

Software Requirements Specification

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Nirmaan Activities Manager

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1.0. INTRODUCTION

1.1. Purpose

The purpose of this document is to present to you a detailed description of the Nirmaan Activities Manager. It will explain the purpose and features of the software, the interfaces of the software, what the software will do, the constraints under which it must operate and the way it interacts with the users. This document is intended for the developers of the system as well as fellow software enthusiasts .

1.2. Scope of Project

This software system will be a Nirmaan Activities Manager for the social club Nirmaan active in goa campus. This system will be designed to maximize the Nirmaan member's productivity by providing tools to assist in structuring and retrieving data , which would otherwise have to be performed manually. It provides a single portal for all members to communicate with each other , thereby reducing the chaos and confusion created by miscommunication. It will give the concerned heads an easy live overview of the money spent without the physical pain of asking his colleagues for the same.

Each member will have the ability to add transactions including its description when they have to buy concerned items to make the event successful, which in turn makes it easy for the treasurer to do the budgeting and reimbursement .And also each member can request for activities which are approved by the activity manager and the event as a whole to occur which the PR head approves or

disapproves. He can also register volunteers for different activities , thereby offering a viable and reliable storage location which his colleagues can also access.

21.3. Glossary

Term	Definition
Nirmaan Member	The people who the software is intended to. A member of the social club Nirmaan Goa.
Treasurer	A Nirmaan member who has privileges to view and edit fund database, a privilege which normal Nirmaan member doesn't get
PR head	Public Relations head in Nirmaan handles the event calendar and has the final say on the date on which an event can be held.
HR	Human Resource head handles the inductions of new members into the organization. Only one to update the Nirmaan user database.
Activity Manager	Nirmaan members who approves activities held during an event.
Event	It is a Nirmaan event occurring on a special day involving people who are aimed to be impacted.
Activity	The activities held along with the community people. Comes under Event.
Transaction	Money spent by volunteers to bring about an event.
Funds	The money available for undergoing the activities of Nirmaan.
Participants	Everyone excluding Nirmaan members who are participating in their events.
Records	The details of the participants.
Volunteers	Any person with an interest in the project and is willing to lend a hand.
Non-Nirmaanite	Bitsians who are not in Nirmaan.

1.4. References

IEEE. *IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications*.

IEEE Computer Society, 1998.

