**PROJECT DESIGN PHASE-2**

**REQUIREMENT ANALYSIS**

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| **Date** | **03 NOVEMBER 2023** |
| **Team ID** | **NM2023TMID04681** |
| **Project name** | **BUILD AN EVENT MANAGEMENT SYSTEM** |

**Functional Requirements:**

Following are the functional requirements of the analysis phase

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| **FR No.** | **Functional Requirement**  **(Epic)** | **Description** | |
| FR-1 | USER REGISTRATION | Allow users to create accounts, including organizers, participants, and admin roles. | |
| FR-2 | USER AUTHENTICATION | Implement secure login mechanisms, such as username/password and two-factor authentication. | |
| FR-3 | EVENT CREATION | Enable event organizers to create new events, including event details, dates, and descriptions. | |
| FR-4 | EVENT SCHEDULING | Provide a calendar for scheduling events, sessions, and related tasks with notifications. | |
| FR-5 | REGISTRATION & TICKETING | Develop a module for attendee registration, ticketing, payment processing, and confirmation. |  |
| FR-6 | ATTENDEE MANAGEMENT | Facilitate attendee check-in, badge generation, and the management of participant information. | |
| FR-7 | VENDOR & RESOURCE | Offer tools for managing vendors, resources, staff, equipment, and materials for events. | |
| FR-8 | BUDGET MANAGEMENT | Create budgeting features, including tracking expenses, generating invoices, and payment processing. | |
| FR-9 | MARKETING & PROMOTION | Integrate marketing tools for email campaigns, social media sharing, and tracking campaign performance. | |
| FR-10 | REPORTING & ANALYTICS | Develop reporting features to collect data on event performance, attendance, revenue, and participant feedback. | |
| FR-11 | INTEGRATION | Allow integration with other software systems and platforms, such as CRM, payment gateways, and marketing tools. | |
| FR-12 | CUSTOMIZATION | Offer customization options to adapt the system to various event types and organization needs. | |

**Operational Requirements:**

Following are the Operational requirements of the analysis phase

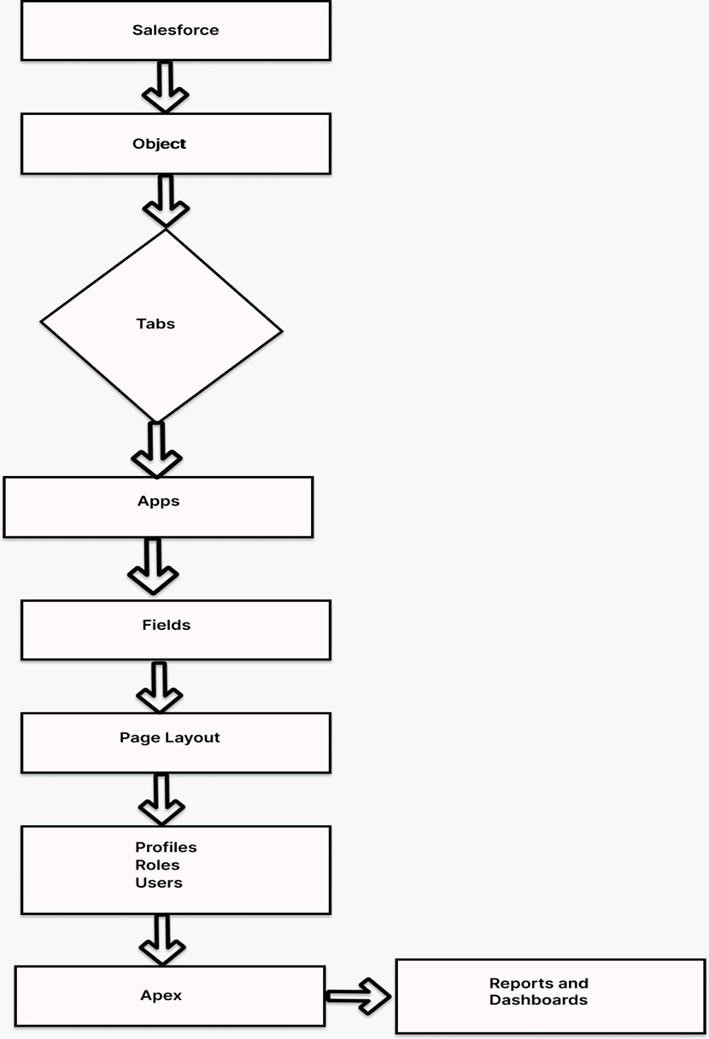
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| **OR No.** | **Operational Requirement** | **Description** |
| OR-1 | Gather User Requirements: | Understand the specific needs, workflows, and goals of the users who will be interacting with the system. |
| OR-2 | Scalability and Performance | .Define performance requirements to ensure that the system can handle the expected load without significant degradation. |
| OR-3 | Data Backup and Recovery | Establish data backup and recovery requirements to ensure that data is protected and can be restored in case of data loss or system failures. |
| OR-4 | User Training | Specify the support mechanisms, such as helpdesk or user manuals, that will be provided to assist users in case of issues. |

**Technical Requirements:**

Following are theTechnicalrequirements of the analysis phase

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| **TR No.** | **Technical Requirement** | **Description** |
| TR-1 | Technology Stack | Define the technology stack, including programming languages, frameworks, and databases. |
| TR-2 | Hosting and Deployment | Specify the hosting environment (e.g., cloud, onpremises) and deployment procedures. |
| TR-3 | Scalability | Ensure the system can scale horizontally to accommodate varying levels of traffic and events. |
| TR-4 | Security | Implement security protocols, including data encryption, firewalls, and secure APIs to protect sensitive information. |
| TR-5 | Data Backup and Recovery | Set up automated data backup and recovery processes to prevent data loss. |
| TR-6 | Performance Optimization | Optimize system performance to ensure fast response times and efficient resource utilization. |
| TR-7 | Integration | Define standards for integrating with third-party services, systems, and APIs. |
| TR-9 | Mobile Responsiveness | Ensure the EMS is mobile-friendly and responsive for users on various devices. |
| TR-10 | Data Storage and Management | Create a robust database structure for efficient data storage, retrieval, and management. |
| TR-11 | Content Delivery | Employ Content Delivery Networks (CDNs) to enhance content delivery and reduce latency. |
| TR-12 | User Authentication | Implement secure user authentication mechanisms, including password hashing and token-based authentication. |
| TR-13 | Accessibility | Compliance Ensure the system complies with accessibility standards (e.g., WCAG) for users with disabilities. |

**Flow Chart:**

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