Software Requirements Specification

For

DREAMCATCHERS- An Event Management Website

By: Anjali A Darokar, Ankit Chourey, Santosh Sharma, Shivani Yadav

Centre for Development of Advance Computing, Bengaluru

December 16, 2020

Table of Contents

Table of Contents Revision History 1. Introduction 1.1			Error! Bookmark not defined. Error! Bookmark not defined. Error! Bookmark not defined. Purpose Error! Bookmark not defined.
1.2Document			Conventions
1.3Intended	Audience	and	Error! Bookmark not defined. Reading Suggestions Error! Bookmark not defined.
1.4Product			Scope
1.5			Error! Bookmark not defined. References 2
2. Overall Description 2.1Product	1		Error! Bookmark not defined. Perspective
2.2Product			Error! Bookmark not defined. Functions
	Classes	1	Error! Bookmark not defined.
2.3User	Classes	and	Characteristics 3
2.4Operating			Environment 3
2.5Design	and	Implementa	_
2.6Assumptions		and	Dependencies 4
3. External Interface 3.1User	Requirements		4 Interfaces
3.2Hardware			4 Interfaces
3.3Software			5 Interfaces
			6
3.4Communications			Interfaces 6
4. System Features 4.1System		Feature	6
5. Other Nonfunction 5.1Performance	al Requirements		7 Requirements
5.2Safety			Requirements
5.3Security			Requirements 7

5.4Software Quality Attributes 8

1. Introduction

1.1 Purpose

The purpose of this document is to make the functional requirements of the Software Engineering project on an Event Management System easy to comprehend. It also serves the purpose of making the functionality clear to the end users. This software is designed to register new Vendors for their businesses and provide the information of available services of the registered Vendors to the User.

1.2 Document Conventions

1.2.1 Database:

A system intended to organize, store, and retrieve large amounts of data easily; a repository of information.

1.2.2 Events:

A social gathering or activity.

1.2.3 Operating System:

The essential program in a computer that maintains disk files, runs applications, and handles devices such as the mouse and printer.

1.3 Intended Audience and Reading Suggestions

The different types of reader that the document is intended for, such as developers, project managers, marketing staff, users, testers, and documentation writers. The sequence for reading this document, beginning with the overview sections and proceeding through the sections.

1.4 Product Scope

With Dreamcatchers, a Web-based event creation and registration system, end-users will have the ability to either create or register for events at locations of their choosing, with management of the system falling into the Admin's hands. The system will have separate access for end-users and the Dreamcatchers admin.

It is intended for the administration of the management and other concerned users. The product will import its data from My SQL Database and use the JAVA Web Based Services for its integrated development environment. Errors will be minimized through the use of drop-down buttons and command buttons to eliminate the excessive use of text input. Management of data includes searching, adding, modifying and deleting

1.5 References

- **1.5.1** *IEEE Standards Description: 830-1998*
- 1.5.2 Writing Effective Use Cases -Ivar Jacobson (1987)

2. Overall Description

2.1 Product Perspective

The software product is a standalone system and not a part of a larger system. All the forms used in the product follows a clear and logical structure. Errors will be minimized through the use of dropdown buttons and command buttons to eliminate the excessive use of text input. Management of data includes searching, adding, modifying and deleting. The minimum required version of the operating system is Windows XP and any subsequent version of Windows will be compatible with the system. It does not also require any new hardware to function.

- 2.1.1 **User**: This program designed to assist managers, event organizers, firms, and other users whose line of business deals with events management to manage their participants' data in an orderly manner. After login user can find the specific Vendors according to their needs at nearest locations and further can get help in organizing their events.
- 2.1.2 **Admin**: This program is designed to manage its Vendors and view the Customer's information and the statists of the business.

2.2 Product Functions

- **2.2.1** On the Admin side, the system can be used to see, delete the Vendor details. Admin will be able to see the feedbacks given on the website. It shall perform the following functions:
- **2.2.1.1** Protect the database of the firm by requiring a correct and registered username and password.
- **2.2.1.2** Facilitate a step-by-step process of entering, organizing, retrieving, modifying and deleting data from the database without the need to go the database itself.
- **2.2.1.3** Add new user and vendor information easily.
- **2.2.1.4** Provide an option for users to update information.
- **2.2.1.5** Present a list of participant codes representing existing users and vendors.
- 2.2.1.6 Display users and vendors information in an organized manner for easy understandability.
- **2.2.2** On the User side, the system can be used to register/update for the Vendor's role and for the Customer's role. Here user as a vendor can post the advertisement for their respective business and

can get their business grows. Also user can enquire for the various services available according to their requirements.

