Tournament Simulator

Goal: To simulate a football league amongst top nation by scheduling match fixture and simulating the tournament

**Project is made more user-interactive and gamified by adding the feature of user to predict….**

Java File/Classes: -

Rough Overview (Subject to change) –

Team – datatype representing each team

Player – datatype representing each player

Scheduling part – contain static methods to schedule league fixtures and knockout fixtures

Tournament – class containing main method and representing whole tournament and the main application.

User – A class keeping record of state of each user who is predicting (users prediction and points).

Input data – through text file

FLOW OF APPLICATION –

First display teams and scheduled fixture

User Prediction for group stage

Group stage fixture simulation

So on ……..

simulate

Lineups

Team A vs Team B

Then after league stage schedule the knockouts

User prediction

Simulate knockouts

API –

User.java

String prediction

int points

public User(String prediction)//initialize points to zero

String toString()

{

User[Current Prediction - ,Points - ]

}

int getPoints()

void setPoints(int x)

String getPrediction()

void setPrediction(String s)

Tournament.java

Team[] groupA;

Team[] groupB;

Fixture[] groupStage//array to scheduled match,length will be 20

Fixture[] RO16,QuaterFinal,Semifinal,Final;

boolean isPrevRoundOver;//match true at end of last match and false at start of next round;

boolean isNextStagescheduled;

int matchNumber//initialized to zero

Constructor –Tournament(String filename)//Parse the file and make groupA,groupB

String getPointsTable()//display points table of both groups

String getPointsTable(‘A’)//points table of GroupA

String getPointsTable(‘B’)//points table of GroupB

void scheduleGroupStage()

String simulateGroupStage(int x)//simulates x matches

Call to static method which calculate is made in above method

void scheduleRO16(),Quaterfinal,Semifinal,Final;

String simulateRO16(),QuaterFinal,Semifinal,Final;