

**Software Requirement Specification**

For Dean Students Office

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# **Introduction**

## **Purpose**

The aim of the document is to gather and analyse and give an in-depth insight of the complete Student Gymkhana System of IIITDM Jabalpur. It will define the users and functionality of the Software.

Also, we shall predict and sort out how we hope this product will be used in order to gain a better understanding of the Software, outline concepts that may be developed later, and document ideas that are being considered, but may be discarded as the product develops. This document describes the project's target audience and its user interface, hardware and software requirements. It defines how our client, team and audience see the product and its functionality. Nonetheless, it helps any designer and developer to assist in Software Development Lifecycle (SDLC) processes.

## **Scope of Project**

The Software System will be Gymkhana Online Web Services Portal to make various events and activities of Gymkhana easier with various tools. Accessing the information and performing certain activities will be easy using the Software.

Software will facilitate various Gymkhana Activities and Administration.

## **Document Convention**

When writing this SRS for Student Gymkhana Software, the following terminologies are used:

* Web server (WS): Web Server over which all the data and information is stored.
* Database: Database is collection of data of the Institute’s various departments.Access will be given on proper authentication.
* Client: The user of the Software.

## **Intended Audience and Reading Suggestions**

Intended Audience of the SRS are students (IIITDM Jabalpur as well as outside) and developers, faculties and Staff. It specifically addresses issues of Gymkhana System.

## **References**

IEEE. IEEE Standard 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.

**Overview of the Document**

The remaining sections of this document provide a general description, including characteristics of the users of this project, the product's hardware, and the functional and data requirements of the product. General description with functional requirements of the project is discussed in section Overall Description of this document. External Interface Requirements gives the Hardware, Software and Communication Interfaces designing the office of dean of students office. It also gives the user viewpoint of product. System Features also gives the specific requirements of the product. It also discusses about the various use cases included in the Project. Last Section of gives detail about Non Functional requirements.

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# **Overall Description**

## **Product Perspective**

Dean of students of office undertakes all the administrative decisions for gymkhana activities, visitor hostel allotment and student hostel allotment.

There are specifically 2 Actors in the System-Superitendent, Dean of students. Different Activities are performed by different actors.

## **Product Functions (Functional Requirements)**

Student Gymkhana will provide a number a functions:

⇨ Facilitate the meeting notification to all the office bearers.

⇨ Software will allow to upload the minutes of the meetings.

⇨Software will allow dean to clear all the relevant budget notification from the gymkhana ERP.

⇨ Approval of all the office bearers.

⇨ Approval of all newly formed committees and clubs

⇨Hostel room allotment to students.

⇨ Visitor hostel room allotment approval.

⇨ Send all the gymkhana notification.

## 

## **User Classes and Characteristics**

The typical Dean of students office user is simply anyone that has access to the Internet and a web browser. It is assumed that the user is familiar enough with a computer to operate the browser, keyboard and mouse and is capable of browsing to, from and within simple websites and literate enough to do basic operations.

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## **Operating Environment**

Operating Environment of the System will be basic Computer with Network Connectivity.

## **Design and Implementation Constraints**

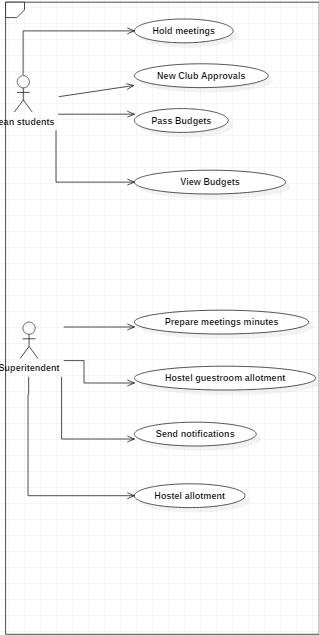
The Software will be designed in English Language only. Native languages are not supported by software itself, although if the underlying platform allows it, there is no objection by the part of software developers.

