

PROJECT REPORT

ON

EVENT REGISTRATION SYSTEM

Submitted in the partial fulfillment of the requirement for
the award of

Bachelor of Technology

Computer Science & Engineering

(Artificial Intelligence and Machine Learning)

Submitted by

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DECLARATION

We hereby declare that this project report is based on our original work except for citations and quotations which have been duly acknowledged. We also declare that it has not been previously and concurrently submitted for any other degree or award at any University or any other Institution.

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ABSTRACT

The Event Registration System (ERS) is a feature-rich software program made to make managing and organizing events easier. With the help of ERS, event planners can quickly establish and manage a variety of events, from conferences to workshops, while providing crucial information like the date, time, place, and agendas. The system provides participants with a simple online registration platform where they can enter their contact information and preferences, supporting effective event planning. A flawless registration process is ensured by ERS, which also offers secure online payment processing using a variety of payment methods. Customizable registration forms let organizers collect attendance information that is pertinent to the needs of each event. The system also provides alternatives for ticketing, communication functions, and attendee management tools. It delivers analytics and reporting tools for data-driven decision-making, prioritizes security and complies with data protection laws, and provides scalability and customization to meet the particular requirements of event planners. In conclusion, ERS is a flexible and user-friendly technology that improves event management from beginning to end, helping both organizers and participants.

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Chapter -1

❖ INTRODUCTION

The Event Registration System (ERS) is an advanced software tool created to streamline and improve the registration and management of events. Effective participant management and registration are essential for success in the fast-paced environment of today's events, which might range from little meetings to sizable conferences. These demands are met by ERS, which provides an extensive collection of tools and features that make it simple for event planners to plan, advertise, and manage their events. ERS automates the whole event lifecycle, from initial planning and online registration through secure payment processing, participant communication, and analytical analytics, whether it's a company seminar, a community workshop, or a significant industry conference. ERS gives event planners the flexibility to provide great experiences for both attendees and organizers because of its user-friendly interface, scalability, and customization choices.

● Purpose

Event Registration System (ERS) is intended to revolutionize the way events are planned and administered. It has several advantages for both attendees and event organizers. An ERS's primary function is to simplify the registration process for events by offering simple online forms for guests to fill out. These registration forms can be modified to gather particular attendance information, ensuring that event organizers have access to the necessary data.

Additionally, ERS incorporates secure payment processing, enabling visitors to make purchases online with confidence and guaranteeing the convenience and security of all financial transactions. The ERS improves the overall event experience for participants by making it simple to get event details, timetables, and updates, frequently through the use of mobile apps that include interactive maps, real-time event updates, and networking possibilities.

For ERS systems, data security comes first. Attendees' personal and financial information is protected using strong security measures and encryption processes, ensuring compliance with data protection laws.

ERS also offers considerable advantages to event planners. The system provides a range of event planning capabilities, such as the ability to build event websites, handle registrations, and track participant information in real-time. ERS also offers considerable advantages to event planners. The system provides a range of event planning capabilities, such as the ability to build event websites, handle registrations, and track participant information in real-time. These tools are enhanced by built-in communication capabilities that enable event planners to communicate with attendees by sending announcements, confirmations, and updates about the event. Mass communication and personalized messages are improved by integration with email marketing and communication systems.

● Scope

A full range of capabilities is provided by an Event Registration System (ERS), which covers the complete event planning and management process. Event creators can enter event information, timetables, and descriptions using the sophisticated system's event development tools. Online registration, which offers attendees user-friendly registration forms available from any device and streamlines the sign-up process, is one of its core features. Additionally, ERS systems have secure payment processing gateways, providing participants with a reliable way to pay for event tickets and registration costs. ERS platforms often incorporate attendance management tools in addition to these essential features, making it easier to track and manage participant lists.

Event organizers can send announcements, updates, and reminders to attendees using the ERS systems' built-in communication facilities, which are a key component of successful events. With ERS's ticketing features, event organizers can design several ticket types and pricing schemes to meet their particular requirements. Additionally, ERS offers useful analytics and reporting tools that enable organizers to learn more about demographics, registration trends, and event success.

