

Project 0 -- EECS 2500 -- Linear Data Structures

Football Player Classes and Inheritance

Due: Thursday September 13, 2018

Description:

You are to make a set of classes that describe a football player's statistics. Some pieces of information are shared regardless of the position the football player plays. These include name, weight, and age. If the player is a defensive player they will have statistics for tackles, sacks, and interceptions. If the player is a tight end, running back, or receiver they will have statistics for receptions, passing yards, rushing attempts, rushing yards, touchdowns, and fumbles. If they are a quarterback they will have pass attempts, pass completions, passing yards, rushing attempts, rushing yards, fumbles, touchdowns, and sacks. We are not including offensive lineman or including kickers.

Details:

You are going to create a set of classes that inherit from a base class for this project. The information for the players will come in from a file named "*playerinfo.txt*". The format of the file will be:

- Position (string)
- Name (string)
- Weight (floating point value)
- Age (integer)

If it is a defensive player then the next 3 lines are:

- Tackles (integer)
- Sacks (float)
- Interceptions (integer)

If it is a tight end, running back or receiver the next 6 lines are:

- Receptions (integer)
- Reception Yards (integer)
- Rushes (integer)
- Rushing Yards (integer)
- Touchdowns (integer)
- Fumbles (integer)

If the player is a quarterback the next 9 lines are:

- Pass Attempts (integer)
- Pass Completions (integer)
- Passing Yards (integer)
- Rushing Attempts (integer)
- Rushing yards (integer)
- Touchdowns (integer)
- Interceptions (integer)
- Fumbles (integer)
- Sacks (integer)

You are to read these in using a `BufferedReader` and add them to an `ArrayList`. The list should then be listed out to the console with appropriate `toString` methods.

Submission:

Your source code should be submitted online in BlackBoard. I do not need your input file.