1.5. Overview of Document

The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

2.0. Overall Description

2.1 System Environment

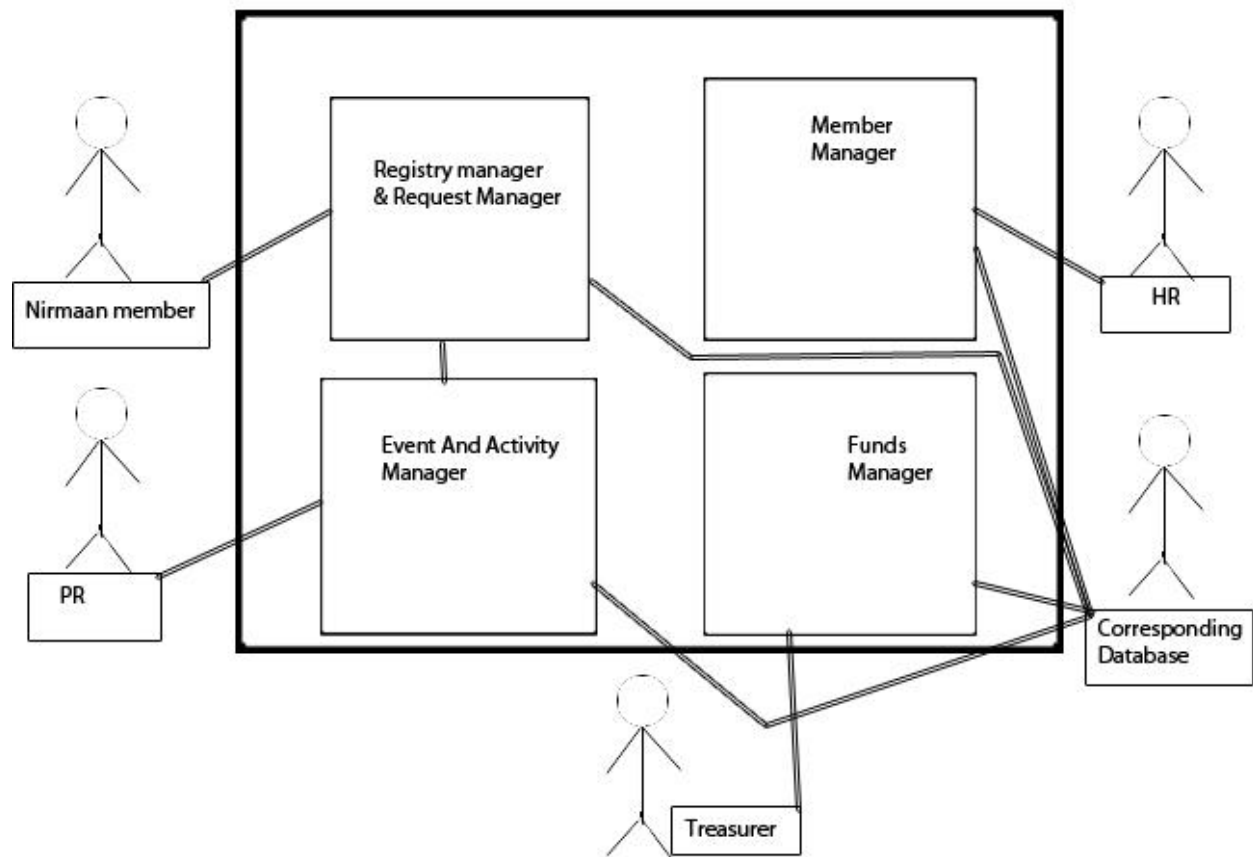


Figure 1 - System Environment

The Nirmaan Activities Manager has five major actors and one cooperating system.

The treasurer accesses the Funds manager through the internet .

Similarly The Public Relation(PR) head accesses the Event and activity manager via the internet

And the HR head access the member manager via the same.

Normal Nirmaan members also need internet access to use the software

The software has 4 managing parts which are

i)Funds,

ii)Events & Activity,

iii)Member,

iv)Volunteer Registration & request

2.2 Functional Requirements Specification

This section outlines the use cases for each of the active users separately. The PR, the HR and the Treasurer have only 1use case apiece while the normal Nirmaan member is the main actor in this system.

2.2.1 PR Use Case

Use case: Manage Events

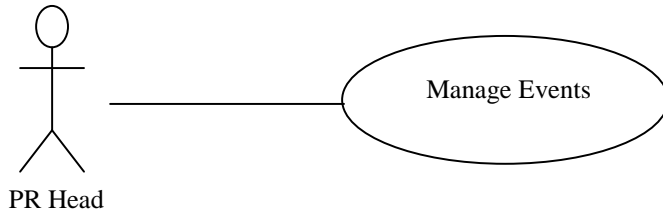


Diagram:

Brief Description

The PR head can add ,delete events as well as approve events requested by normal Nirmaan Members

Initial Step-By-Step Description

Before this use case can be initiated, the PR has already logged into the Nirmaan Activities Manager as the PR head.

1. The PR head chooses whether to check pending requests or Modify Events
2. The system retrieves data from the Event database if the PR had chosen 1
3. The PR head chooses whether to approve or disapprove the requests
4. The system asks the PR head to fill details of the event and corresponding activities if the PR chose 2
5. The system updates the database accordingly.

ref: Section 3.2.1, Search Article

2.2.2 HR Use Case

The HR can update the member database and register the new inductees in the software

Use case: Member Registration

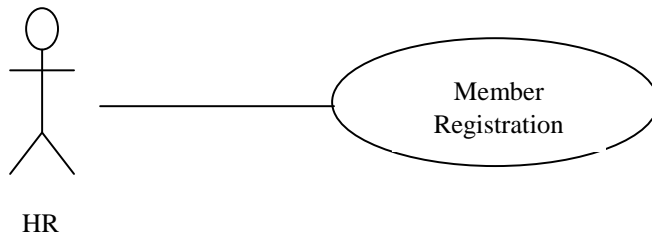


Diagram:

Brief Description

The HR registers new inductees into the software

Initial Step-By-Step Description

Before this use case can be initiated, the HR has already Logged in to the HR portal of the Software.