2.3 User Classes and Characteristics

2.3.1 User: The system will operate in a graphical environment where the users interact with the program by clicking buttons and choosing from menus. However some specific information (e.g. users name, Address, contact numbers, etc.) requires them directly input the data by typing it. It will be fully operational on any personal computer with a Windows operating system.

The user's information may be accessed and updated by both the admin and the team. Therefore, any changes with regard to the date of event, change of supplier, among others are updated easily.

2.3.2 Admin: The system on the admin side will also operate in a graphical environment where the admin can see the detailed information of the registered Vendors and the Customers who enquired for the events. It is intended for the administration of the management and other concerned user and vendors.

2.4 Operating Environment

The server should have Java installed on the machine, along with Java's cryptographic packages. The server runs on the http server. The browsers through which the users access the server should have minimal support for cookies and encrypted transactions. Angular CLI needs to be installed in the system for the presentation layer.

2.5 Design and Implementation Constraints

Even though the system enables the users to register as a vendor for their respective business, the user should initially register to authenticate them and establish their vendor-ids and password. This constraint is imposed to ensure that only the genuine person is allowed to register for business. Also, it is assumed that only the admin has the authority to see the list of the registered vendors and the customers.

The primary responsibility of the managing body is to contact the suppliers of services and coordinate with them about the event. Supplier contacts of the firm are those which are known of rendering high quality service.

2.6 Assumptions and Dependencies

- **2.6.1** User side assumptions and dependencies: PC (Personal Computer) or workstation with GUI. A web browser is required with support for cookies and working Internet connection.
- **2.6.2 Server-side assumptions and dependencies**: A web server with GUI, Java and an http server installed.

3. External Interface Requirements

3.1 User Interfaces

The interface of the software will provide options for a 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 simple and easy undertaking of action-driven processes as command buttons are functionally labeled. With all these, target users of this software will relatively find it not difficult to use it.

We have given all the use cases that are there for the system to specify the user interface. They are given below:

3.1.1 Use case 0: Home Screen

This will be the default page of the website and will have five options. i.e., ('Home', 'Services', 'Gallery', 'About us', 'Feedback, and 'Login/Register' options for Administrator and Users.)

Main success scenario:

- **3.1.1.1** The Admin will be forced to login using his Admin username and password to see the details of the available Vendors and their Customers and the feedbacks given for the website. Refer to Use case-1 for more details.
- **3.1.1.2** The Users will be asked to register and then he can login as Normal user/Vendor with his respective username and password. Refer to Use case-1.
- **3.1.1.3** The User can click on the Services option to view the available services. Henceforth they can get the details of the respective Vendors of the particular services and further can enquire to avail them.
- **3.1.1.4** Any person who is visiting the website, if he wants to see the pictures of the events can click on the 'Gallery' option.
- **3.1.1.5** If anybody wants to see the details of the Admin and Co-founders of the website, they can click on the 'About us' section.
- **3.1.1.6** If anybody wants to give feedback regarding the available services, website can fill the feedback form from the 'Feedback' option.

Extensions:

- **3.1.1.7** The Admin enters wrong username or password. He is asked to re-enter the correct username or password.
- **3.1.1.8** The user who chooses to register for his business enters the wrong username or password, asked to re-enter the correct username or password.

3.1.2 Use case 1: Registering for the business and enquiry for the available services

Main success scenario:

- **3.1.2.1** On start-up, the Admin is presented with a screen. This will contain the list of the available Vendors who has registered for their respective businesses. Also Admin will have the option to see the list of the customers who has enquired to them for certain event. Refer to Extensions of Use case 1 (3.1.2.4).
- **3.1.2.2** After successful login, Vendors will be able to register for their respective business. Refer to Extensions of Use case 1 (3.1.2.5).
- **3.1.2.3** After submission of the enquiry form, this form will reach to the respective vendors of the business or their team will contact that particular customer to assist them with that event.

