Software Requirements Specification

for

Online Event Management System and Planner

Version 0.0

Table of Contents

1. Introduction

	1.1 Purpose	3
	1.2 Intended Audience	3
	1.3 Scope	3
	1.4 Abbreviations	4
	1.4 References	
	4	
	1.5 Overview	4
2.	Overall Description	
	2.1 Product Perspective	5
	2.2 Product Functions	5
	2.3 User Characteristics	6
	2.4 Constraints	6
	2.5 Assumptions	7
3.	Specific Requirements	
	3.1 External Interface Requirements	7
	3.1.1 User Interfaces	7
	3.1.2 Hardware Interfaces	8
	3.1.3 Software Interfaces	8
	3.1.4 Communications Interfaces	8
	3.2 Functional Requirements	8
	3.3 Performance Requirements	13
	3.4 Design Constraints	14
	3.5 Other Requirements	14
Index		15

1. Introduction

1.1 Purpose

This document provides a detailed description of the Online Event Management System and Planner software. The purpose of this document is to assemble and analyse the user requirements, outline the design and implementation process of the required functionalities and interfaces, identify the constraints under which the software must operate and verify whether it conforms to the project goals and objectives.

This document is aimed to gain a better understanding of the project, outline concepts that may be developed in the later phases of development, and identify and discuss the various modifications that have been made in successive versions of the software.

1.2 Intended Audience

The target audience for this software include -

- Typical customers who have an event to host and are interested in checking different services or hiring an event planner.
- Vendors who want to provide their services to the customers through this platform.
- Employees associated with this platform, viz., planners, managers, customer care executives and system administrator.

1.3 Scope

- The Online Event Management and Planner System is used to create a dedicated website to manage and organize events. The accessibility of the system should facilitate communication between customers, event planners, service providers and managers.
- It will allow the customers to select the event of their discretion from given templates and even customisable events will be accommodated, in compliance to related guidelines.
- It will give customers the freedom to create their own events and also to specifically select the service providers, in requirement to the said event.
 - The managers will be given the assignment tasks' responsibility.
- Customers, event planners and service providers will be able to sign up in the website and showcase their respective areas of expertise.
- A Customer Care Executive team will be permanently present to aid the software users.
 - An online payment portal will be provided for all transactions.
- The core of the system will reside on a server connected to the Internet and the primary interface for the system will be via an internet browser.

1.4 Abbreviations

IEEE - Institute of Electrical and Electronics Engineers

HTTP – Hypertext Transfer Protocol

WAN - Wide Area Network

LAN – Local Area Network

TCP/IP - Transmission Control Protocol/Internet Protocol

HTML - Hypertext Mark-up Language

CUA – Common User Access

GUI – Graphical User Interface

1.5 References

- IEEE Recommended Practice for Software Requirements Specifications IEEE Std 830-1998 by IEEE Computer Society; Approved 25 June, 1998 by IEEE-SA Standards Board.
- **Software Engineering**, Ed 9, by Ian Sommerville; Pearson.
- <u>https://docs.microsoft.com/en-us/windows/win32/appuistart/-user-interface-principles</u> User Interface Principles, Microsoft.
- <u>https://www.ibm.com/support/knowledgecenter/en/SSLTBW 2.1.0/com.ibm.zos.v2r1</u> <u>.f54dg00/cuahlp.htm</u> – CUA Guidelines, IBM.

1.5 Overview

The remainder of this document is divided into two sections:

- The first section, Section 2, provides the functional requirements and constraints for the system as well as how it will operate from a user's perspective.
- The next section, Section 3, provides a more detailed system specification including design and structure.

2 Overall Description

Sometimes, certain events don't get the recognition that they should. The main method of communication for these events is via a poster or mouth to mouth. It is getting very clear that these methods of communication are becoming more and more dated. Recently, numerous social media platforms have been shown to be more receptive in regards to communication via a Client and the attendees. To follow this trend, this system is being implemented to facilitate communication between the managers, service-providers and the potential customers. As well as provide up to the minute updates and information about the event.

