# SOFTWARE REQUIREMENTS SPECIFICATION

For

# **EVENT MANAGMENT SYSTEM**

Version 1.0

#### **Prepared by Team Data Pirates**

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# Acknowledgement

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# Version

Name	Date	Reason for changes	Version
All three authors	04/08/2021	Initial Version	1.0

# 1. Introduction

### 1.1 Purpose

The software requirement specification document is to provide a detailed description and to create a clear image regarding the requirements of the event management system developed to provide event management and all services related to it easily. The system requirements specification document is provided to ensure that a clear understanding of the project goals and outcomes. So, it will provide a strong foundation for the project since all the parties involved in the project development have a clear picture of the project.

#### 1.2 Document Convention

This document will use IEEE format. Entire document is justified. Major headings.

Font face: Times New RomanFont style: Bold Font size :18

#### Concurrent headings.

Font face: Times New Roman

Font style: BoldFont Size: 14

#### Sections.

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Font Style: RegularFont size: 11

#### 1.3 Intended Audience

The Software requirement Specification document is addressed to the following audience. Here the intended audience consists of all the parties related to the development of the project.

- Software Engineers
- System Analyzers
- System Developers
- System designers
- System testers (who will participate in designing, developing, testing, and producing the event management system, will use this document to gain a clear understanding of requirements of the system.)
- Clients / customers (End Users) who will be able to use the Software requirement specification as a conformation of the finalized requirements.

# 1.4 Project Scope

The Proposed system is an event management system that will be developed as a web-based system that the end-users will be able to access through a web browser online. The main objective of this project is to automate the file-based detail management system at the event management service providers. The currently using file-based system is

inefficient and time-consuming. The scope of the project or the extends of the project operations that will be covered during this phase of project development are as follows.

- Hotel Booking and reservations
- Catering service
- Event Decoration planning
- Bridal and Groom Dressing Services
- Making Inquiries
- Payment with Receipt.

The developed system will be accessible to End users, Admins, Service Providers, and Guests. The admins will be able to maintain the system and the service providers will be able to add, delete and update their services and the users are allowed to view, book, or make reservations and to make payments.

#### 1.5 References

- [1] "3N Events | Event Management | Wedding Planning | Sri Lanka." <a href="http://www.3nevents.com/">http://www.3nevents.com/</a> (accessed Aug. 06, 2021).
- [2] A. Mercurio, "Event Management System Project In PHP And MySQL With Source Code," *Itsourcecode.com*, Mar. 24, 2021. <a href="https://itsourcecode.com/free-projects/php-project/event-management-system-project-in-php-and-mysql-with-source-code/">https://itsourcecode.com/free-projects/php-project/event-management-system-project-in-php-and-mysql-with-source-code/</a> (accessed Aug. 06, 2021).
- [3] N. Krüger, "How to Write a Software Requirements Specification (SRS Document)," *Perforce Software*. <a href="https://www.perforce.com/blog/alm/how-write-software-requirements-specification-srs-document">https://www.perforce.com/blog/alm/how-write-software-requirements-specification-srs-document</a> (accessed Aug. 06, 2021).
- [4] S. Watts, "SRS: Software Requirement Specifications Basics," *BMC Blogs*. <a href="https://www.bmc.com/blogs/software-requirements-specification-how-to-write-srs-with-examples/">https://www.bmc.com/blogs/software-requirements-specification-how-to-write-srs-with-examples/</a> (accessed Aug. 06, 2021).
- [5] M. E. McHugh and M. Lepore, "The 19 Best Wedding Planning Websites and Apps for Every Couple," *Brides*. <a href="https://www.brides.com/story/top-apps-and-sites-for-brides">https://www.brides.com/story/top-apps-and-sites-for-brides</a> (accessed Aug. 06, 2021).

#### 1.6 Overview

The rest of the SRS document is organized into three main sections. The first section is the overall description, and the second section is the specific requirements section. The overall description section describes the requirements of the vehicle rental system from a generalized, high-level perspective. The specific requirements section describes the requirements in a detailed manner.

