PROJECT REPORT

Project Report: Managing Cricket League Statistics

Introduction:
The purpose of this project is to develop a program in C that facilitates the management of player statistics in a cricket league. The program allows users to input details for batsmen and bowlers, view individual player statistics, generate match summaries, and analyze records such as the highest runs scored by a batsman and the maximum wickets taken by a bowler.

Project Objectives:

Design a user-friendly interface for inputting player statistics.
Implement functions to calculate and display individual player details.
Develop functionalities to generate match summaries including batsmen and bowlers statistics.
Create a mechanism to analyze and display records such as highest runs and maximum wickets.
Project Structure:
The project consists of a single C file named cricket_stats.c. It utilizes two data structures: struct batsman for storing batsman details and struct bowler for storing bowler details. The main function drives the execution of the program, guiding users through inputting data, selecting options, and displaying relevant information.

Program Logic:

Data Input:

Users are prompted to enter the number of batsmen and bowlers participating in the league.
For each batsman, details such as name, runs scored, balls faced, fours, sixes, etc., are inputted.
Similarly, for each bowler, details including name, runs given, overs bowled, and wickets taken are inputted.
Menu Options:

After inputting player details, users are presented with a menu offering various options:
Batsman Detail: Allows users to view detailed statistics of a specific batsman.
Bowlers Detail: Provides detailed statistics of a specific bowler.
Match Summary: Generates a summary of the match including statistics for all batsmen and bowlers.
Record: Displays records such as the highest runs scored by a batsman and maximum wickets taken by a bowler.
Exit: Terminates the program.
Functionality Implementation:

Batsman Detail:

Users input the batsman number to view their details.
The program calculates the total runs scored by the batsman and their strike rate before displaying the details.
Bowlers Detail:
Users input the bowler number to view their details.
The program calculates the economy rate of the bowler before displaying the details.
Match Summary:
Displays a comprehensive summary of the match, including individual statistics for batsmen and bowlers.
Record:
Calculates and displays records such as the highest runs scored by a batsman and maximum wickets taken by a bowler.
Conclusion:
The developed program successfully fulfills the objectives of managing cricket league statistics. It provides a robust platform for inputting, analyzing, and displaying player details and match summaries. Future enhancements could include additional functionalities such as team management features, graphical user interfaces, and statistical analysis tools.