENTS

Operating system	Linux/Windows
Database	MySql
Connector	JDBC

Table 3.3.2 Software Specification

4. SYSTEM ARCHITECTURE

4.1 Primary Functions

The main function of the system is to help users to organize an event or attend it. Hence the system is divided into four modules as follows,

1. **Event Management Module:** This module will be used to manage the entire system
2. **Login Module**: It is used to manage the login details when the user logs on the system.
3. **User Module**: The user module is used to manage the users logging on to the system it is divided into two
   - **Attendee Module**: The user in this module can accept or decline an invitation. He can view the past and the upcoming events and give suggestions and feedback for the event attended.
   - **Organizer Module**: The user in this module can create and schedule an event. He can send out invitations to the guest keep a record of the attendance. He can retrieve cancel or change events he may be able to generate monthly reports of the conducted events.
4. **Admin Module**: The admin or the developer has full authority over the system he can view or delete the registered users and he can edit and update the data.

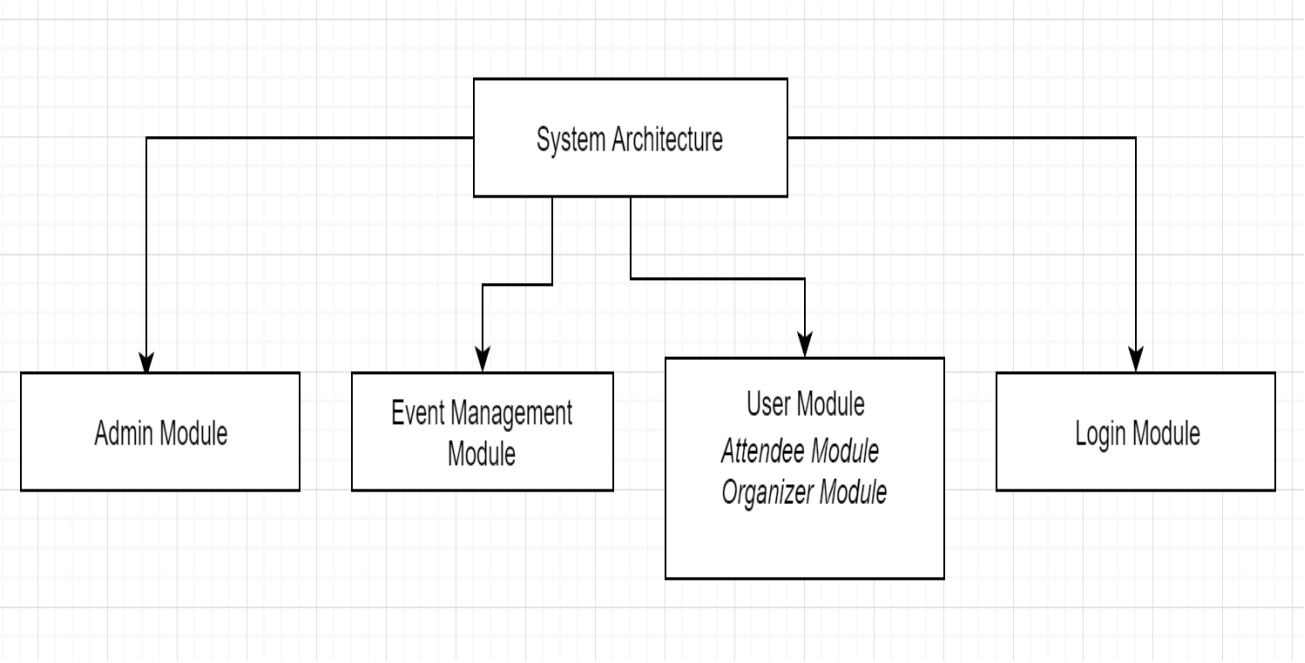

Figure 4.1: Basic System Architecture

4.2 High-Level Overview of System Architecture

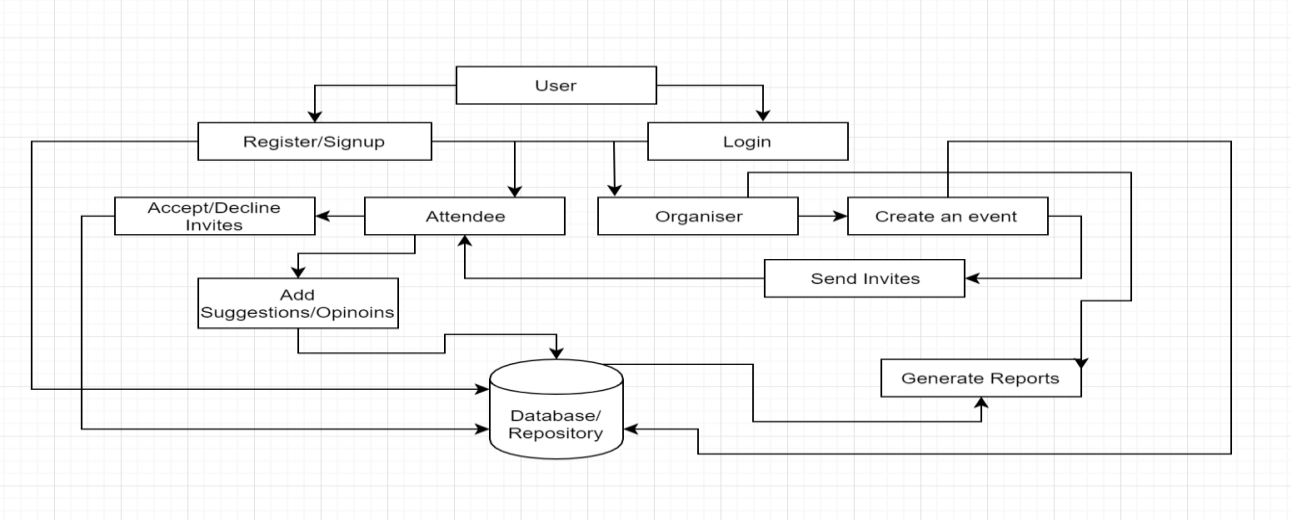

Figure 4.2.1: Overview of System Architecture

The above high-level view of the architecture shows the various functions of every module that is being used in the system.