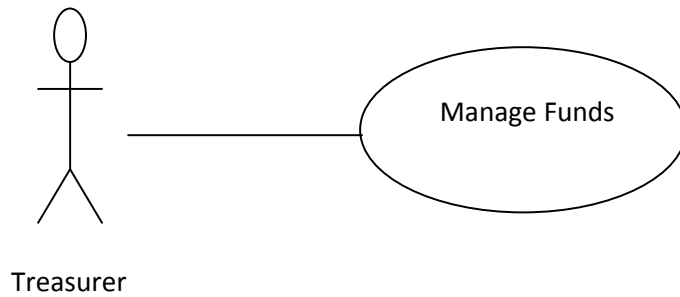
1. HR chooses to add member
2. The System asks to fill in details of the member and his new userid and password
3. The HR fills in the details
4. The System updates the user database

Xref: Section 3.2.2, Communicate

2.2.3 Treasurer Use Case

Use case: Funds management

Diagram:



Brief Description

The Treasurer has access to the funds database and can modify the Core funds upon the legitimacy of the transaction.

Initial Step-By-Step Description

Before this use case can be initiated, the Treasurer has already logged in to the treasurer portal of the software.

1. The system asks whether to view the transactions done by other Nirmaan members or not.
2. If yes, the system shows the transaction database.
3. The treasurer views transactions done by other Nirmaan members.
4. The System awaits approval of transaction.
5. If approved, the system updates core fund database.
6. System asks if the treasurer wants to modify core funds.
7. If yes, the amount to be added or subtracted is asked.
8. Respective modifications in the core funds are made.

Xref: Section 3.2.2 manage Funds

2.2.4 Nirmaan member Use Cases

The Editor has the following sets of use cases:

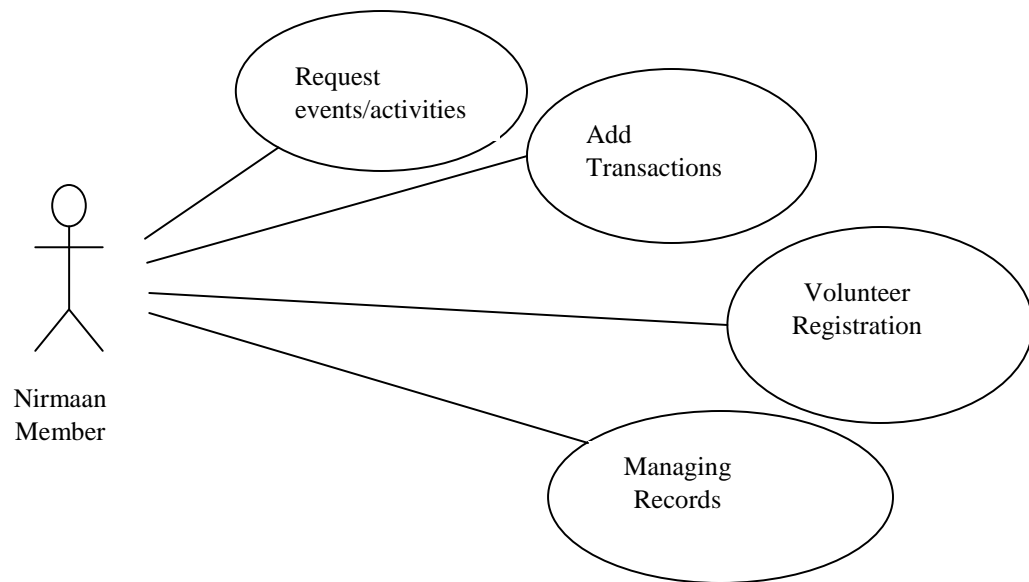
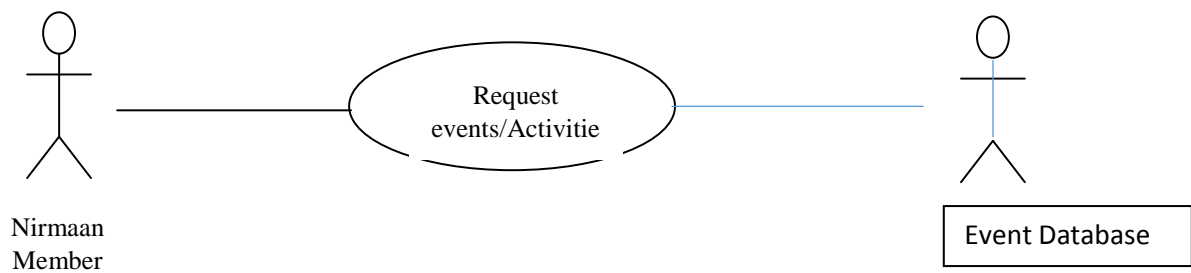