2.1 Product Perspective

This software is an independent and self-functioning product. It can be used online by any user. Basic features provided by the product are available to all the users for use, while some functionalities have privileged access. The software is OS-independent and runs completely over the Internet.-

The system will accept payment from the customers through their bank details or card details via a third-party payment gateway. Also this product doesn't have a parent software or doesn't serve as an umbrella product for any other software.

2.2 Product Functions

2.2.1 Accounting Program:

Login IDs and unique passwords will be assigned to each and every user who registers on the website. A database will be maintained with appropriate technical requirements and setup for its smooth functionality, maintainability and retrievability in case of unforeseen circumstances.

2.2.2 User Types:

There will be various types of user registrations who can be majorly divided into 3 categories, namely,:

- 1. Customers Who want an event to be organized.
- 2. Event Planners Who register on the website and their trade is event management. They can be hired at the will of the Customer.
- 3. Service Providers Different service providers will be able to register, denoting their trade on the website, thus gaining distinguished visibility to Customers and Event Planners alike (E.g. Catering Service, Decorations). Can be hired by the Event Planners or by the Customers directly.

2.2.3 Management:

Managers will be present on the website, from the Server portal. Every scheduled event will be assigned a manager to undertake the desired requirements of the Customers.

2.2.4 Customer Care:

Assigned to address and resolve any registered users' issues.

2.2.5 Payment Portal:

Online Payment Portal is established for all transactions, and keeping privacy unhindered.

2.2.6 System Admin:

Undertakes the task of database maintenance and Event Configuration across different types of users. Important role in system maintenance as well.

2.3 User Characteristics

The Event Management and Planner software is aimed at providing the users with a smooth experience in relation to organizing their events, both large and small. To use this software no such educational level, experience, and technical expertise is required. The interface provided is robust and easy to use and the features are easy to recognise. However, it is recommended for the user to go through our policies to make the best use of the product.

2.4 Constraints

2.4.1 Interfaces to Other Applications:

- The software will have direct connectivity to large-scale social media platforms (e.g., Facebook) and major technological companies that provide various platform to its users(e.g., Google).
- If potential users of the software are already registered on such platforms, then they can directly register on the website using the identification of other supported interfaces, which also happen to be deployed on the Internet.
- A user-friendly view of the whole system will be maintained and easy undertaking of action driven processes as command buttons are functionally labelled.

2.4.2 Regulatory Policies:

- A safe and secure user-end of the software has to be established to ensure safe browsing and proper utilisation of the software in question.
 - A "Terms and Conditions" will be specified beforehand to the potential users.
- Banking transactions will be carried out through a safe online portal. User's online payment details will not the interfered with and any breach of privacy will not be tolerated, from the server's end or the user's.

2.4.3 Higher-order Language Requirements:

The developers' must be fluent with the applications of Django and its usages in Python for the back-end development. The front-end, on the other hand, will be implemented using HTML, CSS, Bootstrap framework. The website will use PostgreSQL as its relational database management system.

2.4.4 Reliability:

As the system provides the right tools for discussion and problem solving, it must be made sure that the system is reliable in its operations and for securing the sensitive details. Security and fluency with various operating systems are of pivotal importance to ensure proper reliability.

2.5 Assumptions

- All the services obtained through this software are not dedicated to any particular company or organisation. This software acts as a mediator between the customers and the vendors.
- All the actors have efficient and sufficient communication among themselves.
- The vendors will make themselves available based on Customers' request.
- A vendor offering more than one type of service(among hall, catering, decorating and photography) must provide each service independently.
- All payments must be done online.
- The Customer must make the payment as billed by the Event Manager.
- All the venders will be paid by the Manager. The Customer shall not intervene with the payments of the vendors.
- To book a customized event, the Customer must submit a request with the necessary details that are to be evaluated. The approval for the said event should be awaited from thereon.
- Details submitted by a Customer while booking an event must be unambiguous.
- The Planner assigned by the Manager will be provided with all the details necessary to organize an event.
- The profiles of the vendors in respective catalogues are to be maintained by the vendors themselves. A Customer can access these catalogues without registration.
- The database contains all the booking details with corresponding customer details, vendor accounts, planner profiles, service catalogues and financial documents (restricted access).

