Cricket Scoreboard System OOM Project

INTRODUCTION: our project "Cricket Scoreboard System" is designed to display batsman's and bowler's details of two teams for both the innings and final match result including all the necessary match details.

REQUIRNMENTS:

- To build a Cricket Scoreboard System which display all the necessary data of a cricket match and a final scorecard after end of the match.
 - Allow user to select desired: match format (T10 or T20), venue, status, teams.
 - Making a file storing the above data.
 - Allow user to select Squad of 11 players for each team from a list of 15 players for the selected teams.
- Taking input from user of first innings
 - For each batsman, providing 3 options:
- Enter batsman details (serial no., runs scored, balls faced, fours, sixes.)
- Update batsman details (serial no., runs scored, balls faced, fours, sixes.)
- > Delete batsman details (serial no.)
 - For each entered serial no. corresponding batsman name is displayed.
 - For each bowler, providing 3 options:
- Enter bowler details (serial no., overs bowled, maiden overs, runs given, wickets taken.)
- Update bowler details (serial no., overs bowled, maiden overs, runs given, wickets taken.)
- Delete bowler details (serial no.)
 - For each entered serial no. corresponding batsman name is displayed.

- After completion of first innings (according to balls), Scorecard is displayed containing:
 - Entered batsman details of first team along with name and strike rate.
 - Entered bowler details of second team along with name and economy.
 - Total runs scored and total wickets.
- Taking input from user of second innings (similar as first)
- After completion of second innings, Scorecard is displayed (similar as first).
- At the end, Final Scorecard is displayed containing match details (venue, status, format) and total score of both the teams.
- Finally winning team name along with margin is displayed.

WORKING:

Here is a Detailed Working of our program

Match.h and Match.cpp

Cointains Match Class: has a field to store Venue option from a venue.txt file, Team 1 name and Team 2 name from teams.txt and Match status

Ltd Overs Match.h: (Abstract class)

It contains format of the match(Numbers of overs to be played in matches)

It Inherits Match class

• T-10.h and T_10.cpp:

It sets maximum overs to be played to 10 overs.

T-20.h and T 20.cpp:

It sets maximum overs to be played to 20 overs.

Batsman.h and Batman.cpp :

It stores Names, No of balls faced, Runs scored No of fours, No of Sixes, Strike Rate.

It cointins methods like enter_batsman _details, update_batsman_details, delete_batsman_details, Display the charts of batsman during the match.

• Bowler.h and Bowler.cpp:

It stores Names, Overs Bowled, Maiden Overs bowled, runs given, wickets taken , Economy

It cointins methods like enter_bowler _details, update_bowler_details, delete_bowler_details, Display the charts of bowler during the match.

• Innings.h and Innings.cpp:

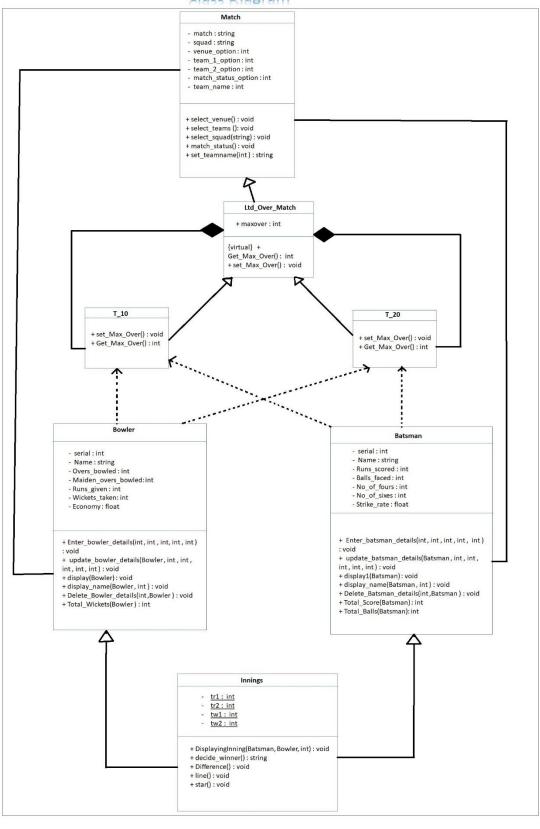
It includes team 1 and team 2 batsman and bowler details through out the match and also decide the winner by comparing between both the teams run.

• Project.cpp : (main file)

It carries out overall functionalities of the program at the run time

- It takes input from the user and executes the classes and its attributes and methods
- o Program takes input from user and decides the match result.

Class Diagram



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