

SOFTWARE REQUIREMENTS SPECIFICATIONS
REPORT

**INTER IIT TOURNAMENT
MANAGEMENT SYSTEM**

GROUP - 6

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1. INTRODUCTION

1.1 PURPOSE

The purpose of this document is to enlist the descriptions and requirements of the software *Inter IIT Tournament Management System*. This document contains all the functional and non-functional requirements of the features along with their brief discussion.

1.2 SCOPE

This software will be a centralized portal for smooth management of the entire Inter IIT Tournament. It will serve as a communication medium and a reminder medium regarding the events schedules and updates of Inter IIT events between management and participants.

2. FUNCTIONAL REQUIREMENTS

R1 Register User

- Description: Register user takes user email, user password and user role in the inter IIT and verifies if the user is approved by authorities for that role. If the user is approved, then he/she is added to the system and to the relevant sports group.
- **R1.1 Validate User**
 - Input: UserType, Email, Password
 - Output: Verification link sent
 - Description: The generated verification link will be sent to the user via email.
 - **R1.1.1 Validation of user role**
 - Description: Checking whether the user who is registering has selected valid roles for themselves
 - **R1.1.1.1 Validation of Event manager role**
 - Input: Registering user email, List of emails of event managers approved by host college
 - Output: Success/Error message

- Description: Verifying if registering user email is approved to be a event manager
- **R1.1.1.2 Validation of Participant role**
 - Input: Registering user email, List of emails of participants
 - Output: Success/Error Message
 - Description: Verifying if registering user email is actually a participant
- **R1.2 Register User to the software**
 - Input: UserType, Email, Password
 - Output: Success/Error Message
 - Description: Credentials of the new user stored in the database
- **R1.3 Add User to Specific Sports group**
 - Description: Adding the newly registered user to the groups where he/she is participant/event manager
 - **R1.3.1 Search for Matching Sports Groups**
 - Input: Sports wise approved members(Participants, Event managers), User email
 - Output: Matched Sports List
 - Description: Search in each sport group if the email exists in the list of approved emails for that sport group
 - **R1.3.2 Add User to Matched Sports Groups**
 - Input: User email, Matched Sports list
 - Output: Success/Error message
 - Description: User is added to all sport groups from matched sports list

R2 Login

- Input: Email, Password
- Output: Success/Error Message
- Description: Authenticates the credentials and shows success/error message if correct/incorrect respectively.

R3 Create Sports Group

- Input: Sport name
- Output: Success/Error message
- Description: Create a Dedicated group for the Sport.
- **R3.1 Add Participants**
 - Input: Participants email list
 - Output: Success/Error message
 - Description: Emails of participants added into the group
- **R3.2 Send notifications**
 - Input: List of members, Sport name
 - Output: Notification sent to members
 - Description: Sends notifications to members added to the group

R4 Create Match Event

- Input: Time, Venue, Participants, Event Manager email, Sport, Match number
- Output: Match Id generated
- Description: A new event is created and saved to database
- **R4.1 Send notification to participants**
 - Input: Participants, Match number, Sport
 - Output: Notification sent
 - Description: New match event notification is sent to the participants

R5 Update Match Event

- Input: Match Id, Updated event details(New Time, New venue etc)
- Output: Success/Error message
- Description: Changes in the event will be saved or not in the database.
- **R5.1 Send notifications to participants**
 - Input: Participants, Match Number, Sport
 - Output: Notification sent
 - Description: Update event notifications is sent to the participants

R6 Remind Participants 30 minutes or User preferred time interval before the match

- Input: Current time, Match Participants, Match Time, Match venue, Sport Name, Time Interval*
- Output: Notifications sent to the participants with match details
- Description: Reminds the participants 30 minutes or User preferred time interval before the match

R7 View all Upcoming matches of a Sport

- Input: Sport Matches details
- Output: Upcoming Match details of the sport displayed
- Description: Displays all upcoming events of a sport

R8 View all Upcoming events of the tournament

- Input: All Sport Matches details
- Output: Upcoming match details of the tournament displayed
- Description: Displays all upcoming matches of the tournament

R9 Send Message

- Input: Sender(Participant, Event manager) email, Message, Sport Name, Current Time
- Output: Message displayed in the event group at the bottom
- Description: Facilitates communication between participants and management

R10 Create Leaderboard

- Input: Sports List, Participating IITs Sportwise
- Output: Leaderboard generated
- Description: Leaderboard generated for all Sports with 0 initial score of all IITs

R11 Update Leaderboard

- Description: Updating the scores and ranks of participants and displaying updated Leaderboard
- **R11.1 Update Score:**
 - Input: Match Participants, Match Id, Results, Match score
 - Output: Participants(IITs) score updated and displayed
 - Description: Scores of participants updated according to results

- **R11.2 Update Ranks:**

- Input: All Participating IITs list, Scores of all IITs in concluded match sport, Overall scores of all IITs
- Output: Overall Rank and Sport Rank updated in the leaderboard
- Description: Updates the rank of participants in the overall and current sport leaderboard by sorting based on scores

*Optional Input

3. CONTEXTUAL INQUIRY

- **Identification of the Goals of the observation**

The major goal of our contextual inquiry was to find out the limitations of the ways in which previous Inter IIT tournaments were managed. We also wanted to know about what method the users would have preferred to remove these limitations.