Figure 2 - Editor Use Cases

Update Information use cases

Use case: Request events/activities

Diagram:



Brief Description

The Nirmaan user adds new event and activity requests

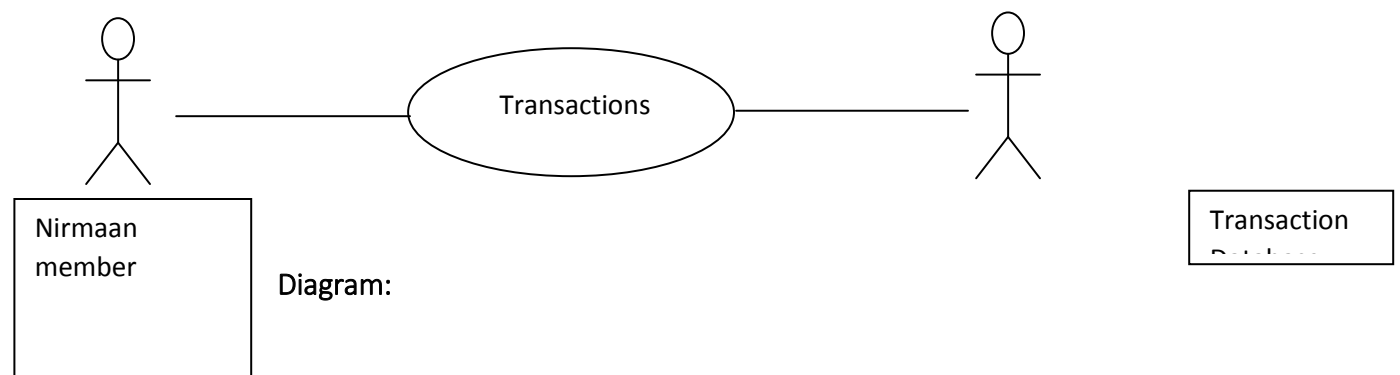
Initial Step-By-Step Description

Before this use case can be initiated, the member has already logged in to the software

1. The system presents a choice of adding an event
2. The member chooses to add
3. The system asks to fill in details of event and activities he would like
4. The member enters it
5. System updates the events database

Xref: Section 3.2.3, Add Author; Section 3.2.5 Update Person

Use case: Add Transactions



Brief Description

The Nirmaan member fills in a new Transaction along with its details..

Initial Step-By-Step Description

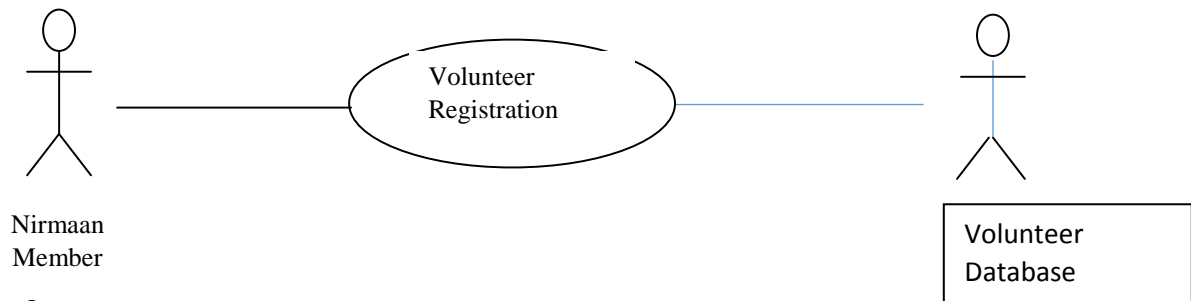
Before this use case can be initiated, the Nirmaan member has already logged in to the software.

