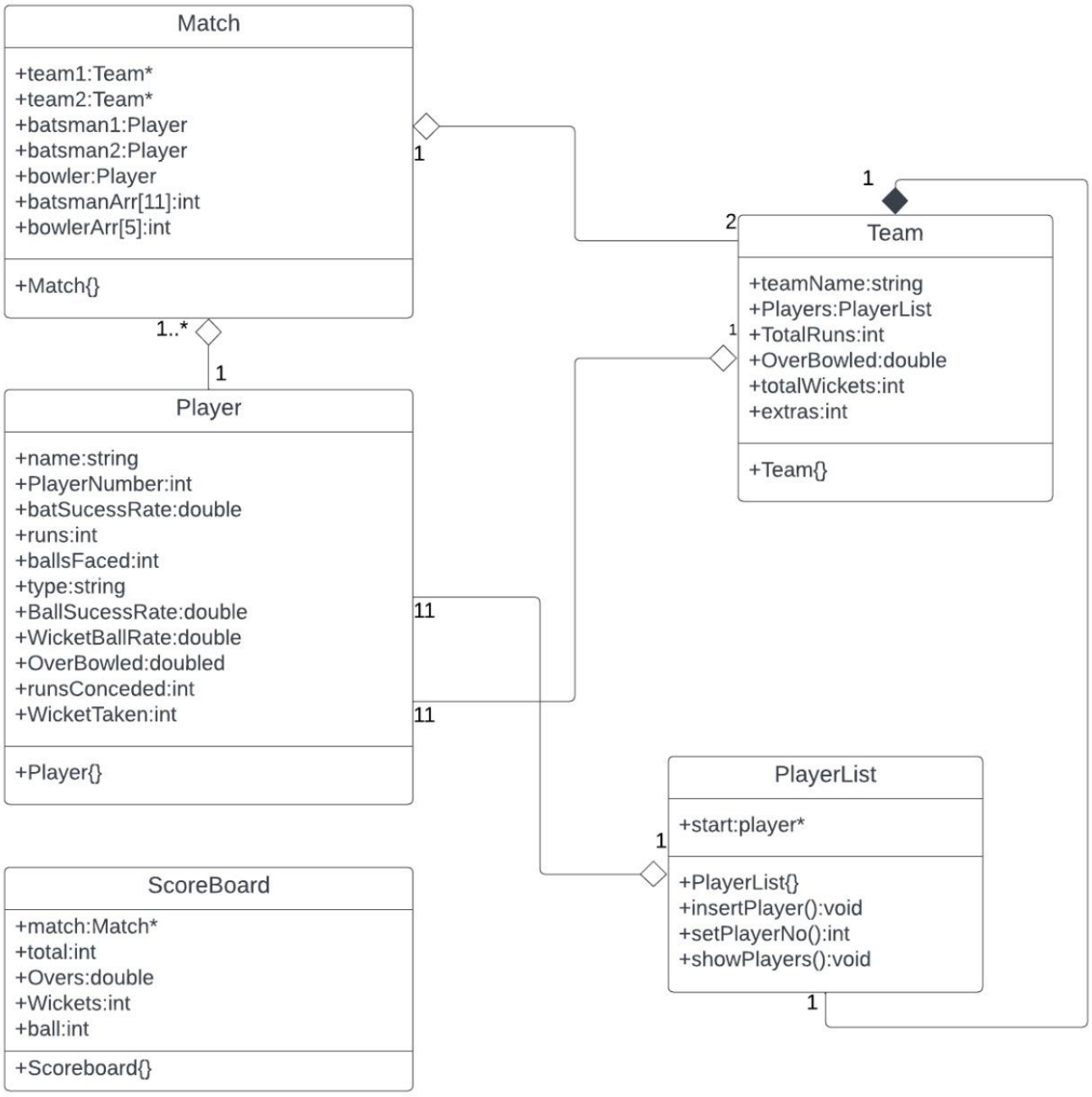
MINI PROJECT REPORT

NAME: W.D.S.R.RUDRIGO

INDEX:21/ENG/151

REGISTRATION NO: EN102814

UML Diagram of the Project



Design of the Project

To make the simulation of a cricket match run more smoothly, some crucial assumptions have been established. First, it is assumed that TeamA always wins the coin toss, which creates the opportunity for their favored option. Second, it is believed that the text file input only includes information on players who have made it into the starting XI for both sides. Based on their position in the batting order, these players are added to the team. The code also assumes that each team will only use five bowlers for the duration of the game. The fact that wide balls and no balls are both treated as extra runs without any consideration for free hits is a big simplification.

The Player Class creates a connected list of players by encapsulating individual player features such as player number, name, batting and bowling success rates, runs scored, and more. This list is managed by the PlayersList Class, which enables player insertion, searching, and retrieval by player number. Cricket team information, such as team name, player list, total runs, overs bowled, wickets taken, and additional runs are all stored in the Team Class, which serves as a representative of a cricket team. Two sides, batsmen, bowlers, and run rate calculations are all planned out by the Match Class. The visual representation of information relevant to matches is handled by the Scoreboard Class, which shows scorecards and updates during the simulation. These courses work together to produce a comprehensive cricket simulation program that enables the modeling of an entire match with player data, scoring, and inning transitions.