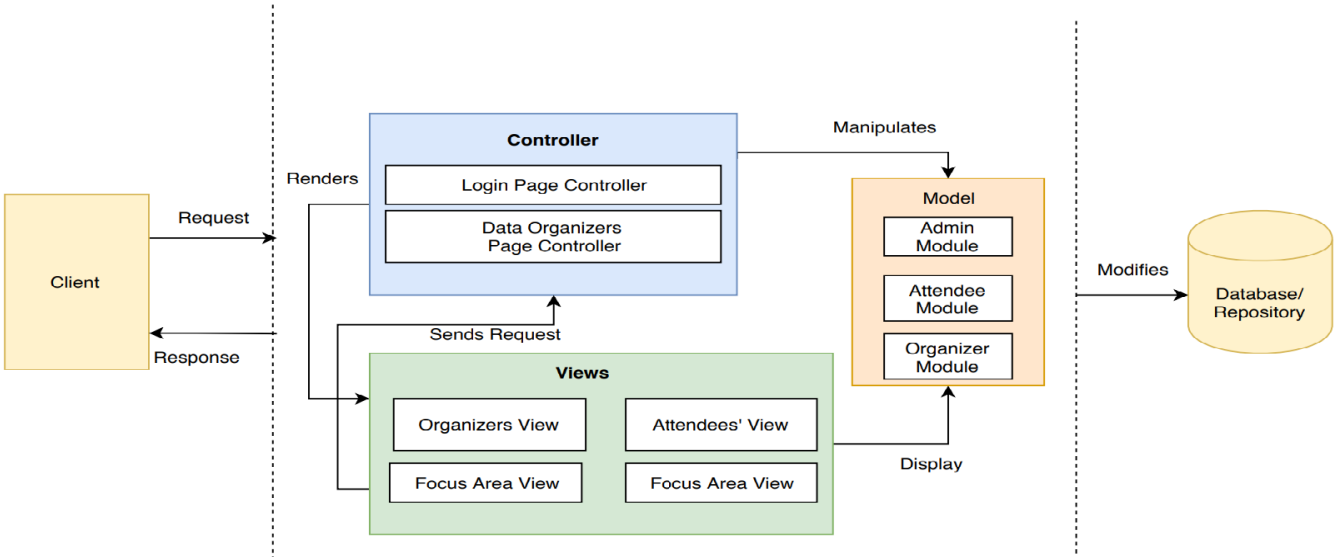

Figure 4.2.2: System Architecture for EMS using MVC-Model View Controller Design

The Model View Control (MVC) is the most popularly used software design pattern for the development of web applications. The MVC consists of the following three components:

- **Model:** Lowest level of the pattern which is responsible for maintaining the data.
- **View:** Responsible to display all the data in the various views to the users.
- **Controller:** Responsible for manipulation of the data between the Model and the view

The controller receives the incoming requests from the client and co-ordinates with the Model to get the data required by the View. The View is responsible for generating a presentable response to the user.

5. SYSTEM REQUIREMENT SPECIFICATION

After the analysis of the system, architecture is done the culmination leads to the preparation of a Software Requirement Specification (SRS) document. It gives a detail description of the hardware and software requirements, performance requirements and constraints.

5.1 System Functions

The system for the event management will have various functions for the successful implementation of the event. Following are the system features:

Function 1: Creation of Events

Function 2: Sending out invitations to guests.

Function 3: Scheduling Events.

Function 4: Records of the Attendants

Function 5: Retrieval of the data

Function 6: Cancellation and Change of events

Function 7: Accept invitations or deny invitations.

Function 8: Add opinions or suggestions on the events.

Function 9: The system will generate a monthly report.

5.2 System Interface

The component design plays an important role in the interfacing of the system. The components will be designed in such a way that there will be compatibility within the components hence the system interfacing will be easier.

The system will not use any external interfacing with the hardware. However, it would use a middleware to interface with the software system. The event management software will interact with the platform software for interfacing and the EMS will be developed in JAVA.

The component model will define the interfaces of the system. The system would get the input from the user via an input keyboard and a cursor and hence the interfacing between the user and the system would be via hardware

5.3 User Interface

The user will interact with the system via a graphical user interface working with the latest versions of the browser which will be essentially using Cascading Style Sheets (CSS) for the interface designing.

How would the system look like?

A first-time user will have to sign-up and then login into the software or if the account exists he will have to log in directly.

Then the user will select the event he wants to register for or he can choose to become an event organizer and schedule events.

On the next page he can either send invitations or if he has logged in as a guest he can accept or decline the invites.

5.4 Hardware Interfaces

The software will not be using any hardware interfacing with the external environment.

5.5 Software Interfaces

The event management software will interact with the platform software for interfacing and the EMS will be developed in JAVA. The interfacing will include the

- **The operating system** which is currently Windows 8.1 build,
- **A database software** which will be MYSQL
- **A middleware** which essentially will be ECLIPSE OR IntelliJ
- **Other application systems**

5.6 Communication Interfaces

The software system will not be using any external communication interface, except for a mouse and a keyboard to give inputs to the system. The internal communication is handled by the interaction between the underlying operating system and the middleware. This communication is important since there is a dependency between the various software systems.

6. GLOSSARY

6.1 Definitions

Organizer: A person who organizes the event

Customer: Guest who attends the event

Client: The user who logs on to the system using the front-end interface

Admin: The person who has full authority over the system.

6.2 Acronyms and abbreviations (NONE)