

CS346 SOFTWARE ENGINEERING LAB

Cognitive Walkthrough report

For

Inter-IIT Tournament

Management System

Group - 16

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Introduction

Inter-IIT Tournament Management System is an app which is designed to efficiently organize, maintain and inform about the events that occur during the Inter-IIT by providing them tools to assist in automating the entire process which would save both time and resources if done manually.

This report contains the results found from an evaluation performed using the Cognitive Walkthrough method for the Inter-IIT Tournament Management System. .This method is used to evaluate the usability of the application by assigning the user (evaluator) to perform certain given tasks who are unfamiliar with the given environment of the application.

Goal of the Report

The overall goal of this report is to give detailed analysis of the Inter-IIT Management System regarding major usability tasks that will be pertinent in the use of the system.

The cognitive walkthrough will allow the evaluators to get into the minds of the user in order to understand, design suggestions or other pertinent information necessary for the user to accomplish specific tasks.

Methodology

The evaluation consisted of a Cognitive Walkthrough process in which a group of evaluators reviewed the interface of the Inter-IIT management system with given a brief description of the target user and were directed to take certain action sequences that would eventually lead to a desired task to complete.

The evaluator will answer the following four questions during each sequence of the assigned task:

- Will the user try to achieve the right effect ?
- Will the user notice if the correct action is available ?
- Will the user associate the correct action with the effect trying to achieve ?
- If the correct action is performed, will the user see that progress is made toward the solution of their task ?

Preparatory

Understanding the user and what is the his/her important task

Target User :

The target user would be the participants and team managers who would be participating in different events of Inter-IIT Tournament.

Scenario :

Various students have come to a certain IIT Campus where the Inter-IIT is going to be hosted. These students are going to participate in different events and represent their corresponding institute in the tournament. The events are to be organized by the host institute and the information related to these events are available on the application from the schedule of the sports to result of matches as well as the leaderboard, students just need to use the app to gain the information.

Tasks :

- 1) Get the match results of a specific sport
- 2) Get the points scored in a specific sport by a given institute
- 3) See the timing of an event of a specific sport

Why these tasks ?

Every user who uses the application will belong to one of the participating institutes and during the tournament each user wants to track the score in sports and rank of the institute he/she belongs which changes after each and every event between the teams representing the institutes in the tournament. Along with this, the users are the audience if they are not participating in the event and they can get the information of an event such as venue, timing and playing teams in the event.

Individual Steps

For Task 1 - Get the match results of a specific sport

Step 1) Click on the "Match Result" Button.

Step 2) Click the specific sports button to see the result of that sport.

Step 3) Slide through the list of results to see the result of the specific sport.

For Task 2 - Get the points scored in a specific sport by a given institute.

Step 1) Click the "Leaderboard" Button

Step 2) Click the specific Institute Name to see the scores.

Step 3) Slide through the list of sports to see the scores in the specific sport.

For Task 3 - See the timing of an event of a specific sport

Step 1) Click the "Schedule" Button

Step 2) Click the specific sports button to see the schedule

Step 3) Slide through the list to find the event

Findings and Recommendations

For Task 1 - Get the match results of a specific sport.

Step 1 - Click on the “Match Result” Button.

Main Issue - There were no main issues found with this step.

Answers to questions -

Q1) Will the user try to achieve the right effect ?

Yes. The user will find a ‘Match Result’ named button on the screen.

Q2) Will the user notice if the correct action is available ?

Yes. The Match Result button is clearly visible on the screen.

Q3) Will the user associate the correct action with the effect trying to achieve ?

Yes. The user will press the button and it will redirect to the Match Results.

Q4) If the correct action is performed, will the user see that progress is made toward the solution of their task ?

Yes. The user will be redirected to the leaderboard where Match Result of institutes are present.

Step 2 - Click the specific sports button to see the result of that sport.

Main Issue - There does not exist any visible slider through which we can slide down to see the rest of the list.

Recommendation - A visible slider will be helpful to the user which will give intuition to slide down the list.

Answers to questions -

Q1) Will the user try to achieve the right effect ?

Yes. He/She will be presented a list which will be familiar with the user where the match results of institutes are given.

Q2) Will the user notice if the correct option is available ?

No. There is no visible slider button which will guide the user to slide to view the part of the list which is not visible on the screen.

Q3) Will the user associate the correct action with the effect trying to achieve ?