An ERS's flexibility to scale, which enables it to accommodate events of all sizes and sorts, from small seminars to big-scale conferences and festivals, is one of its key advantages. No matter the size of the event, this versatility guarantees that event planners have the necessary resources. Additionally, ERS systems enable for customization, enabling event planners to modify registration forms, event websites, and attendee communications to collect particular data and represent the event's branding. Last but not least, ERS places a high focus on data security, putting strong security mechanisms and encryption in place to safeguard sensitive data and ensure compliance with data protection laws.

Chapter -2

❖ Background Study

EVENT REGISTRATION SYSTEM will be a web-based application for online users. The system will run over the windows operating system. The web server will run over Xampp Server version 8.1.2 and the programming languages used for developing the system are: HTML, CSS, JavaScript, Apache and PHP. We have selected MySQL as the database management system.

● HTML

We use HTML to make the structure of EVENT REGISTRATION SYSTEM of Programming Languages. Technically, HTML is not a programming language, but rather a markup language. HTML5 is a co-operation between the World Wide Web Consortium (W3C) and the Web Hypertext Application Technology Working Group (WHATWG). The new standard incorporates features like video playback and drag-and-drop that have been previously dependent on third-party browser plug-ins such as Adobe Flash, Microsoft Silverlight, and Google Gears.

● CSS

We use CSS to control the look and feel of web documents. CSS allows you to apply specific styles to specific HTML elements. The main benefit of CSS is that it allows us to separate style from content.

● **Express JS**

Express is a minimal and flexible Node.js web application framework that provides a robust set of features for web and mobile applications.

PHP is capable of:

- Generating dynamic page content
- Creating, opening, reading, writing, deleting, and closing files on the server
- Collecting form data
- Adding, deleting, and modifying information stored in your database
- controlling user-access
- encrypting data.

● **MySQL**

We use MySQL of version 4.8.5 as database management system for our project. MySQL is an Oracle-backed open-source relational database management system (RDBMS) based on Structured Query Language (SQL). MySQL runs on virtually all platforms, including Linux, UNIX and Windows. Although it can be used in a wide range of applications, MySQL is most often associated with web applications and online publishing.

● **JAVASCRIPT**

We use JavaScript version ES6 to make our page interactive which engage a user. JavaScript is a dynamic programming language that's used for web development, in web applications, for game development, and lots more. It allows you to implement dynamic features on web pages that cannot be done with only HTML and CSS.

Chapter -3

❖ FEASIBILITY STUDY:

Feasibility study is conducted once the problem is clearly understood. Feasibility study is a high level capsule version of the entire system analysis and design process. The objective is to determine quickly at a minimum expense how to solve a problem. The purpose of feasibility is not to solve the problem but to determine if the problem is worth solving.

The system has been tested for feasibility in the following points.

1. Technical Feasibility
2. Economical Feasibility
3. Operational Feasibility.

1. Technical Feasibility

An Event Registration System's (ERS) technical viability is determined by evaluating how well it can be created and implemented technologically. This involves assessing the capacity to develop and integrate required software components, ensuring hardware infrastructure compatibility, putting in place strong data security measures for privacy compliance, evaluating integration capabilities with external systems, gauging scalability for events of various sizes, and assessing customization options. To ensure the system's successful operation, additional factors such as the system's mobile accessibility, thorough testing, and continuous technical support and maintenance should be taken into account.

2. Economical Feasibility

An extensive analysis of the costs and advantages of an Event Registration System (ERS) is required to determine its economic viability. This study takes into account the costs of creation, implementation, and upkeep as well as potential benefits like higher event attendance and greater effectiveness. By considering variables like ROI, payback period, cost-benefit ratio, and potential dangers, the aim is to ascertain whether the ERS represents a financially sound investment. It also determines if the system's advantages will last over time and support the organization's goals and financial stability.

3. Operational Feasibility

An Event Registration System's (ERS) operational viability is a test of the system's suitability for internal use. User acceptance, integration with current processes, resource availability,

training requirements, continuous support, scalability, regulatory compliance, risk management, and change management are a few of the things it takes into account. The goal of this analysis is to ascertain whether the ERS can be effectively integrated into the organization's activities, assuring its usability and effectiveness daily.

▪ **Implementation:**

To successfully establish an Event Registration System (ERS) within an organization, several procedures and actions must be followed. A high-level summary of the implementation procedure is given below:

Project Management: Establish precise aims and objectives for implementing the ERS.

