

Cricket Scorecard Management

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Sanket Shirolkar

Bangalore

Specifications

1. The scorer should enter ball events.

- 1.1 Generic ball event system actions.
- 1.1.1 The system should increment the ball count of the innings if the ball is legal.
- 1.1.2 The system should increment the on strike batsman's number of faced balls if the ball is legal and as well as for No-balls.
- 1.1.3 The system should increment the ball count for the current bowler if the ball is legal.
- 1.1.4 The system should check the end of the over and end of the innings.
- 1.1.5 The system should increment the over count at the end of every six legal balls.
- 1.1.6 The system should generate the score report if the maximum number of permissible overs are bowled or if the number of wickets fell in an innings is 10 or if the batting second team outscores the first batting team or the batting second team scores the same number of runs and maximum number of permissible overs are bowled or 10 wickets have fallen.
- 1.1.7 The system should not increment the ball count of the innings if the ball is illegal.
- 1.1.8 The system should not increment the on strike batsman's number of faced balls if the ball is illegal except for No-ball.
- 1.1.9 The system should not increment the ball count for the current bowler if the ball is illegal.

1.2 Specific ball event system actions.

- 1.2.1 Runs
- 1.2.1.1 The system should award the runs to the batsman on strike.
- 1.2.1.2 The system should swap two current batting batsmen if the runs scored are odd on all balls but the last ball of the over.
- 1.2.1.3 The system should not swap two current batting batsmen if the runs scored are even on all balls but the last ball of the over.
- 1.2.1.4 The system should add the scored runs as the runs conceded for the current bowler.
- 1.2.1.5 The system should add the scored runs to the team's total of the current innings.
- 1.2.2 Extras
- 1.2.2.1 Byes:
- 1.2.2.1.1 The system should deem the ball legal.
- 1.2.2.1.2 The system should add the number of byes to the team's total.
- 1.2.2.1.3 The system should not award the runs to the on-strike batsman.
- 1.2.2.1.4 The system should not award the runs as conceded for the current bowler.
- 1.2.2.2 Leg byes:
- 1.2.2.2.1 The system should deem the ball legal.
- 1.2.2.2.2 The system should add the number of leg-byes to the team's total.
- 1.2.2.2.3 The system should not award the runs to the on-strike batsman.
- 1.2.2.2.4 The system should not award the runs as conceded for the current bowler.
- 1.2.2.3 Penalty
- 1.2.2.3.1 The system should deem the ball legal.
- 1.2.2.3.2 The system should add/subtract 5 runs to/from the team's total.
- 1.2.2.3.3 The system should not award the runs to the on-strike batsman.
- 1.2.2.3.4 The system should not award the runs as conceded for the current bowler.

- 1.2.2.4 Wides
- 1.2.2.4.1 The system should deem the ball illegal.
- 1.2.2.4.2 The system should add the number of wides to the team's total.
- 1.2.2.4.3 The system should not award the runs to the on-strike batsman.
- 1.2.2.4.4 The system should award the runs as conceded for the current bowler.
- 1.2.2.5 No-Balls
- 1.2.2.5.1 The system should deem the ball illegal.
- 1.2.2.5.2 The system should add the number of wides to the team's total.
- 1.2.2.5.3 The system should not award the runs to the on-strike batsman.
- 1.2.2.5.4 The system should award the runs as conceded for the current bowler.

1.2.3 Dismissals

- 1.2.3.1 The system should show the available modes of dismissals.
- 1.2.3.2 The scorer should enter the mode of dismissal of the batsman.
- 1.2.3.2.1 Bowled
- 1.2.3.2.1.1 The system should award the dismissal to the bowler.
- 1.2.3.2.1.2 The system should increment the wicket count for the bowler.
- 1.2.3.2.1.3 The system should declare the batsman as dismissed, by selected mode.
- 1.2.3.2.1.4 The scorer should set incoming batsman at the strike.
- 1.2.3.2.1.5 The system should prompt the scorer to enter the details of the next incoming batsman.
- 1.2.3.2.2 Caught
- 1.2.3.2.2.1 The system should show the fielding team players.
- 1.2.3.2.2.2 The scorer should select the player, who caught the ball.
- 1.2.3.2.2.3 The system should award the dismissal to the bowler.
- 1.2.3.2.2.4 The system should increment the wicket count for the bowler.
- 1.2.3.2.2.5 The system should declare the batsman as dismissed, by selected mode.
- 1.2.3.2.2.6 The system should prompt the scorer to provide information about strike rotation at the time of dismissal.
- 1.2.3.2.2.7 The system should set the incoming batsman at the strike if the batsmen at crease crossed each other at the time of dismissal.
- 1.2.3.2.2.8 The system should prompt the scorer to enter the details of the next incoming batsman.
- 1.2.3.2.3 Run-Out
- 1.2.3.2.3.1 The system should show the fielding players.
- 1.2.3.2.3.2 The scorer should select the player, who threw the ball.
- 1.2.3.2.3.3 The system should declare the batsman as dismissed, by selected mode.
- 1.2.3.2.3.4 The system should prompt the scorer to provide information about strike rotation at the time of dismissal.
- 1.2.3.2.3.5 The system should set the incoming batsman at the strike if the batsmen at crease crossed each other at the time of dismissal.
- 1.2.3.2.3.6 The system should prompt the scorer to enter the details of the next incoming batsman.