3 Specific Requirements

3.1 External Interface Requirements

3.1.1 User Interfaces:

The Event Management and Planner system is a web-based system. The user interface for the software will be compatible with any browser such as Google Chrome, Mozilla etc., by which user can access to the system.

The system's user interface will implement data input processes using forms with all the fields and command buttons properly labelled. This will result in ease of handling for non-

technical users. The user-friendly view of the whole system will help in easy undertaking of action-driven processes.

3.1.2 Hardware Interfaces:

Since the application must run over the Internet, all the hardware required to connect to the Internet, will be a part of the hardware interface for the system. For example - Modem, WAN – LAN, Ethernet Cross-Cable.

The hardware used must have a competent firewall to secure the data in the system.

3.1.3 Software Interfaces:

The software interfaces implemented in the system are as follows:

- The system will provide an interface for the customers to browse through the catalogues of the services provided.
- The system will provide an interface between the vendors and the catalogues in order to maintain the latter.
- The system will provide an interface for the System Admin to maintain the database.
- The system will provide an interface to communicate with the Payment Gateway to identify payment details, validate the payment and process the payment.
- The system will provide an interface to the Manager to manage the finances of the platform.
- The system will provide an interface for the Planner to report to the Manager about a certain event and for the Manager to oversee it.
- The system will provide an interface between the Customer and Customer Care services.

3.1.4 Communications Interfaces

The Online Event Management and Planner system will use the HTTP protocol for communication over the Internet. The system will be able to conduct intranet communication through TCP/IP protocol suite.

3.2 Functional Requirements

3.2.2 Registration:

A customer trying to browse through the different services offered by the platform or willing to book an event has to register him/herself. A new employee(planner, customer care executive, manager) also has to register him/herself. The 'Registration' module will provide this functionality.

Customers, employees, vendors will be able to register themselves on this platform. Upon registration, a customer can browse through all the services provided by the platform and can book an event. New employees(planner, customer care executive, manager) will have

to create their own accounts as well. Vendors willing to offer their services through this platform must create a business account.

There will be 3 categories of registration:

1. New Customer Account:

Inputs – This module will consist of a form that includes the following fields:

- first name,
- last name,
- contact number,
- city,
- email address,
- username,
- password,
- confirm password,
- agreement to terms and conditions(checkbox).

2. New Employee Account:

Inputs – This module will consist of a form that includes the following fields:

- first name,
- last name,
- contact number,
- employee ID,
- email address,
- username,
- password,
- confirm password,
- agreement to terms and conditions(checkbox).

3. New Business Account:

Inputs – The form will have the following fields:

- company name,
- business ID,
- contact, number,
- email address,
- password,
- confirm password,
- agreement to terms and conditions (checkbox).

Processing and Output – User details will be checked with the database. Email address and username must be unique, i.e., there should not be more than one account linked with one email address and every customer must have a unique username. Password constraints will be checked as per validation. After a successful registration, the user will be automatically logged into the corresponding profile.

3.2.2 Login:

A user will be able log into an existing account from this webpage.

Inputs – The page will have a form that takes in the username and password from the user.

Processing – The system will check whether the input is valid. If not, the user will be prompted to re-enter credentials.

Output – Upon successful login, the user profile page will be displayed.

3.2.3 Submit Details:

To book an event the customer has to submit the details of the concerned event. It will include the following fields:

- customer name,
- customer address,
- contact number,
- valid ID no.(dropdown Aadhar/PAN card/Voter card),
- email address,
- event type(dropdown wedding/anniversary/birthday/meeting),
- date of the event,
- no. of guests,
- services required(checkboxes hall, caterer, decorator, photographer),
- timing preference,
- comments(optional),

The details will be submitted to the Manager, who verifies all data and sanctions the event.

