SOFTWARE REQUIREMENTS SPECIFICATION

MIS For Intra College Cultural, Technical and Sports Activities

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Revision History

Date	Reason For Changes	Version
27-08-18	Initial preparation	V 1.0
01-09-18	Version 2	V2.0

1. Introduction

With the most recent developments and changes in numbers of students in college, data and information must be effectively gathered, managed and stored to keep pace and compete in the event management. Thus, an easier and cost-efficient manner of handling information is necessary.

1.1 Purpose

This Software Requirements Specification (SRS) document is intended to give a complete overview of MIS Portal for Cultural, Sports and Technical Activities, including the user interface and the underlying processes. The SRS document details all features with reference to the manner and importance of their implementation.

It describes the data, functional and behavioral requirements of the software. This will make it easier for the users to control and manage use of software.

1.2 Document Conventions

Component object model - An interface for software components which enables inter-process communication and also dynamic object creation.

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

Events - A social gathering or activity.

Operating system - The important program in a computer that helps to maintains disk files, runs applications, and manages devices such as the mouse and printer.

1.3 Intended Audience and Reading Suggestions

During the development phase, the intended audience for the document are the developers of the software to get proper direction and guidelines on how to proceed while working. In the implementation phase, the intended audience are the users of the product including admins, faculty and students. The document will provide a solution and an explanation for every problem the user might encounter while using the product.

1.4 Scope

The document covers various aspects about the complete software like its functions, requirements, features and constraints. It also discusses about the user interfaces required for the proper functioning of the product. The document can be used as a reference or help in case the user encounters any difficulty while using the software to get the in-detail description of every functionality.

1.5 References

The following references are used in preparing this SRS:

- i) The SRS Template and Sample sent by Prof. Ravi Gorthi
- ii) Bourque, P.; Fairley, R.E. (2014). "Guide to the Software Engineering Body of Knowledge (SWEBOK)"
- iii) Stellman, Andrew & Greene, Jennifer (2005). Applied software project management. O'Reilly Media, Inc

Overview

The next chapter, the Description section, of this document provides a summary of the practicality of the merchandise. It describes the informal needs and is employed to determine a context for the technical requirements specification with in the next chapter.

2. Overall Description

DFD level 0 -

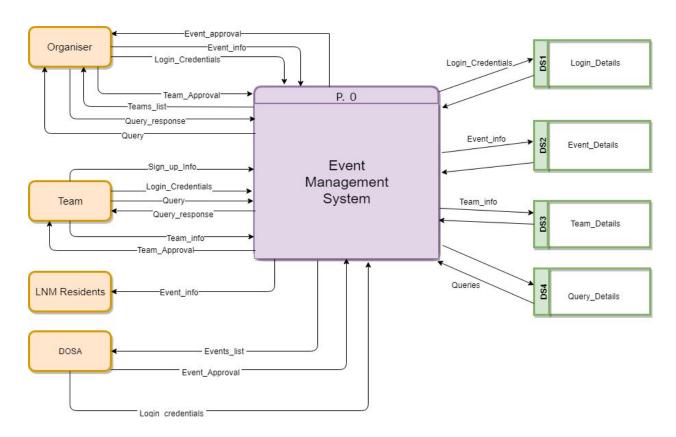


Fig1. Context Diagram for MIS Portal For Events Management

2.1 Product Perspective

The software will be a new independent product, with new utilities provided for the LNMIIT students and faculties. The software will allow the participants of an event to have effective communications with the organizers about the various intra-college events, by logging in the MIS portal through their PC. Any sort of errors will be minimized by the use of drop-down buttons and command buttons to eliminate the excessive use of text input. Data management techniques include searching, adding, modifying and deleting.

2.2 Product Functions

The software is designed to assist event organizers(G Secs.), participants, and other LNMIIT residents. It shall perform the following functions:

- 1. Allows the G secs(sports,cultural,technical) to schedule new events, and update for any changes in the pre-designed schedule.
- 2. Allows DOSA to approve, or grant budget to any event on the software.
- 3. Provides smart ways for team formation, registration, and communication(via query posting) for various events.
- 4. A daily updated notice board visible to all the users of the portal will display all the events scheduled, with their respective dates, timings and venues.
- 5. Provides a step-by-step process of viewing, setting, organizing, retrieving, modifying and deleting data from the database as per the authorization of the concerned user without the need to go the database itself.
- 6. Protects the database by requiring a correct and registered username and password strictly commissioned to the General Secretaries (Cultural, Technical, Sports), DOSA, and to the participants of a particular event.
- 7. Makes data organization easier by classifying the users into different subcategories as DOSA, G.Secs, participants, and general residents of LNM.

2.3 User Characteristics

The following are the target users:

1. General Secretaries:

The General Secretaries can use the software to schedule new events, get them approved by DOSA, approve team registrations, announce the winners, issue updates and for the active communications with the participants of any particular event by responding to the queries made to them. He/She must possess basic computer literacy and analytical skills to use the software and make good use of the information provided by the same.

2. LNMIIT Residents:

All the LNMIIT residents can register/participate in the upcoming events after checking the eligibility/requirements of the event and thus can do the online team formation and look for the event schedule

3. Team:

Team members can look for the event schedule and communicate directly with the event organizers in case of any queries through the online event query section. A given team can modify its members and their details if needed.