Make a project plan that outlines deadlines, roles, and checkpoints. Budget and staff should be allocated as needed.

Selecting a system: Select an ERS solution that meets the needs and financial constraints of the organization. Think about elements like scalability, customizability possibilities, security features, and support services.

Setup and Personalization: Adapt the ERS to the organization's unique requirements, taking into account the event types, registration processes, and branding. Set up the system so that it may interact with other pertinent programs and hardware.

Migration of data: Migrate pertinent data, such as participant records, event specifics, and historical statistics, to the new ERS if you are switching from an existing system.

Tests and Quality Control: To confirm that the ERS is operating properly, perform extensive testing. Test several situations, such as those involving attendee management, payment processing, registration, and communication capabilities. Address and fix any problems or flaws found.

Training: Provide staff personnel who will use the ERS with training sessions. Make sure they are capable of creating events, managing registrations, and reporting utilising the system.

Deployment & Rollout: Launch the ERS to test it internally or for a pilot program to improve its performance. Access should be gradually expanded to a larger audience, including event organizers and participants.

Communication: Share information about the new ERS's advantages with all relevant parties, including event organizers and prospective participants. Explain how to register and utilize the system in detail.

Suspension and Upkeep: Create a support system to handle user questions and technical problems. Create a maintenance schedule to make sure the ERS is secure and up to date.

Monitoring and Assessment: Keep an eye on how the ERS is performing, get user input, and evaluate how it affects event management. Based on comments and changing needs, make the appropriate adjustments and improvements.

Security and compliance for data: To protect attendee data, implement and maintain data security procedures. Continually make sure that data protection laws are being followed.

Scalability and Development: Consider the system's scalability in order to accept rising usage and more events. To enable organizational growth, take into account upcoming upgrades and integrations.

Chapter -4

❖ Software and Hardware Requirements

Hardware: -

- i3 Core or above.
- Minimum 4 GB RAM or above.
- Minimum hard disk 40 GB or above.

Software: -

- Windows operating system.
- Expre Js
- . · MYSQL- a relational database management system
- . VS Code