3.2.4 Book Event:

The Customer will be prompted to register(if not done already), submit details(as discussed in Section 3.2.3) and will also provide an option to book an Event Planner(as discussed in Section 3.2.5).

3.2.5 Book Planner:

The customer will be able to book a planner to plan his/her event using this functionality. This will have a form with the following fields:

- planner(checkbox),
- planner preference(optional).

The request will be submitted to the manager, who is to assign a planner as requested.

3.2.6 Search Event:

A Customer will be able to browse through events previously managed and/or planned by the service provider.

3.2.7 Manage Your Event:

This module will provide the Customer with certain functions, viz. –

- **View Event** A registered customer will be able to see the details of the event booked by him/her.
- **Cancel Event** A customer can cancel an event that has been already booked.
- **Contact Planner** A customer can communicate with the assigned planner.

3.2.8 Catalogues:

Each type of catalogue will consist of a list of vendors associated with this platform. Each vendor will have a profile in the catalogue that includes:

- services offered by them,
- plans offered and corresponding rate,
- gallery,
- customer reviews,
- address of their office,
- contact no..

The catalogues are to be maintained by the vendors themselves and can be viewed by any customer.

3.2.9 Manage Catalogue:

The vendors will maintain their service profiles in the catalogues themselves. The vendors can perform the following operations:

- add/update details(name, address, contact no., short description),
- add plans and corresponding rate,
- add/delete photos to the gallery.

3.2.10 Ad Services:

This module will allow the vendors to advertise their company or organisation on the platform, complying with the platform's advertisement policies.

3.2.11 Planner Profile:

Profile maintained by a planner; will include the planner's name, contact no., email address, experience, personal gallery, customer reviews etc.

3.2.12 Arrange Transportation:

A planner can arrange transportation services for his/her customer. It will include the details of the action taken, viz., no. of vehicles, name of vehicle, passenger accommodation, rate.

3.2.13 Prepare Budget:

The Planner can organize the event as per the budget set after discussing it with the customer. This will include:

- budget set initially,
- cost of each service,
- cost of management,
- cost of planning,
- total amount.

The amounts will be updated by the planner as the process continues and all of this is to be reported to the Manager.

3.2.14 Report to Manager:

The planner has to report about the event being organized to the Manager. The report will include:

- financial details,
- project progress,
- customer requirements,
- customer feedback,
- status of booked services.

3.2.15 Manage Event:

The Manager will verify the event request submitted by the Customer(discussed in Section 3.2.16) and will assign a planner if requested(discussed in Section 3.2.17).

3.2.16 Verify & Sanction Event:

The Manager will be assessing an event request submitted by the Customer and will sanction it if all the requests are valid. Assessment will be is based on:

- availability of the services requested on the date of event,
- authenticity of the customer,
- availability of planners.

3.2.17 Assign Planner:

The Manager can assign a planner if the customer has booked one to organize the event. If a planner has been specified by the customer, the Manager will assign him/her, if he/she will be available. Otherwise the Manager can select a planner arbitrarily.

3.2.18 Finance Management:

The Manager will handle the finances, including event billing and the payment of vendors and planners (discussed in Sections 3.2.19 and 3.2.20).

3.2.19 Event Billing:

The Manager will draft the final event bill for customers as per the reports of the planners or according to the rates of the services provided (as discussed in Section 3.2.14).

3.2.20 Pay Service Providers:

The Manager will pay the vendors who provided the services to a specific event and the Planner organizing that event as per the rates or the planner's report.

3.2.21 Payment:

Through this module the Customer can pay the bill for the event online and the Manager can pay the vendors and the Planners for their service. The secure gateway for payment is provided by a third-party Payment Gateway Service.

3.2.22 System Guidelines:

The Customer Care Executive can cater to customer queries regarding the rules and regulations and functionality as listed in the system guidelines. It includes:

- details about the functionalities of the system,
- details about the terms and conditions,
- details about the legislative requirements.