## **Assumptions and Dependencies**

It is assumed that the platform on which the software is operating is working correctly, such as Network connectivity, Operating system, as well as Hardware components such as Hard disk, RAM, processor, network interface card, are functioning as per requirements. Also, it is assumed that the required technology to run the software is present in the system.

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# **System Features**



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# **Use Cases**

**UseCase#1**

|  |  |  |
| --- | --- | --- |
| UC ID | UC#1 | |
| Use case Name | Hold Meetings | |
| Description | Different meetings related to the Gymkhana(Technical, Cultural, Sports) , Budget and Accounts Sections are held | |
| Actor | Dean Students | |
| Precondition | Dean Students should book the slot for the meeting | |
| Main Flow | 1. | Dean books the Slot for the Meeting |
| 2. | The minutes of the meeting are noted and then is passed to the convener and the gymkhana and the superintendent |
|  |  |
| Post Condition | The Minutes and the Schedule of the meeting are fixed and no other  meeting is going to be held in that time.. | |
| Alternate Flow | Re-elect the coordinators if any objection is raised against the selected students | |
| Sub Flow |  | |
| Global Alternate Flow |  |  |

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**UseCase#2**

|  |  |  |
| --- | --- | --- |
| UC ID | UC#2 | |
| Use case Name | Pass Budgets | |
| Description | Dean Students is able to hold the meetings and approve the budget and then the account section passes it onto the specified clubs | |
| Actor | Dean Students | |
| Precondition | Dean students should be able to go on through the requirements of the club budget and the infrastructure | |
| Main Flow | 1. | The Dean Students must be able to go through the agenda of the meeting |
| 2. | He is given an option to pass the budget form to the superintendent |
| 3. | The Finalized list of the budget is then sent to the accounts section thus passing the budget |
| Post Condition | The Final Budget is then Passed and no other changes are made to it. | |
| Alternate Flow |  | |
| Sub Flow |  | |
| Global Alternate Flow |  |  |

**UseCase#3**

|  |  |  |
| --- | --- | --- |
| UC ID | UC#3 | |
| Use case Name | New Club Approvals | |
| Description | Propal for any new clubs submitted by any student of the institute will be forwarded to Dean Students for approval | |
| Actor | Dean students | |
| Precondition | The proposal should be filled and recorded. | |
| Main Flow | 1. | Proposal will be forwarded to Dean Students from the respective Counsellor/Convener. |
| 2. | Proposal will be viewed by dean Students for approval |
| 3. | If approved it will be passed to Supritendent to issue a notification for it |
| Post Condition | No objection should be there against the proposal | |
| Alternate Flow | If rejected/reverted back, proposal will be send back to the student for making required changes | |
| Sub Flow | Once changes made the proposal can be send again to the dean Students for review | |
| Global Alternate Flow |  |  |

**UseCase#4**

|  |  |  |
| --- | --- | --- |
| UC ID | UC#4 | |
| Use case Name | View Budgets | |
| Description | Dean Students can view all the past budgets of Clubs/Fests | |
| Actor | Dean Students | |
| Precondition | All the budgets approved in past are in record of database. | |
| Main Flow | 1. | Dean Students views all the budgets under respective council’s section. |
| 2. | Dean Students views the necessary files attached with each approval. |
| 3. | Then a new budget can be passed/approved with reference to old budgets. |
| Post Condition | All records viewed. | |
| Alternate Flow |  | |
| Sub Flow |  | |
| Global Alternate Flow |  |  |