- **Identification of the Intended Users**

There are two intended users of our system:

- **Participants**

Students from all the IITs who are going to participate in at least one event of the tournament.

- **Event Managers**

Students from the host IIT who are going to manage the tournament events.

- **Execute Stage**

We conducted the contextual inquiry in both passive and active mode, majorly being in active mode.

In active mode, we scheduled interviews with the students who have either participated in any sport in Inter IITs or who have managed any event in the Inter IITs. Most of the interviews were conducted on video calls while some of them were conducted via messaging and voice calls. At Least two of our team members were present during each interview in case the interview is happening on the

video call, one for asking the questions and one for writing down the observations from the responses of the interviewee.

In the passive mode, we went over the earlier Inter IIT facebook groups and found out the posts that were citing some of the limitations of the way Inter IIT was managed. We also visited the Inter IIT website discussion forum to gather more information.

- **Reflect Stage**

Our collected data and observations are given below in form of affinity chart:

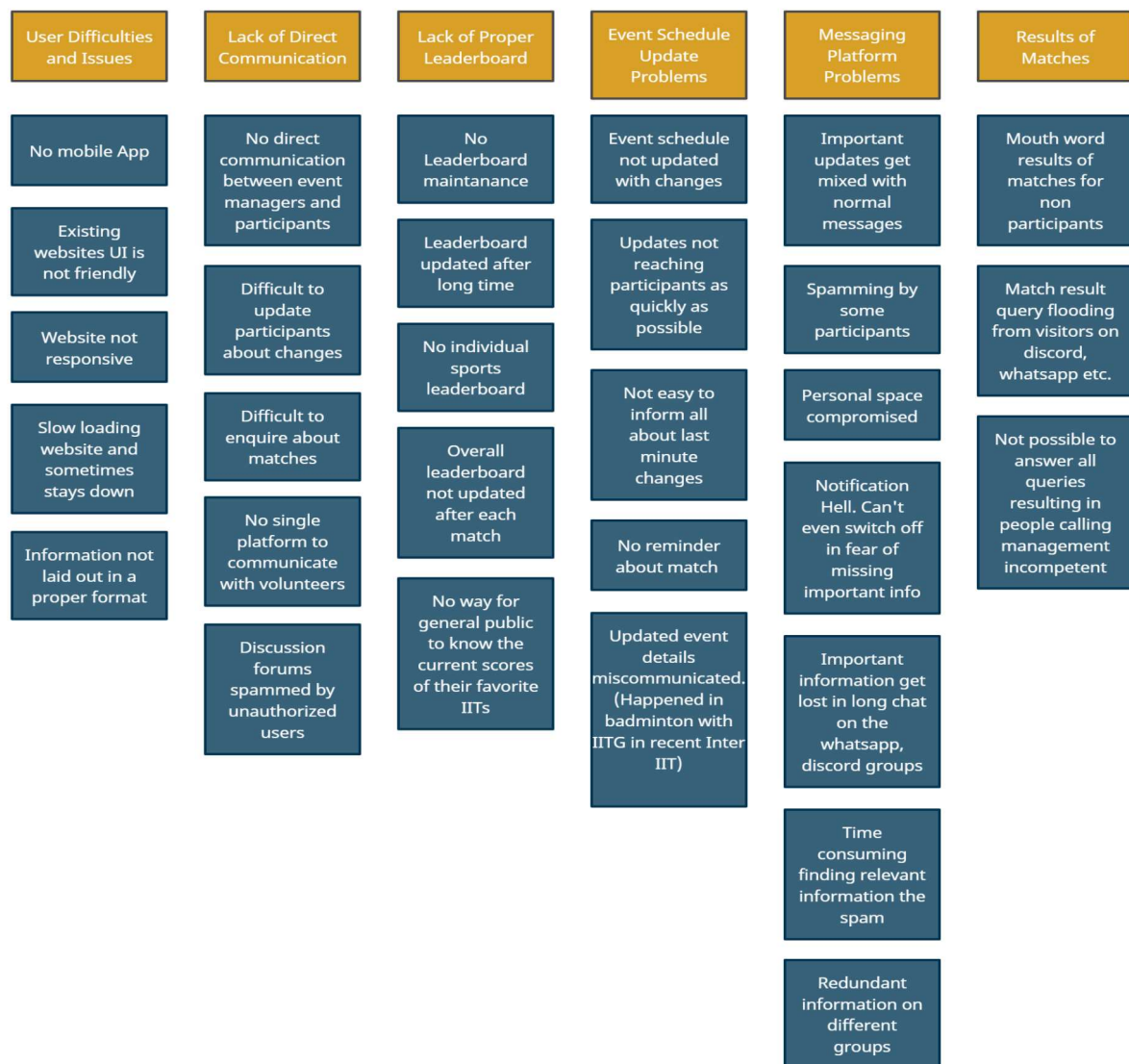


Figure 1. Affinity Diagram