



## CSE 215L: Programming Language II Lab

Section: 7, Fall 2020

### Quiz-2

Define the Player and FootballPlayer classes as described by the UML diagrams below.

Player<<abstract>>	
#name: String #rating: double	<ul style="list-style-type: none"><li>- <b>setRating</b> method throws <code>IllegalArgumentException</code> if rating is negative</li><li>- <b>toString</b> method returns all the value of attributes in this class</li></ul>
#player (name: String , rating: double) +setName (name:String): void +setRating (rating:double): void +getName(): String +getRating(): double +changeRating (rating: double): void +toString(): String	

FootballPlayer <<extends>> Player implements Comparable <<interface>>	
-goals: int	<ul style="list-style-type: none"><li>- call parent constructor inside its own constructor</li><li>- <b>setGoals</b> method throws <code>IllegalArgumentException</code> if goal is negative</li><li>- while implementing the <b>compareTo</b> method of the interface, compare the goals with goals of another <code>FootballPlayer</code> obj: return 1 if the number of class goals is greater than that of obj goals, else return 0</li><li>- while implementing the abstract method of the parent class, set the rating of the parent class to the rating value from the parameter list.</li><li>- <b>toString</b> method returns all the data field including parent attributes should be returned</li></ul>
+footballPlayer ( name: String, rating: double, goals: int) +setGoals (goals: int): void +getGoals(): int +compareTo (Footballplayer obj): int +changeRating(rating: double): void +toString(): String	

Now, implement the following tasks in the main method.

- Create a FootballPlayer object p1 of reference type Player with following data values: name = “Shahidul Alam”, rating = 7.6, goals= 10
- Create another FootballPlayer object p2 of reference type Player with the following data values: name=”Sabrina Khatun”, rating=8.9, goals= 15
- Call compareTo method to compare p1 and p2. Output the name p1 if compareTo method return 1 else output p2 name.
- Set rating of object p1 as -5. Catch with appropriate error messages if any exception occurs here.
- Invoke changeRating() method of p2 and pass value 8.0.