3.2.23 Access Database:

Customer Care Executive will have a restricted access to the database in order to answer to any query of the customers about the events being organized. The access will be restricted to the details submitted by customer about an event and the planner or manager.

The System Admin will have unrestricted access to the database in order to maintain and update the system.

3.2.24 System Maintenance:

The System Admin will be responsible for the maintenance of the system by

- updating the software,
- maintaining the database,
- updating rules and regulations(system guidelines),
- supervising security of database and payment actions.

3.3 Performance Requirements

- The product will be based on web and has to be run from a web server.
- The product will take initial load time depending on internet connection strength which also depends on the media from which the product is run.
 - The performance will depend upon hardware components of the user.
- The system will run on all browsers, such as Google Chrome, Mozilla Firefox, Microsoft Edge etc.

3.4 Design Constraints

3.4.1 Standard Development Tools:

The system is built using a standard web page development tool that conforms to either IBM's CUA standards or Microsoft's GUI standards.

3.4.2 Web Based Product:

- There are no memory requirements .
- The computers must be equipped with web browsers.
- The product must be stored in such a way that allows the user easy access to it.
- Response time for loading the product should take no longer than five minutes.
- A general knowledge of basic computer skills is required to use the product.

3.5 Other Requirements

3.5.1 Security Requirements:

3.5.1.1 Data Transfer

- The system will use secure sockets in all transactions that include any confidential customer information.
 - The system will automatically log out all customers after a period of inactivity.
 - The system will confirm all transactions with the customer's web browser.
- The system will not leave any cookies on the customer's computer containing the user's password.
- The system will not leave any cookies on the customer's computer containing any of the user's confidential information.

3.5.1.2 Data Storage

- The customer's web browser must never display any user's password. It will always be echoed with special characters representing typed characters.
- The customer's web browser must never display a customer's credit/debit card number after retrieving from the database. It will always be shown with just the last 4 digits of the credit/debit card number.
- The system's back-end servers will never display a customer's password. The customer's password may be reset but never shown.
- The system's back-end servers will only be accessible to authenticated administrators.
 - The system's back-end databases will be encrypted.

3.5.2 Supportability:

The source code developed for this system shall be maintained in configuration management tool.

3.5.3 Legislative Requirements:

The system should display the disclaimers, copyrights of images and resources, rules and regulations of the vendor companies, trademarks.

3.5.4 Licensing Requirements:

The business licenses of the vendors must be issued by authorised government agencies.

Resources published on the website cannot be used for commercial or non-commercial purposes without the consent of the owners.

Index

Aadhar, 3.2.3

advertisement, 3.2.10

assessment, 3.2.16

authenticated, 3.5.1.2

backend, 2.4.3, 3.5.1.2

billing, 3.2.18, 3.2.19

browser, 3.1.1

budget, 3.2.13

Chrome, 3.3

configuration, 3.5.2,

copyrights, 3.5.3

Cross-Cable, 3.1.2

CUA, 1.4, 3.4.1

disclaimers, 3.5.3

email, 3.2.2, 3.2.11

encrypted, 3.5.1.2

Ethernet, 3.1.2

Firewall, 3.1.2

gallery, 3.2.8

Google, 3.1.1, 3.3

GUI, 1.4, 3.4.1

guidelines, 3.2.22

HTML, 1.4, 2.4.3

HTTP, 1.4, 3.1.4

IBM, 3.4.1

Internet, 3.1.2

intranet, 3.1.4

LAN, 1.4, 3.1.2

legislative, 3.5.3

licenses, 3.5.4

login, 3.2.3

Microsoft Edge, 3.3

Modem, 3.1.2

Mozilla, 3.1.1, 3.3

password, 3.2.2, 3.2.3

Payment Gateway, 3.2.21

profile, 3.2.2, 3.2.3, 3.2.11

protocol, 3.1.4

registration, 3.2.2

source code, 3.5.2

TCP/IP, 1.4, 3.1.4

trademarks, 3.5.3

transportation, 3.2.12

username, 3.2.2, 3.2.3

WAN, 1.4,