# 2. Overall Description

# 2.1 Production Perspective

The event management system which is to be developed will work independently and is not integrated into any larger systems, software, or any other web-based application. A database management system will be running with the webserver to manage the database of Service providers and the clients or the end-users.

#### 2.1.1 User Interfaces

Responsive web design will automatically adjust for different screen size and viewports.

#### 2.1.2 Hardware Requirement

There will not be any special hardware requirements for this proposed event management Application to work. This system is completely accessible through a web browser, So the only requirement needed is for the device to have an active internet connection.

#### 2.1.3 Software Requirement

#### **Operating System**

The Event management System is compatible with Windows versions above 2000 (both 32 Bit and 64 Bit), Linux, Ubuntu, Apple MacOS.

#### Web Browser

The main software requirement is a web browser since the system is a web-based system and the web browser could be any browser with an internet connection. (Google Chrome, Internet Explorer, Safari).

#### Languages

- HTML
- CSS
- PHP Version 7.4.6
- JavaScript

## Web server

Apache /2.4.46(Win 64) Open SSL was used to host the system on the web browser.

#### **Database Server**

10.4 13-MariaDB was used with MySQL server to create the database management system of the Web Application.

#### 2.1.4 Operation Environment

- User- Initiated Operation
  - Make Payments for the services booked or reserved
  - o Book or reserve services in the web site
  - o Make inquiries and give feedback.
  - o Register to the Site
  - o Log in to the site
  - Search Services through the site
- Admin- Initiated Operations
  - Access the Database
  - o Change, Add, Remove and Update the entire database.
- Service Provider- Initiated Operations
  - o Register and log in as service providers
  - o Change, Add, Remove and Update the allowed Part of the database that belongs to the service provider.

#### 2.1.5 Communication Interfaces

The system uses communication resources which include HTTP/HTTPS protocol to communicate with the web browser and the web server, and TCP/IP network protocol with the HTTP protocol. The system will communicate with the database that holds information regarding the system. Users can contact the database through the HTTP protocol. This connection interface allows the application to use the data retrieved by the server to fulfill the request fired by the user.

#### 2.2 Product features and Functions

- Customer, Service Provider Registration allows the customer or a service provider to sign up and log into the system.
- Reservations and Bookings
  - o The site consists of reservation functions, which includes, hotel booking, Decoration supplies,
  - o Bridal and groom dressing, Catering Services, Photography etc.
- Making Inquiries and Reviewing the service
- The system allows to make inquiries and review the services provided by the service suppliers on the website by ranking and writing reviews.
- Payment
  - the web application enables the user to make the payments online for the reservations and bookings done by the customers
- Receipt Printing
  - o A receipt is printed after the payment is carried out.

#### 2.3User Classes and Characteristics

This subsection gives a brief description of the general characteristics that are expected from potential system users. The Event Planning System has three types of potential users including the admins namely admin and customers and Service providers. These users have different security privileges where the admin has the full security clearance to

access and change any part of the database, Customers only have access to the interface and the service providers can only change their services.

The system requires low technical expertise from a potential client as the GUI will be user-friendly and easy to manage. The system expects a slightly higher level of technical expertise from admin users as will be expected to perform more functionalities when compared to a normal client. And the service suppliers are expected to have a little knowledge to handle their privileges.