Chapter -5

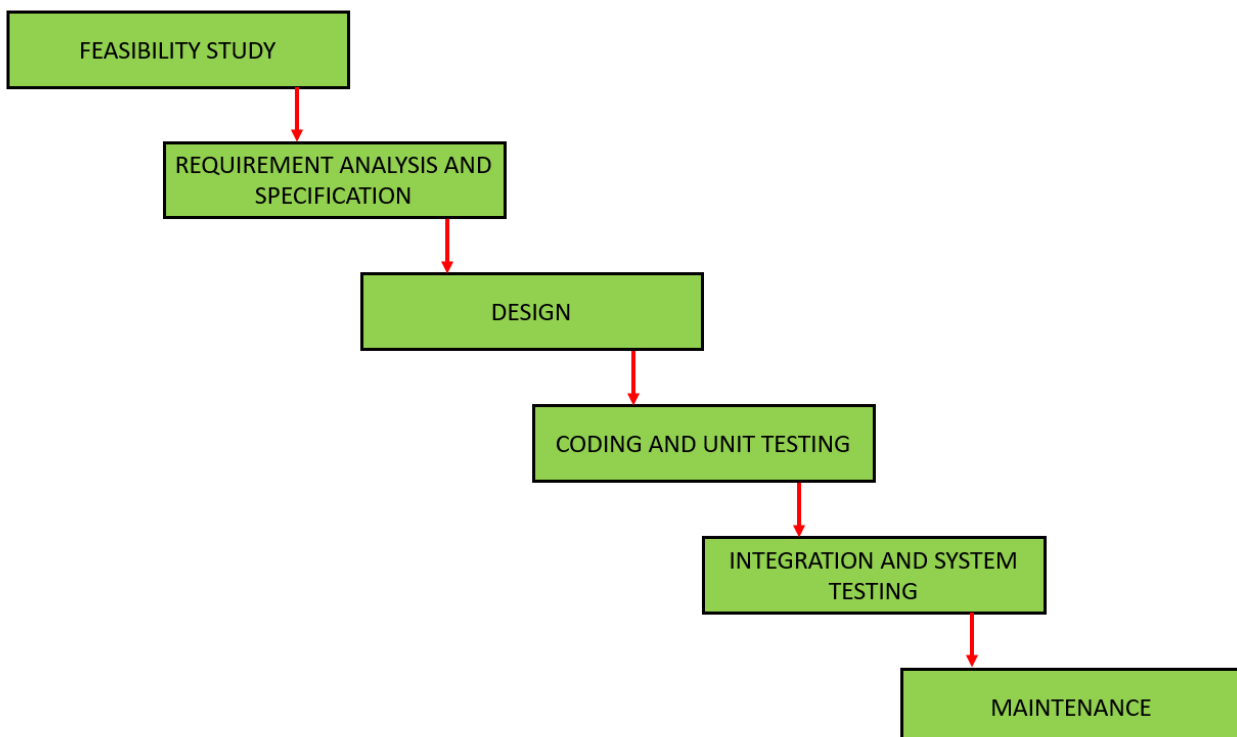
❖ Project Development

● Project Life Cycle Model

➤ Classical waterfall model

Classical waterfall model is the basic **software development life cycle** model. It is very simple but idealistic. Earlier this model was very popular but nowadays it is not used. But it is very important because all the other software development life cycle models are based on the classical waterfall model.

Classical waterfall model divides the life cycle into a set of phases. This model considers that one phase can be started after completion of the previous phase. That is the output of one phase will be the input to the next phase. Thus the development process can be considered as a sequential flow in the waterfall. Here the phases do not overlap with each other. The different sequential phases of the classical waterfall model are shown in the below figure:



Let us now learn about each of these phases in brief details:

1. **Feasibility Study:** The main goal of this phase is to determine whether it would be financially and technically feasible to develop the software.
The feasibility study involves understanding the problem and then determine the various possible strategies to solve the problem. These different identified solutions are analyzed based on their benefits and drawbacks, The best solution is chosen and all the other phases are carried out as per this solution strategy.
2. **Requirements analysis and specification:** The aim of the requirement analysis and specification phase is to understand the exact requirements of the customer and document them properly. This phase consists of two different activities.
 - **Requirement gathering and analysis:** Firstly all the requirements regarding the software are gathered from the customer and then the gathered requirements are analyzed. The goal of the analysis part is to remove incompleteness (an incomplete requirement is one in which some parts of the actual requirements have been omitted) and inconsistencies (inconsistent requirement is one in which some part of the requirement contradicts with some other part).
 - **Requirement specification:** These analyzed requirements are documented in a software requirement specification (SRS) document. SRS document serves as a contract between development team and customers. Any future dispute between the customers and the developers can be settled by examining the SRS document.
3. **Design:** The aim of the design phase is to transform the requirements specified in the SRS document into a structure that is suitable for implementation in some programming language.
4. **Coding and Unit testing:** In coding phase software design is translated into source code using any suitable programming language. Thus each designed module is coded. The aim of the unit testing phase is to check whether each module is working properly or not.
5. **Integration and System testing:** Integration of different modules are undertaken soon after they have been coded and unit tested. Integration of various modules is carried out incrementally over a number of steps. During each integration step, previously planned modules are added to the partially integrated system and the resultant system is tested. Finally, after all the modules have been successfully integrated and tested, the full working system is obtained and system testing is carried out on this.
System testing consists three different kinds of testing activities as described below :
 - **Alpha testing:** Alpha testing is the system testing performed by the development team.

