Pulselive

Pulse Innovations A Sony Company

Java Development Task - League Table

Introduction »

The purpose of this exercise is to demonstrate your ability to use Java to build a dynamic football league table generator.

Task »

Consider a league table for football. Each team plays a number of matches and the results of each match build the table. Given the following code below as a starting point build the LeagueTable class that can take a list of completed matches and produce a sorted list of LeagueTableEntry objects.

LeagueTableEntry objects are sorted by points, goal difference, goals for and then team names. The normal rules for scoring points apply.

Your code will be run through a series of JUnit tests to validate the implementation so it is important that method signatures are not changed. You will also be assessed on code quality and clarity.

In undertaking this task, **please consider the following:**

- You should be submitting production quality code
- Future reuse and extension of code
- Any documentation / notes on build

Starting code »

Match.java

```
public class Match
{
    private String homeTeam;
    private String awayTeam;
    private int homeScore;
    private int awayScore;

    public Match( final String homeTeam, final String awayTeam, final int
```

```
homeScore, final int awayScore )
    {
        this.homeTeam = homeTeam;
        this.awayTeam = awayTeam;
        this.homeScore = homeScore;
        this.awayScore = awayScore;
    }

    public String getHomeTeam()
    {
        return homeTeam;
    }

    public String getAwayTeam()
    {
        return awayTeam;
    }

    public int getHomeScore()
    {
        return homeScore;
    }

    public int getAwayScore()
    {
        return awayScore;
    }
}
```

LeagueTableEntry.java

```
public class LeagueTableEntry {
    private String teamName;
    private int played;
    private int won;
    private int drawn;
    private int lost;
    private int goalsFor;
    private int goalsAgainst;
    private int goalDifference;
    private int points;

    public LeagueTableEntry(String teamName, int played, int won, int drawn,
int lost, int goalsFor, int goalsAgainst, int goalDifference, int points) {
        this.teamName = teamName;
        this.played = played;
        this.won = won;
        this.drawn = drawn;
        this.lost = lost;
        this.goalsFor = goalsFor;
        this.goalsAgainst = goalsAgainst;
        this.goalDifference = goalDifference;
        this.points = points;
    }

    public String getTeamName() {
        return teamName;
```

```
    }

    public void setTeamName(String teamName) {
        this.teamName = teamName;
    }

    public int getPlayed() {
        return played;
    }

    public void setPlayed(int played) {
        this.played = played;
    }

    public int getWon() {
        return won;
    }

    public void setWon(int won) {
        this.won = won;
    }

    public int getDrawn() {
        return drawn;
    }

    public void setDrawn(int drawn) {
        this.drawn = drawn;
    }

    public int getLost() {
        return lost;
    }

    public void setLost(int lost) {
        this.lost = lost;
    }

    public int getGoalsFor() {
        return goalsFor;
    }

    public void setGoalsFor(int goalsFor) {
        this.goalsFor = goalsFor;
    }

    public int getGoalsAgainst() {
        return goalsAgainst;
    }

    public void setGoalsAgainst(int goalsAgainst) {
        this.goalsAgainst = goalsAgainst;
    }

    public int getGoalDifference() {
        return goalDifference;
    }
```

```
    public void setGoalDifference(int goalDifference) {
        this.goalDifference = goalDifference;
    }

    public int getPoints() {
        return points;
    }

    public void setPoints(int points) {
        this.points = points;
    }

}
```

LeagueTable.java

```
import java.util.List;

public class LeagueTable {


    public LeagueTable(final List<Match> matches) {
    }

    /**
     * Get the ordered list of league table entries for this league table.
     *
     * @return
     */
    public List<LeagueTableEntry> getTableEntries() {

    }
}
```