Yes. If a user understands that all part of the list not presented on the screen he/she will slide on the screen to view the rest part.

Q4) If the correct option is performed, will the user see that progress is made toward the solution of the task ?

Yes. Upon sliding on the screen the results of the rest of the sports will be visible.

For Task 2 - Get the points scored in a specific sport by a given institute.

Step 1 - Click the "Leaderboard" Button

Main Issue - The user does not need to press the leaderboard button to view the points scored

Recommendation - It would be more inviting to users if there would have been a Institute Performance button on the screen that would invite the user to see the points or performance in different events of an institute.

Answers to questions -

Q1) Will the user try to achieve the right effect ?

Yes . The user will attempt to find a button that allows the user to view points scored by the institute.

Q2) Will the user notice if the correct option is available ?

No. There needs to be another option for institute scores in different sports.

Q3) Will the user associate the correct action with the effect trying to achieve ?

No. It seems odd to press the Leaderboard button to view institute scores in different sports.

Q4) If the correct option is performed, will the user see that progress is made toward the solution of the task ?

No. Upon clicking the button it will lead to the leaderboard not to score list.

Step 2 - Click the specific Institute Name to see the scores.

Main Issue - There is no text or sign which says to click on the institute name to see the institute profile which consists of the scores.

Recommendation - There should be a button named like “View Details” which instructs that upon clicking it will redirect to the institute profile.

Answers to questions -

Q1) Will the user try to achieve the right effect ?

No. The user will tend to find View detail or View more buttons to see more about the institute's score in specific sport which is not present.

Q2) Will the user notice if the correct option is available ?

No. The user won't notice as there is no instruction.

Q3) Will the user associate the correct action with the effect trying to achieve ?

Yes. To know the information related to a specific institute we need to choose that institute which we do by clicking on the institute name.

Q4) If the correct option is performed, will the user see that progress is made toward the solution of the task ?

Yes. It will lead to an institute profile which consists of scores of different sports.

Step 3 - Slide through the list of sports to see the scores in the specific sport.

Main Issue - There does not exist any visible slider through which we can slide down to see the rest of the list.

Recommendation - A visible slider will be helpful to the user which will give intuition to slide down the list.

Answers to questions - Same as as mentioned for Task 1 ,Step 2.

For Task 3 - See the timing of an event of a specific sport

Step 1 - Click the "Schedule" Button

Main Issue - No issues here

Answers to questions -

Q1) Will the user try to achieve the right effect ?

Yes. The user will find a schedule named or related to the word button on the screen.

Q2) Will the user notice if the correct option is available ?

Yes . The user will find the "Schedule" named button on the screen.

Q3) Will the user associate the correct action with the effect trying to achieve ?

Yes.

Q4) If the correct option is performed, will the user see that progress is made toward the solution of the task ?

Yes. Upon clicking he/she will be shown the different list of sports.

Step 2 - Click the specific sports button to see the schedule

Main Issue - There does not exist any visible slider through which we can slide down to see the rest of the list.

Recommendation - A visible slider will be helpful to the user which will give intuition to slide down the list.

Answers to questions -

Q1) Will the user try to achieve the right effect ?

Yes. He/She will be presented a list which will be familiar with the user where the match results of institutes are given.

Q2) Will the user notice if the correct option is available ?

No. There is no visible slider button which will guide the user to slide to view the part of the list which is not visible on the screen.

Q3) Will the user associate the correct action with the effect trying to achieve ?

Yes. If a user understands that all part of the list not presented on the screen he/she will slide on the screen to view the rest part.

Q4) If the correct option is performed, will the user see that progress is made toward the solution of the task ?

Yes. Upon sliding on the screen the results of the rest of the sports will be visible.

Conclusion

This report proposes some adjustments to the current design of the Leaderboard which will further enhance the users' experience and their success in desired tasks. By the way of the cognitive walkthrough evaluation and analysis, minor but relevant difficulties to a given task of task 2 (Get the points scored in a specific sport by a given institute) were brought under light and some adjustments are mentioned in the report which are recommended to the developers which will help to clarify in which way users' will think and take action so that they can complete the task given to them during the evaluation process which will enhance the usability of the interface of the application.

Adobe xD file for Prototype, Prototype recording and Evaluation recording can be found in the following drive link-

<https://drive.google.com/drive/folders/144wjinNcf2egv4ffhtuhOXEuPzPkWHrzE?usp=sharing>