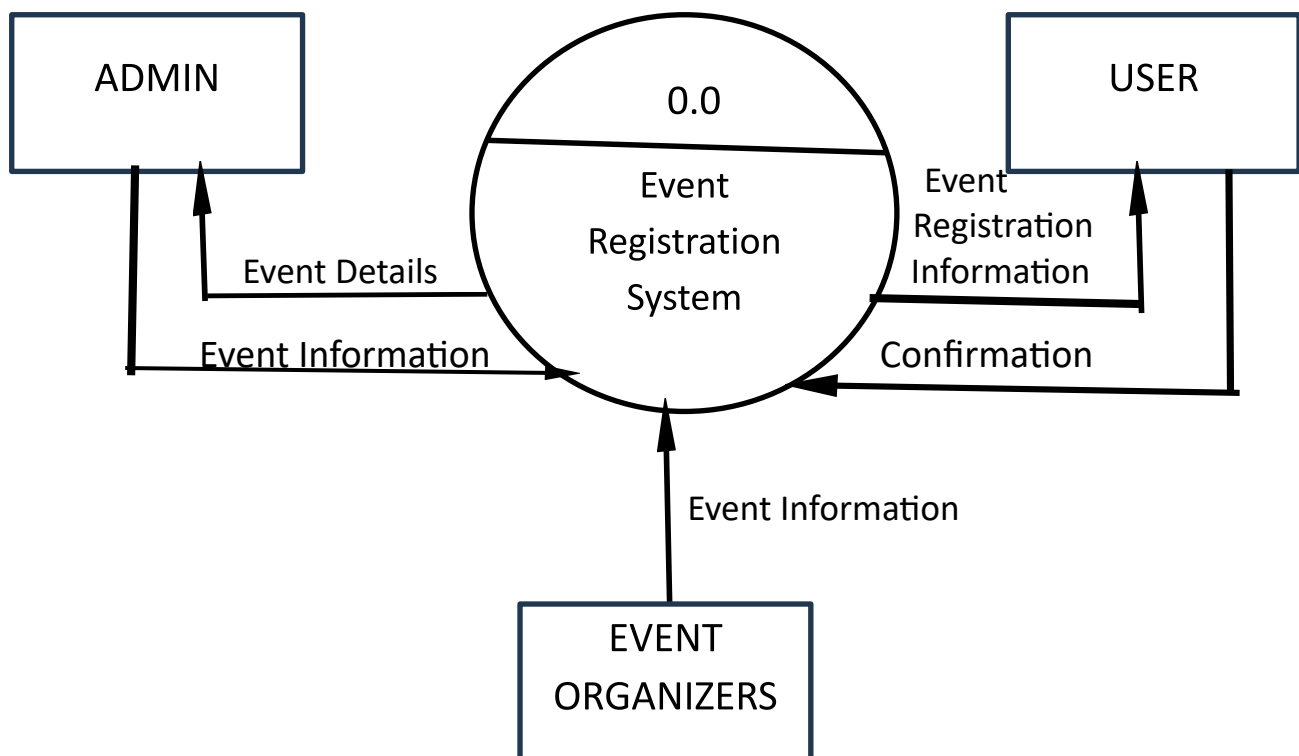
- **Beta testing:** Beta testing is the system testing performed by a friendly set of customers.
 - **Acceptance testing:** After the software has been delivered, the customer performed the acceptance testing to determine whether to accept the delivered software or to reject it.
6. **Maintenance:** Maintenance is the most important phase of a software life cycle. The effort spent on maintenance is the 60% of the total effort spent to develop a full software. There are basically three types of maintenance :

- **Corrective Maintenance:** This type of maintenance is carried out to correct errors that were not discovered during the product development phase.
- **Perfective Maintenance:** This type of maintenance is carried out to enhance the functionalities of the system based on the customer's request.
- **Adaptive Maintenance:** Adaptive maintenance is usually required for porting the software to work in a new environment such as work on a new computer platform or with a new operating system.