1. The Nirmaan member selects to *Add Transaction*
2. The system presents the new transaction dialogue.

3. The user fills in the transaction details and presses finish.
4. The system updates the transaction in transaction database pending approval.

Use case: volunteer Registration

Diagram:



Brief Description

The nirman member Enrolls Volunteer

Initial Step-By-Step Description

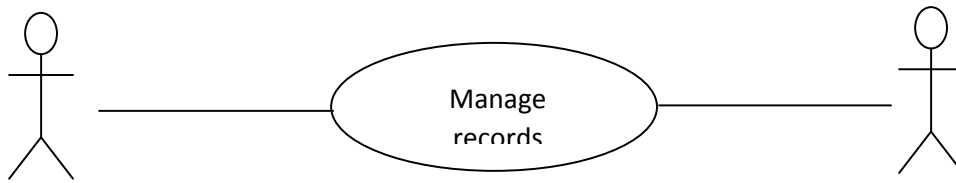
Before this use case can be initiated, the member has already logged in to the software

1. The member chooses to enroll a person.
2. The system asks for the event or activity
3. The member fills in the event Name
4. The system asks for the volunteer details
5. The member fills in the volunteer details
6. System updates the volunteer database

Use case: Manage records

Diagram:





Brief Description

The Nirmaan member adds participant details to the database.

Initial Step-By-Step Description

Before this use case can be initiated, the nirmaan member has logged in to the software and reached the 'Edit participant' page.

1. The system prompts the user to select one type of participant.
2. If the participant type is kids, the system prompts the user to select the type of kids, Teach Zari or Shiksha.
3. The user selects the participant type and fills in the participant details.
4. The System updates the participant database.

2.3 User Characteristics

The Nirmaan member is expected to be Internet literate and be able to fill in forms.

The PR and HR are expected to be Internet literate and to be able to use fill in forms & registration portals respectively

The treasurer is expected to be internet literate and to be able to download bill images and update stuff as necessary

The detailed look of these pages is discussed in section 3.2 below.

2.4 Non-Functional Requirements

This software is to be hosted on the college server if it has to be accessed by anyone on the campus via campus wifi or Ethernet. And the connection must be reliable so as to not get cut in between updating databases. Also hubs and switches are to be appropriately implemented to avoid traffic to one server during Nirmaan fests.

3.0. Requirements Specification

3.1 External Interface Requirements

The link to an external system is the link to the Nirmaan member Database to verify the membership of a Reviewer. The Nirmaan member database consists of fields like member's name, (ID) number, and email address phone number and their username, password.

3.2 Functional Requirements

3.2.1 Manage Events

Use Case Name	Manage Events
XRef	Section 2.2.1, Manage Events
Trigger	The PR logged into Nirmaan Activities Manager as PR head.
Precondition	There are Events in the Event database.
Basic Path	<ol style="list-style-type: none">1. The PR head chooses whether to check pending requests or Modify Events2. The system retrieves data from the Event database if the PR had chosen 13. The PR head chooses whether to approve or disapprove the requests4. The system asks the PR head to fill details of the event and corresponding activities if the PR chose 25. The system updates the database accordingly.
Alternative Paths	<ol style="list-style-type: none">1. If the user chooses to modify event, The system prompts the user to fill details of the event and corresponding activities if the PR chose 22) The system updates the database accordingly.
Post condition	Event updated to database.