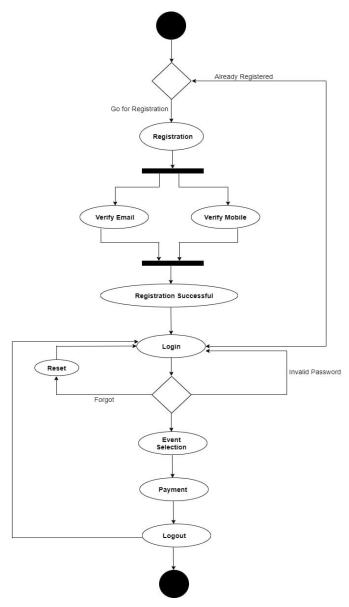


Figure 1:Activity Diagram

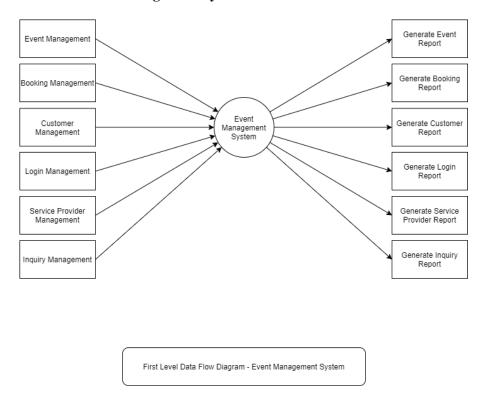


Figure 2:DFD Diagram

# 2.4 Design and implementation Constrain

- The users must have their correct usernames and passwords to make a reservation
- The information of all the users must be stored in a database that is accessible by the Service Providers & Requesters Cooperating System.
- The payment can be only done through debit and credit cards (PayPal or any other methods are not allowed)
- An Advanced Payment is a must for reservation and bookings.
- Catering Services are only allowed with the outdoor functions.

# 2.5 Assumptions and Dependencies

- If the user logs out from the system without making a payment the cart clears out.
- The system will not accept other payments than the credit or debit cards.
- The users have sufficient knowledge of computers.
- The computer should have Internet connection and Internet server capabilities.
- The users know the English language, as the user interface will be provided in English.

#### 2.6 User Documentation

This Event management application has an "About Us" tab. There is another user manual for the lowest level users. Also, we have one technical document which describes the functionality of the sub section in details for use of developers. These documentations are useful for future enhancement of this application and maintenance.

## 2.7 Apportioning of Requirements

• The system will be updated with the PayPal payment method

# 3 Specific Requirements

# 3.1 External Interfaces

The interface of the application will provide options for relatively easy data input processes text boxes that will be properly labeled. It will also have a user-friendly view of the whole system with the simple and easy undertaking of action-driven processes as command buttons are functionally labeled. With all these, target users of this web-based application will relatively find it not difficult to use it. The user interface of this application will use standard Windows API and GUIs using PHP.

## **3.2Functional Requirements**

The functional requirements define the fundamental actions that the system must perform. The event management system consists of Five requirements as follows.

#### 3.2.1 Customer Registration

- 1. The system shall allow an unregistered customer to register to the Event Plan system.
- 2. The system shall allow the customer to either register or login.
- 3. The system shall record details from the customer
  - a. The system shall record details from the customer
  - b. The system shall record the full name of the customer
  - c. The system shall record Address of the customer
  - d. The system shall record NIC of the customer
  - e. The system shall record mobile number
  - f. The system shall record email address
- 4. The system shall ask for a username from customer
- 5. The system shall ask for a password from customer
- 6. The system shall ask the customer to confirm the password.
- 7. The system shall request the customer to accept the terms and conditions
- 8. The system shall request the customer to save the requested data and to sign up
- 9. The system shall display a confirmation message upon successful registration.

#### 3.2.2 Service Providers registration

- 1. The system shall allow an unregistered Service Providers to register to the Event Plan system.
- 2. The system shall allow the Service Providers to either register or login.
- 3. The system shall record details from the Service Providers
  - a. The system shall record details from the Service Providers
  - b. The system shall record Business Name of the Service Providers
  - c. The system shall record Address of the Service Providers
  - d. The system shall record Registration Number of the Service Providers
  - e. The system shall record Contact number
  - f. The system shall record email address
- 4. The system shall ask for a username from Service Providers
- 5. The system shall ask for a password from Service Providers

- 6. The system shall ask the Service Providers to confirm the password.
- 7. The system shall request the Service Providers to accept the terms and conditions
- 8. The system shall request the Service Providers to save the requested data and to sign up
- 9. The system shall display a confirmation message upon successful registration