Chapter -6

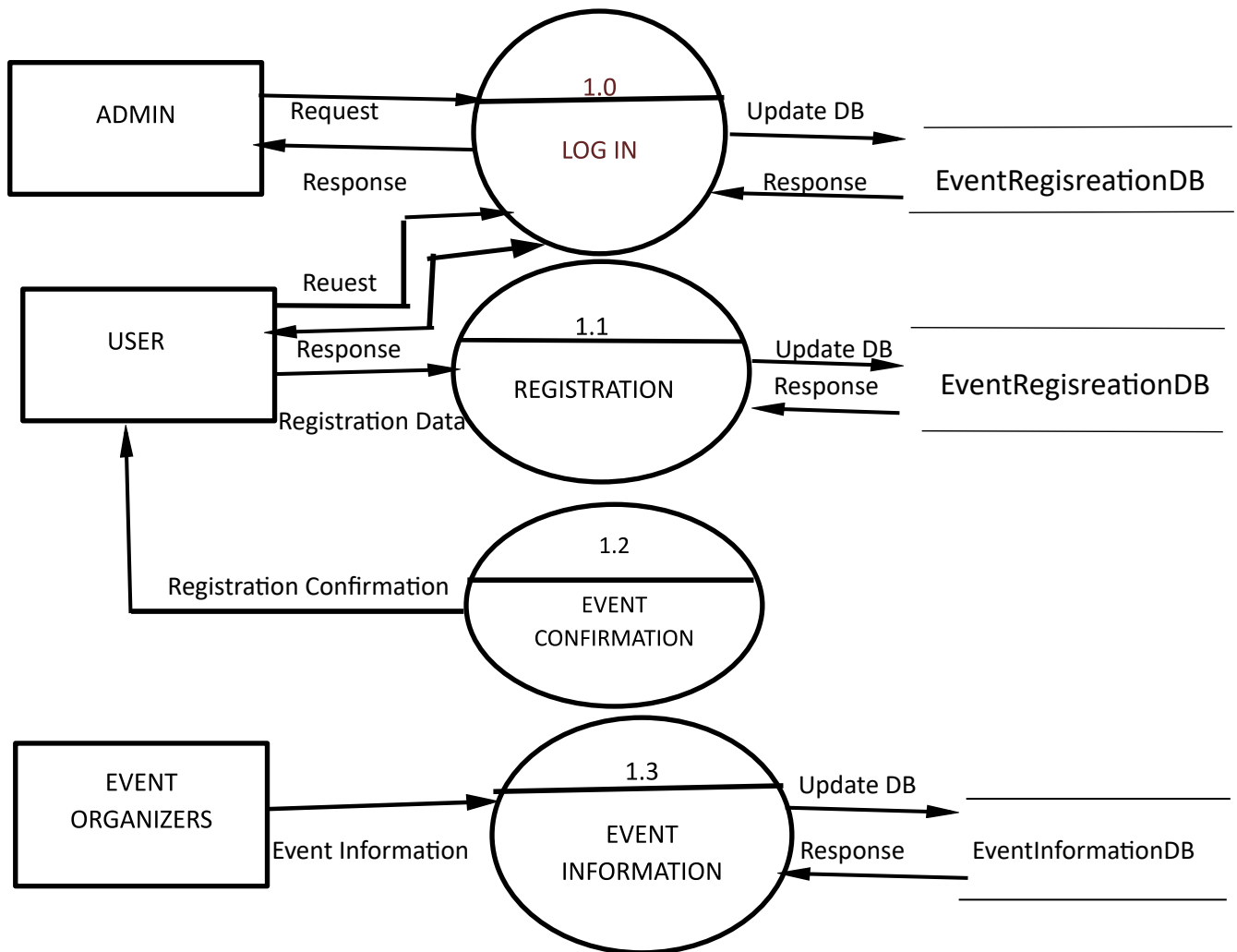
Data Flow Diagram (DFD): A system context diagram in building is a chart that characterizes the limit between the system, or part of a system, and its condition, indicating the substances that cooperate with it. A Data Flow Diagram is a method of speaking to a progression of information through a cycle or a system. The DFD also provides information about the outputs and inputs of each entity and the process itself. A context diagram is a top level Data flow diagram.