4. **DOSA**:

DOSA can use the software to get the list of all the events along with the details of budget required. He/She can approve the request, or decline the request and ask the Gsec to renew the proposal by adding the comments.

2.4 Design and Implementation Constraints:

The design constraints include the software package to be designed to handle the access by faculty or staff members, admin and approx 200 students concurrently.

2.5 Assumptions and Dependencies:

3. Specific Requirements

3.1 External Interface Requirements

3.1.1 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 not find it difficult to use. Set of user interfaces(as per constraints) consists of:

- 1. To log on to their respective accounts by registered users(G.secs and DOSA).
- 2. To view published data such as event schedule, their venue, and winners announced.
- 3. To create event.
- 4. For event approval
- 5. To register in any event.
- 6. To ask query.
- 7. Forget password interface.

3.1.2 Communication Interfaces

This software package should be securely accessible through intranet communication (wired or wireless).

3.2 Functional Requirements

3.2.1 Input/Output Requirements

User Login (for DOSA, General Secretaries and Teams)

- i) Description: The System provides facility to login into the system.
- ii) Input: Enter username and password
- iii) Output: User Home screen
- iv) Processing: The system will check the input of user and if valid then login is done.

Otherwise, user will be asked to re-enter the username and password.

Forgot Password

i) Description: The user can send reset link to the mail id to reset password.

ii) Input: Email id

iii) Output: Reset link send to Email id.

iv) Processing : By reset link we can easily change the password and update store in database .

Logout

i) Description: The system provides the facility to logout from the site

ii) Input : Select logout option

iii) Output : Logout from the system iv) Processing : User will logout

Organizer Panel

New Event Creation

i) Description: To create new event, G.Sec has to login using his/her credentials and then has to enter the event related details and send it for further approval of DOSA.

ii) Input : Event Details

iii) Output: Event details send for approval screen.

iv) Processing: Event details will be saved in database and the proposal for the event will be send to DOSA for approval.

Event Modification/Deletion

i) Description : Modify the details of an already existing event or to delete the event after its completion.

ii) input: Modifications or deletion.

iii) output : Event details modified/ Event deleted screen

iv) Processing: Event details will be modified in the database or the event info will be erased from the database when organizer wishes to delete the event.

Responding to query

i) Description: Allows to respond to queries made by the participants.

ii) Input: response to the query

iii) Output: Your response has been recorded screen.

iv) Processing: The response gets saved in the database



ORGANIZER PANEL

LNM Residents Panel

Registration for participation in event

- Description: To participate in an event user must register first. Requirements for the registration are first name, last name, the username, email-id, password, confirm password, etc.
- ii) Input: User Details
- iii) Output: Filled Registration Details.
- iv) Processing: User details are recorded in the database and login page displayed as for further validation.

Select the event

- i) Description: The user can select the event to view the event related details and schedule.
- ii) Input: (no input)
- iii) Output : Event details page.
- iv) Processing: The system will fetch the details of the selected event from database.



HOME PAGE

Participants Panel

Modify/delete team:

- i) Description: Modify the details of an already existing team or to delete the team.
- ii) input: Modifications or deletion.
- iii) output : team details modified/ team deleted screen
- iv) Processing: team details will be modified in the database or the team info will be erased from the database if the organizer wishes to delete the team.

Ask a query

- i) Description: Allows to ask queries to the organizer.
- ii) Input : query.
- iii) Output: Your query has been sent to the organizers screen.
- iv) Processing: The query gets saved in the database.

View response of organizers

- i) Description: It allows the teams to see response of the organizers to the query posted by them.
 - ii) Input: (no input)
 - iii) Output : query and it's response is displayed
- iv) Processing: Fetch the queries and response of the corresponding team from the database.



TEAM PANEL

DOSA Panel

Approve Event

- i) Description: It allows DOSA to see the list of the events which needs approval along with its details and budget demand and thus approve them.
 - ii) Input: Select the checkbox (approved)
 - iii) Output: Event approved screen
 - iv) Processing: Event which is approved is removed from the list.

Reject Event

- i) Description: It allows DOSA to see the list of events and then reject them
- ii) Input: Select the checkbox (rejected) and add the further comments.
- iii) Output: The event has been rejected screen.
- iv) Processing: Event which is rejected is removed from the list.



DOSA PANEL

5. Non-Functional Requirements

5.1 Performance Requirements

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 institute 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 organization's database management system.

The software should be able to do the following things:

- I) At least 3 organizers can log in on an average of 5 hours a day for five days a week.
- II) At least 100 participants can log into their accounts for 3 hrs for 5 days a week.
- III) It should be able to handle the MySQL database of 500 participants and 100 events.

5.2 Safety Requirements

Different information is entered into the database including information about the different events and participants. Mismanagement of information might cause participant dissatisfaction that will eventually lead to decrease in participation, only because of mistakes on giving information. In line with this, the organizer should always double check which events can be organized.

5.3 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 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.

5.4 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 affected 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.

5.5 Business Rules

In order to organize the events in the college, the following business rules will apply-

The event first needs to be proposed by Gen Secretary, which is then passed to the DOSA for its approval. Once verified and approved by DoSA(Dean of Student Affairs) the requested budget is allocated and the event is finally organized.