# # boolean \_over # boolean \_fallen # Stack<String> \_status # int \_attraction # int \_pendingLikeChange # ArrayList<TreeNode> \_stage1 # ArrayList<TreeNode> \_stage2 # ArrayList<TreeNode> \_stage3 # ArrayList<TreeNode> \_currentStage # String \_descrip # String \_name # Player \_player # boolean \_isRichard # int x

+ boolean isOver()

# int y

- + boolean hasFallen()
- + String getStatus()
- + int getAttraction()
- + ArrayList<TreeNode> getStage()
- + String getDescrip()
- + String getName()
- + boolean getIR()
- + boolean setOver(boolean isOver)
- + boolean setFallen(boolean hasFallen)
- + String changeStatus()
- + void friendify()
- + String maintainStatus(int oldAttraction)
- + int changeAttraction(int change)
- + boolean updateTree(TreeNode newHead)
- + int probeTree()
- + int probeTreeHelper(TreeNode node)

\*Note: Charactar has 3 subclasses: Jessica, Brad, and Richard. The only distinction between these subclasses is the differences in their constructors. We've set it up this way to avoid convoluted Charactar instantiations in Woo; this way, we can create Jessica, Brad, and Richard without having an overly complicated set of parameters in the constructor.

# \_\_\_\_

- Brad brad
- Jessica jessica
- Richard richard
- Player \_player
- boolean gameOver
- boolean \_firstTime;
- + void introduction()
- + void play()
- + static void type(String s)
- + static void delay (int milliseconds)
- + static String removePunctuation(String word)

Woo

# Player

- ArrayList<Charactar> \_rank
- String \_name
- boolean \_hasFriend
- boolan \_dead
- + ArrayList<Charactar> getRank()
- + void sortRank()
- + void addToRank(Charactar character)
- + String getName()
- + String setName(String name)
- + boolean hasFriend()
- + boolean isDead()
- + boolean die()

## abstract TreeNode

- # ArrayList<TreeNode> children
- # int likeChange
- # Character character
- # Player \_player
- + abstract void interact()
- + ArrayList < Integer > getChildrenLikeChanges()
- + ArayList<TreeNode> getChildren()
- + static void type(String s)
- + static void delay (int milliseconds)

\*Note: Each node in the storyline tree will be coded individually (a class for each node). It will extend TreeNode, and each will have a specialized interact() method (this is essentially a chatbox)

### **Scanny**

- \_response
- + String toString()
- + static void type(String s)
- + static void delay (int milliseconds)

\*Note: Much of Scanny's functionality is contained in its constructor. It works similarly to Scanner but also gives the player the opportunity to ask a friend for advice before providing a response.