Extensions:

- **3.1.2.4** If Admin wants to see any particular Vendors business/service, he can do so by clicking on 'Service' button. Then Admin will be able to the Vendors brand name, address, photos uploaded by him.
- **3.1.2.5** Post registration, Vendors will be able to edit their profile details, can delete their particular business advertisement. Vendor can also see all enquires which has been done for their particular business and can logout from that page.
- 3.1.3 3.1.2.6 After Log-in Customer can also edit his profile and also can view the available services and their respective Vendors and get further contact them by clicking on 'Get In Touch' button. An enquiry form needs to be filled to contact the respective vendors to avail any particular service.

3.2 Hardware Interfaces

To be able to run the system, the minimum requirements of the hardware for this system are:

- 3.2.1 CPU 2.0 GHz or CPU (laptops) Core 2
- 3.2.2 CPU (desktops) RAM 2 GB RAM
- **3.2.3** 7200 RPM6 GB or at least 10% free space (whichever is greater).

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

3.3 Software Interfaces

The system was developed to serve as a database for the events' organizers. However, the system requires minimum specifications for the software interfaces to be able to use it efficiently. The server runs on http server that is enabled to handle server pages (e.g. Apache Tomcat for support JSP). It uses a relational database to keep track of the polls, which it connects through standard database connectivity interfaces. In order to run the setup software, the environment needs to have a JVM running on it.

3.4 Communications Interfaces

The organizers have respective accounts with password that enables only the organizer/s to login onto the system. Passwords are required so that no one else can access the system or database. In the case of the administrator, he/she needs to have the adequate knowledge about maintaining databases should the system encounter problems. Because the participants and suppliers themselves provide the information entered into the database, there should be very little problems about the information entered. However, the organizer should always triple check every information given. Security systems need database storage just like many other applications.

4. System Features

- **4.1** The system will operate in a graphical environment where the users interact with the program by clicking buttons and choosing from menus. However some specific information (e.g. participants name, Address, contact numbers, etc.) requires the user to directly input the data by typing it. It will be fully operational on any personal computer with a Windows operating system.
- **4.2** The system mandates the use of relational database management system so as to systematically store information in database.
- **4.3** The minimum required version of the operating system is Windows XP and any subsequent versions of Windows will be compatible with the system

5. Other Nonfunctional Requirements

5.1 Performance Requirements

5.2 Although the system is a simple one, a literate organizer who is able to understand simple computer processes is needed to run the system. An organizer is one who is knowledgeable about the ins and outs of the firm and is learned in the field of organizing events. The organizer will be the person to enter the data needed into the system, thus an organizer needs also be efficient to utilize fully the benefits that can be provided by this software. The system also needs MS Access for the organizations database management system. The software is expected to have reasonably short response time. It should be able to log-in and register the vendor with new pages on request with a response time of the order of a few seconds. This would imply that the system should have the capability for processing about 20 transactions each second.

5.3 Safety Requirements

5.4 Different information is entered into the database such as information about the different caterers, suppliers and participants. Mismanagement of information might cause participant dissatisfaction that will eventually lead to profit loss, only because of mistakes on giving information. In line with this, the organizer should always double check which suppliers are available.

5.5 Security Requirements

The organizers have respective accounts with password that enables only the organizer/s to login onto the system. Passwords are required so that no one else can access the system or database. In the case of the administrator, he/she needs to have the adequate knowledge about maintaining databases should the system encounter problems. Because the participants and suppliers themselves provide the information entered into the database, there should be very little problems about the information entered. However, the organizer should always triple check every information given. Security systems need database storage just like many other applications.

5.6 Software Quality Attributes

Correct information must be entered into the system to prevent mismanaged conflicts to occur. This will make the information provided by the system to be reliable and useful. However, in case an error occurs, changes may be immediately effected provided the user notices the error. This is why periodic monitoring and run-through of the database and the system must be done. The target users of the system are deemed to understand basic computer processes so use of this system will be easy for them. They will not need to undergo rigid training and instruction in order to use the software.