CONTEXT LEVEL OR ZERO LEVEL DFD -

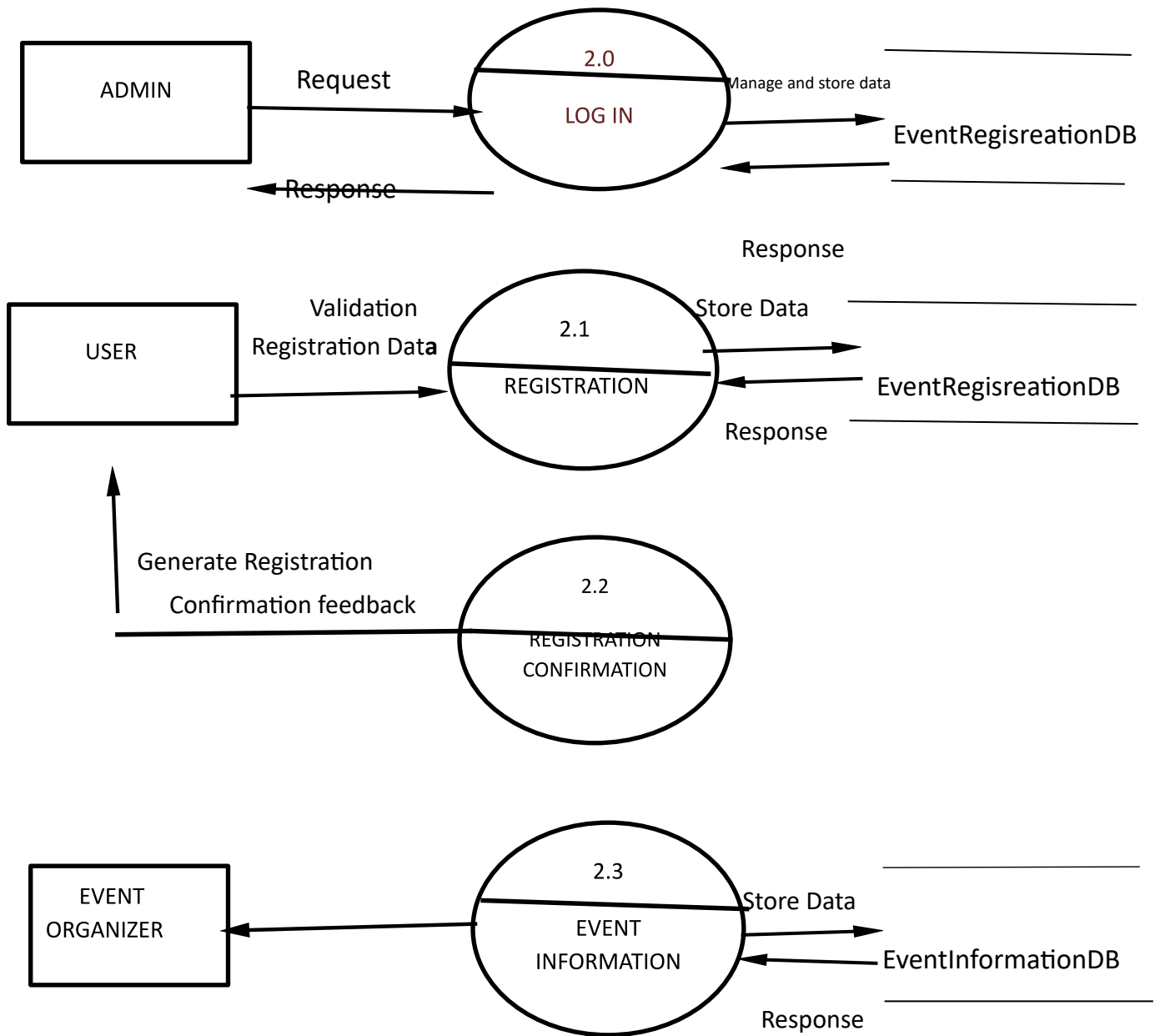


LEVEL 1 DFD

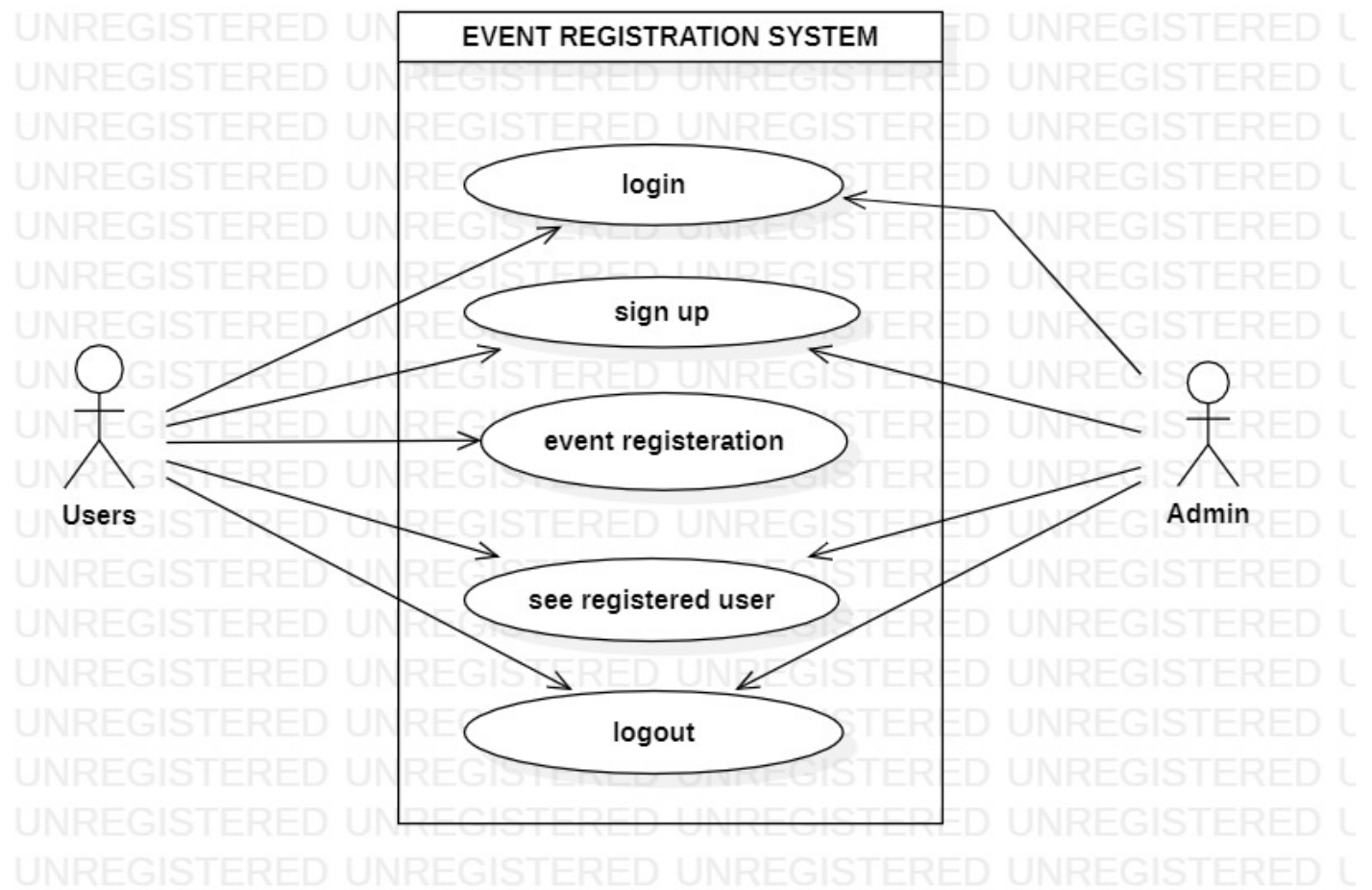
DFD External Features: This will be the first screen that will be displayed. It allows user to access different screens based upon the user role. Like, User ID, Password, Role.



LEVEL 2 DFD



USE CASE DIAGRAM:



❖ CONCLUSION:

In conclusion, An Event Registration System (ERS) is a crucial instrument in the contemporary event management scene, to sum up. It functions as an all-inclusive solution to simplify the difficulties of planning and managing events, from tiny get-togethers to significant conferences. The ERS provides excellent management of attendance data, communication, and analytics in addition to efficiency in event creation, online registration, and secure payment processing. Its adaptability to different event types and sizes is facilitated by its customization, scalability, and mobile accessibility. The ERS also places a high priority on data protection, compliance, and ongoing assistance. The ERS continues to be a key asset for organizations as they depend more and more on technology to improve their event management procedures, greatly enhancing the attendee experience and assisting event organizers in meeting their objectives.

REFERENCES:

- [1]. Database System Concepts, sixth edition, Mc Graw Hill by Abraham Silberschatz, Henry F. Korth, S. Sudarshan. [2]. Learning PHP, MySQL & JavaScript with JQUERY, CSS & HTML5, Fourth edition, O'REILLY by Robin Nixon
- [3]. Fundamentals of Software Engineering, third edition, PHI Learning Private Limited by Rajib Mall.
- [4]. Software Engineering. 7th edition. New Delhi: Mc Graw-Hill Higher Education; 2010 By Roger S. Pressman

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