Exception Paths	The user may cancel anytime.
Other	NA

3.2.2 Member registration

Use Case Name	Member registration
XRef	Section 2.2.2, Member registration; Section 2.2.3, Member registration
Trigger	The HR logs into his account.
Precondition	New member details available.
Basic Path	<ol style="list-style-type: none"> 1. HR chooses to add member 2. The System asks to fill in details of the member and his new user id and password 3. The HR fills in the details 4. The System updates the user database
Alternative Paths	NA
Postcondition	Member database updated.
Exception Paths	The user may cancel anytime.
Other	NA

3.2.3 Manage Funds

Use Case Name	Manage Funds
XRef	Section 2.2.4 Manage Funds
Trigger	Treasurer logins
Precondition	Transactions have been made by other members.
Basic Path	<ol style="list-style-type: none"> 1. The system asks whether to view the transactions done by other Nirmaan members or not. 2. If yes, the system shows the transaction database. 3. The treasurer views transactions done by other Nirmaan members. 4. The System awaits approval of transaction. 5. If approved, the system updates core fund database. 6. System asks if the treasurer wants to modify core funds.

	7. If yes, the amount to be added or subtracted is asked.
Alternative Paths	1. System asks if the treasurer wants to modify core funds. 2. If yes, the amount to be added or subtracted is asked.
Postcondition	Funds have been altered accordingly.
Exception Paths	The treasurer can cancel his progress anytime.
Other	The transactions shown will their details with them.

3.2.4 Request events/activities

Use Case Name	Request events/activities
XRef	Section 2.2.4 Request events/activities SDD, Section 7.4
Trigger	The member logs in and requests events.
Precondition	The vertical has been chosen, Event is to be added.
Basic Path	1. The system presents a choice of adding an event 2. The member chooses to add 3. The system asks to fill in details of event and activities he would like 4. The member enters it 5. System updates the events database
Alternative Paths	NA
Postcondition	The Event has been added to the database and is pending approval.
Exception Paths	The Member may abandon the operation at any time.
Other	The event information includes Date, Time and venue.

3.2.5 AddTransactions

Use Case Name	AddTransactions
XRef	Sec 2.2.4 AddTransactions; Sec 2.2.4 AddTransactions
Trigger	Member logs in and asks for a transaction.
Precondition	Member chooses Vertical.
Basic Path	<ol style="list-style-type: none">1. The Nirmaan member selects to <i>Add Transaction</i>2. The system presents the new transaction dialogue.3. The user fills in the transaction details and presses finish.4. The system updates the transaction in transaction database pending approval.
Alternative Paths	NA
Postcondition	The Transaction database has been updated.
Exception Paths	The Member may abandon the operation at any time.
Other	Transaction includes details of Date and reason behind transaction.

3.2.6 Volunteer Registration

Use Case Name	Volunteer Registration
XRef	Section 2.2.4, Volunteer Registration
Trigger	The member chooses to add volunteer
Precondition	He has chosen his vertical and volunteer is to be added
Basic Path	<ol style="list-style-type: none">1. The member chooses to enroll a person.2. The system asks for the event or activity3. The member fills in the event Name4. The system asks for the volunteer details5. The member fills in the volunteer details6. System updates the volunteer datatbase
Alternative Paths	In step 4, the back option can be done to change the event

Post condition	The volunteer database has been updated.
Exception Paths	User cancels the volunteer at any point of time
Other	This software asks for the event name and id. the same person can be a volunteer In multiple events

3.2.7 Manage records

Use Case Name	Manage records
XRef	Section 2.2.4 Manage records; Section 2.2.4, Manage records
Trigger	Member decides to maintain data of people participating in an event
Precondition	Member chooses vertical & User has data of people participating in the event
Basic Path	<ol style="list-style-type: none"> 1. The system prompts the user to select one type of participant. 2. If the participant type is kids, the system prompts the user to select the type of kids, Teach Zari or Shiksha. 3. The user selects the participant type and fills in the participant details. 4. The System updates the participant database.
Alternative Paths	At step2, the user can choose any one of the two type of kids or go back to choose another type of participant.
Post condition	Participant database is updated
Exception Paths	User may cancel filling details at any time
Other	This use case is served to manage records of multiple objects like orphanage school etc.