#### 3.2.3 Inquiry

- 1. The system shall allow the Customers to make Inquiry
- 2. The system shall record Inquire details from the Customers
  - a. The system shall record Username of the Customer
  - b. The system shall record Email of the Customer
  - c. The system shall record Contact Number of the Customer
  - d. The system shall record Message
- 3. The system shall request the Customer to Submit
- 4. The system shall display a confirmation message upon successful Message Sent

#### 3.2.4 Card Details

- 1. The system sends the customer selected items to the cart
- 2. The selected items are displayed in the cart
- 3. The system shall request the Customer to Enter the Booking date
- 4. The system shall request the Customer to Check Availability
- 5. The system shall request the Customer to Make Payment
- 6. The system shall display a Payment Option

#### 3.2.5 Payments

- 1. The system shall allow the Customers to make card payment.
- 2. The system shall record payment details from the Customers
- 3. The system shall record payment details from the Customers
  - a. The system shall record Visa/Master Card Number of the Customer
  - b. The system shall record Visa/Master Card Holder Name of the Customer
  - c. The system shall record Visa/Master Card CVV Number of the Customer
  - d. The system shall record Visa/Master Card Expired Date of the Customer
  - e. The system shall record Paying Amount
- 4. The system shall request the Customer to accept the terms and conditions
- 5. The system shall request the Customers to Pay
- 6. The system shall display a confirmation message upon successful Payment.
- 7. The system shall record Paid Amount

## **3.3Performance Requirement**

The implementation of the application will be based on the object-oriented programming model. The performance of the functions and every module under them should be well. At every step, the output of the one phase is the input of the other phase, and it will be reliable and accurate. The risk factor must be taken at the initial step for better performance of the application.

For individual function, the performance should be well. When login into the application, the password and username will be matched to the password and name saved in the database and thus only authenticated users can log in. There

will be various ways of recover data and it takes less time. The data will be ambiguous and the record. The overall performance of the Event management application will reliable and enable the users to do their work efficiently.

## 3.4Logical and Database Requirements

This should specify the logical requirements for any information that is to be placed into a database. The logical and database requirements of the specific functions are as below.

- Customer Registration: Name, Address, NIC, Mobile Number, Email, Username and Password
- Service Provider Registration: Business Name, Address, Business Registration Number, Contact Number, Category, Email, Username and Password.
- Billing Details: Customer Username, Date, NIC, Reservations, Payment type, Payment.
- Inquiries: username, email, contact number, Content

## 3.5 Security Requirements

This software is protected from unauthorized access to the system & it protects stored data. It checks different levels of authorization and authentication across different user roles. Before any user accesses the system, they should require providing a username and a password. Each password shall be required to be between 8-12 characters in length and must be required to contain at least one capital letter, one number, and one special character. All service requesters and service providers have a unique id. We can identify service providers and service requesters accordingly. Before checking the service, providers detail all customers should be registered in the system. If not provide any details about the system.

## 3.6 Design Constraints

The Event Management System will be a web-based system accessible online through a web browser and shall be developed using HTML, CSS, JavaScript, jQuery for the frontend, PHP for the backend along a MySQL database.

# Appendix A: Glossary

- IEEE Institute of Electrical and Electronic Engineers
- SRS Software Requirements Specification
- DB Data Base
- DBMS Data Base Management System
- EMS Event Management System
- WA Web Application
- CSS Cascadian Style Sheets
- HTML Hyper Text Markup Language
- PHP Hypertext Preprocessor
- SQL Structured Query Language
- HTTPS Hypertext Transfer Protocol Secure
- TCP Transmission Control Protocol
- UI User Interface
- SSL Secure Socket Layer
- FAQs Frequently Asked Questions
- XSS Cross Site Scripting

- IP Internet Protocol
- FOSS Free and open-Source Software
- API Application Programming Interface
- GUI Graphical User Interface