**UseCase#5**

|  |  |  |
| --- | --- | --- |
| UC ID | UC#5 | |
| Use case Name | Prepare Meeting minutes | |
| Description | The Superintendent is thus gathers the meeting minutes of the particular meeting | |
| Actor | Superintendent | |
| Precondition | The superintendent must be able to gothrough the objectives of the meeting | |
| Main Flow | 1. | The Meeting agenda is known and the Approvals taken in the meeting are added to the list |
| 2. | The Minutes are thus gathered by the Superintendent |
| 3. | The next plans to be taken by the committee is also discussed along with the previous meeting minutes |
| Post Condition | The Final meeting minutes are thus gathered and thus made to the approval of the Dean(S) | |
| Alternate Flow |  | |
| Sub Flow |  | |
| Global Alternate Flow |  |  |

**UseCase#6**

|  |  |  |
| --- | --- | --- |
| UC ID | UC#6 | |
| Use case Name | Hostel Guest Room allotment | |
| Description | The Superintendent allots the guest Room to the outsider of the institution and thus done by the booking of the room before a week | |
| Actor | Superintendent | |
| Precondition | The superintendent must be known the arrival date and Leaving date of the Guest arriving the Institution | |
| Main Flow | 1. | The superintendent is thus given the information of the room needed |
| 2. | Thus the room is allotted to the specific guest by the Caretaker of the hostel by the approval of the superintendent |
| 3. | Thus the room allotted is stored as a record |
| Post Condition | The Room allotted is thus given to the guest | |
| Alternate Flow |  | |
| Sub Flow |  | |
| Global Alternate Flow |  |  |

**UseCase#7**

|  |  |  |
| --- | --- | --- |
| UC ID | UC#7 | |
| Use case Name | Send Notifications | |
| Description | The Superintendent sends the notification to the specific group of the institution according to the approval of the Dean(S) | |
| Actor | Superintendent | |
| Precondition | The superintendent must be known of the declaration of the Dean(S) and the approval of the Dean(S) of the gymkhana and various other committees | |
| Main Flow | 1. | The superintendent is thus given the information of the various approvals |
| 2. | Thus hereby is given the authority and thus he is able to send the mails |
| 3. | the reply mails are thus seen by the superintendent first and then is forwarded to the Dean(S) |
| Post Condition | Thus the Notifications are received to the Students | |
| Alternate Flow |  | |
| Sub Flow |  | |
| Global Alternate Flow |  |  |

**UseCase#8**

|  |  |  |
| --- | --- | --- |
| UC ID | UC#8 | |
| Use case Name | Hostel allotment | |
| Description | The Superintendent allots the Hostel Room to the students of the institution | |
| Actor | Superintendent | |
| Precondition | The superintendent must be known of the students arriving the Institution of the different graduation year | |
| Main Flow | 1. | The superintendent is thus given the information of the room needed to the Specific year |
| 2. | Thus the room is allotted to the specific yearite in that particular year |
| 3. | Thus the room allotted is stored as a record |
| Post Condition | The Room allotted is thus given to the students | |
| Alternate Flow |  | |
| Sub Flow |  | |
| Global Alternate Flow |  |  |

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# **Other Non-Functional Requirements**

## **Performance Requirements**

The software should be able to run day and night continuously without getting disrupted on its own.

If there is any delay in the connection of the database, Proper Error Message must be displayed.

System must not exit without informing the user.

## **Safety Requirements**

Information transmission should be securely transmitted to server without any changes in information.

## **Security Requirements**

The main security concern is for User account (Gymkhana Office Bearers and Administrator) hence proper login mechanism should be used to avoid hacking. The password must be kept in proper encrypted format. The software also send any kind of data to other machine than the user by itself unless tampered. The systems back-end servers shall only be accessible to authenticated administrators.

## **Software Quality Attributes**

The software should be portable so that it can run over multiple platforms. The software should not crash the users machine or the remote server. It sends requests to download web pages. It should not eat excessive bandwidth on network. It should not put extra load on the users machine, making user handle to do any other work. The software should be extensible and should be able to get easily used as a component to larger systems. The software should be maintainable and testable easily. The software should be foremost usable and should work as per the software requirement specifications. The software should be intuitive to use and easy to learn.

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