Project Report

Real Time CricAnalyser

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1. Brief idea of the Project.

The project is basically aimed at providing a detailed and complete <u>Score Analysis</u> of an ongoing <u>One-Day Cricket Match</u>, recording them for future reference, as well as at maintaining a database of player names of the teams and career records of players involved.

Through the software, the Match Scorer would be entering the data regarding the ball-by-ball proceedings of the match on a particular workstation. Concurrently, the scorecard would be made available to various users on the <u>network</u>. The current score would be available even on a Java enabled <u>Mobile</u>.

While at scoring, the scorer would also be able to have a look at the scorecard as well as various <u>analyses</u> of the score, which include: -
- Details of the innings of the Batsman.
- Career record of a Batsman or a Bowler.
- The contest between a particular batsman and a bowler today.
- The details of any particular delivery.
- The run rates.
- The Total Run Graph.

The Scoring can also be done on an isolated terminal, in which case the career records would not be displayed. The scorecards can even be saved for future reference.

2. The Technology Involved.

The Project is coded in Java and uses Oracle 8.0 for database, Apache Tomcat 4.0 as Server and J2ME Wireless Toolkit for mobile applications.

Through various entry forms, the software asks the User/Scorer to enter/edit the player names for various teams in the database, which can themselves be added/removed. After the two teams have been selected, the match and the toss information have to fed in. Thereafter, the Scorer is asked to choose the opening players of the two teams as well as the no. of overs for which the match is to be played. Once the initialization is done, the software is ready to record the score and generate the details.

A score entry form is generated for the Scorer in which he selects the type of the delivery (normal/extra), type of extra (as the case may be), the placement area of the ball, no. of runs scored, etc i.e. all the details of the ball.

As its backbone, the Project runs on the classes Batsman, Bowler and totalscore. Instances of these classes have been maintained in the class Action_Scorer which is responsible for the scoring. As the scorer presses the "Done" button, all the current entries in the scorer form are tracked, and the various fields for details of the Batsman/Bowler/Total Score are updated in accordance with the values on the form. Category wise these include
- Batsman: Runs, Balls Faced, 4s, 6s

- Bowler: Overs, Maidens, Runs, Wickets
- Total Score: Runs, Wickets, Overs, Fall of Wickets, Run-Rates, Extras

The career records of the players are made available through the use of <u>RMI</u>, where the remote machine gets the data from an <u>Oracle</u> Database.

As the data is updated, the current score is also recorded in a file on a remote/local machine as per the users' choice. Two JSPs read them and generate <u>web pages</u> showing the Scorecards, which can be made available on the network. A Servlet reads the info from a file and helps the J2ME application to display the current score on Java enabled <u>Mobile Phones</u>.

3. The aim of the project

The Project is <u>aimed specifically towards</u> providing an inexpensive and dependable software for analyzing/recording data of cricket matches played at local levels, where costlier software cannot be afforded or are not financially advisable eg. Govt. Schools, Colleges/Universities, Colony/Locality Teams.

As the <u>solution</u>, we have been able to successfully come up with a software suitable for the above demands. It provides a full range detailed analysis as well as maintains a record of the matches. Being an indigenous product with easy user interface and simple Java Coding involved, it would be easily comprehendible for the masses. It is designed to abet the traditional paper based cricket-scoring method but is much easier to use and provides many features.

With numerous similar softwares already available viz. Namadgi and Virtual Spectator, we find the <u>originality</u> in the ability of the software to act as the technology bridge. Its applications work even at a very basic technological level at an isolated computer terminal, and also on Server/Client standards. Thus, it can provide an insight into the hi-end techniques like web/mobile applications. So, people may start looking towards them, which would much be in the favour of the Information Revolution.

4. Marketability of the project and its commercial applications.

The Product being cheap, easy to use and targeted towards the masses promises to attract a large market. Cricket being undoubtedly the most popular game/activity in our country further supports the demand for such a software. With the IT industry on an upsurge and various Cricket academies coming up in different parts of the country, the product is definitely going to gain greater attraction.

At the same time, web pages showing the scorecards could also be maintained, which are a part of the Project. The web pages have been designed in such a manner, that commercial advertisements can also be placed on them, and once again the popularity of the game can attract funds for the institutions from the sponsors, etc. The Product definitely has a bright commercial future.

5. The social aspects, which the project aims to fulfill.

The project may serve the dual purpose of <u>raising</u> the overall level of the game <u>Cricket and Technology</u> in India, as well as other such countries. Being simple, it can easily reach out to the masses and provide statistical records as well as quick and easy data analysis, which are quite useful at training and planning sessions. With talent not being a bar, better grooming could cause an increased winning rate, and thus social pride for the country, as the game is increasingly becoming the nerve of the country.

At the very same instant, it also aims to provide a technical insight into higher Technologies. To start with, the product can be used on a local machine, but gradually, as one gets comfortable, it may even be extended to Networks, thus paving the way for Server side Programming, web pages maintenance, as well as Mobile application developments and related issues. This could be a potential boom to the Information Revolution.

6. Other aspects

The project also features <u>audio and text Commentary</u> thus providing for automated commentary, adding an altogether new dimension to Cricket scoring.
The software is smart enough to prevent the scorer from entering incorrect combinations of data. Reduction in the no of overs to be played by the chasing team, in view of slow bowling, etc is allowed. A <u>comparative run-graph</u> of the two teams is shown in the 2nd innings, which can help in result prediction. The Batting scorecard displays the Batsmen in the actual order in which they come to bat.

To conclude, we would like to put the deliverables of the Product at a place
1. Batting Scorecard
2. Bowling Scorecard
3. Batting detail
4. Ball detail
5. Total Run Graph
6. Player Career Record
7. Networked Scorecard
8. Mobile Scorecard
9. Database Updation

It is much more <u>simpler</u> to use than other softwares of the category e.g. in Namadgi used by ESPN, the Scorer has to do 14 to 16 clicks per ball, but for this Product, the range is only 4 to 12 depending on the complexity.

Cricket, the way you want it! Catch up with the cricket fever - Live scorecards, ball by ball update of matches, profiles & audio features – Howzatt!!