1.2.3.2.4 Stumped

- 1.2.3.2.4.1 The system should show the fielding players except the current bowler.
- 1.2.3.2.4.2 The scorer should select the player who stumped the batsman.
- 1.2.3.2.4.3 The system should award the dismissal to the bowler.
- 1.2.3.2.4.4 The system should increment the wicket count for the bowler.
- 1.2.3.2.4.5 The system should declare the batsman as dismissed, by selected mode.
- 1.2.3.2.4.6 The scorer should set incoming batsman at the strike.
- 1.2.3.2.4.7 The system should prompt the scorer to enter the details of the next incoming batsman.

- 1.2.3.2.5 Leg Before Wicket
- 1.2.3.2.5.1 The system should award the dismissal to the bowler.
- 1.2.3.2.5.2 The system should increment the wicket count for the bowler.
- 1.2.3.2.5.3 The system should declare the batsman as dismissed, by selected mode.
- 1.2.3.2.5.4 The scorer should set incoming batsman at the strike.
- 1.2.3.2.5.5 The system should prompt the scorer to enter the details of the next incoming batsman.
- 1.2.3.2.6 Hit Wicket
- 1.2.3.2.6.1 The system should award the dismissal to the bowler.
- 1.2.3.2.6.2 The system should increment the wicket count for the bowler.
- 1.2.3.2.6.3 The system should declare the batsman as dismissed, by selected mode.
- 1.2.3.2.6.4 The scorer should set incoming batsman at the strike.
- 1.2.3.2.6.5 The system should prompt the scorer to enter the details of the next incoming batsman.
- 1.2.3.2.7 Time Out
- 1.2.3.2.7.1 The system should declare the batsman as dismissed, by selected mode.
- 1.2.3.2.7.2 The system should prompt the scorer to provide information about strike rotation at the time of dismissal.
- 1.2.3.2.7.3 The system should set the incoming batsman at the strike if the batsmen at crease crossed each other at the time of dismissal.
- 1.2.3.2.7.4 The system should prompt the scorer to enter the details of the next incoming batsman.
- 1.2.3.2.8 Obstructing the field
- 1.2.3.2.8.1 The system should declare the batsman as dismissed, by selected mode.
- 1.2.3.2.8.2 The system should prompt the scorer to provide information about strike rotation at the time of dismissal.
- 1.2.3.2.8.3 The system should set the incoming batsman at the strike if the batsmen at crease crossed each other at the time of dismissal.
- 1.2.3.2.8.4 The system should prompt the scorer to enter the details of the next incoming batsman.
- 1.2.3.2.9 Retired out
- 1.2.3.2.9.1 The system should declare the batsman as dismissed, by selected mode.
- 1.2.3.2.9.2 The system should prompt the scorer to provide information about strike rotation at the time of dismissal.
- 1.2.3.2.9.3 The system should set the incoming batsman at the strike if the batsmen at crease crossed each other at the time of dismissal.
- 1.2.3.2.9.4 The system should prompt the scorer to enter the details of the next incoming batsman.
- 1.2.3.2.10 Hit the ball twice.
- 1.2.3.2.10.1 The system should declare the batsman as dismissed, by selected mode.
- 1.2.3.2.10.2 The scorer should set incoming batsman at the strike.
- 1.2.3.2.10.3 The system should prompt the scorer to enter the details of the next incoming batsman.
- 1.2.4 Abrupt stoppage in play
- 1.2.4.1 The scorer should enter the time the play stops at.

2. The scorer should enter the bowler at the start of each over.

- 2.1 The system should prompt the scorer to choose the next bowler of the fielding team.
- 2.2 The system should not show the name of the bowler who bowled the previous over.
- 2.3 The system should not allow any bowler to bowl more than set maximum number of overs for each bowler.
- 2.4 The system should increment the over count of each bowler at the end of the over.

3. The scorer should provide the game information.

- 3.1 The scorer should enter the maximum number of permissible overs in each innings at the beginning.
- 3.2 The scorer should provide the team list.

4. The scorer should provide information about the first-batting team.

- 4.1 The scorer should also provide the information about opening batsmen.
- 4.2 The scorer should set one of the two opening batsmen at the strike.

5. The scorer should enter the resumption in play.

- 5.1 The system should calculate the duration of stoppage in play.
- 5.2 The system should calculate the number of overs lost during the stoppage of play.

6. The system Should swap the fielding sides.

6.1 The system should swap the fielding side after the maximum number of permissible overs are bowled or after the fall of 10 wickets.