

```
1  /*
2   * Class name: TradeItem (header file)
3   * Class description: Class definition for the type TradeItem. TradeItem objects represent an item that can be sold or
4   *                     traded. Each instance has a name, a value, and a flag indicating whether the item is legal or illegal to have.
5   *
6   * Programmer: Chad Philip Johnson
7   * Date created: February 21st, 2013
8   * Last date modified: May 10th, 2013
9   *
10  * Sources Used:
11  *     None
12  */
13
14 #include <string>
15
16 using namespace std;
17
18 #ifndef TRADEITEM_H
19 #define TRADEITEM_H
20
21 class TradeItem
22 {
23     public:
24
25     //***** constructor/destructor declarations *****/
26
27     /**
28      * Default constructor for the TradeItem class.
29      * @param strItemName The name of the item (default is the string EMPTY)
30      * @param uintItemValue The value of the item (default is the integer 0)
31      * @param boolIsContraband Flag to set whether the item is legal/illegal (default is boolean false)
32      */
33     TradeItem( string strItemName = "EMPTY", unsigned int uintItemValue = 0, bool boolIsContraband = false );
34
35     /**
36      * Destructor for the TradeItem class. This destructor does not perform any operations.
37      */
38     ~TradeItem();
39
40     //***** overloaded operator declarations *****/
41
42     /**
43      * Overloaded comparison operator. Checks to see whether the values for the variables strItemName and
44      * uintItemValue are the same between two instances of TradeItem.
45      * @param objTradeItemLeft The left instance of TradeItem to be compared.
46      * @param objTradeItemRight The right instance of TradeItem to be compared.
47      */
48     friend bool operator == ( const TradeItem& objTradeItemLeft, const TradeItem& objTradeItemRight );
49
50     //***** public function declarations *****/
```

```
51
52 /**
53 * Accessor function for the strItemName variable.
54 * @returns string object with the current value of the strItemName variable.
55 */
56 string getItemName();
57
58 /**
59 * Mutator function for the strItemName variable.
60 * @param strItemName The new string value to be assigned to the strItemName variable.
61 */
62 void setItemName( string strItemName );
63
64 /**
65 * Accessor function for the uintItemValue variable.
66 * @returns unsigned int value for the strItemName variable.
67 */
68 unsigned int getItemValue();
69
70 /**
71 * Mutator function for the uintItemValue variable.
72 * @param uintItemValue The new unsigned int value to be assigned to the uintItemValue variable.
73 */
74 void setItemValue( unsigned int uintItemValue );
75
76 /**
77 * Accessor function for the boolIsContraband variable.
78 * @returns bool value for the boolIsContraband variable.
79 */
80 bool getIsContraband();
81
82 /**
83 * Mutator function for the boolIsContraband variable.
84 * @param boolIsContraband The new boolean value to be assigned to the boolIsContraband variable.
85 */
86 void setIsContraband( bool boolIsContraband );
87
88 private:
89
90 /*** private variable declarations ****/
91     string strItemName;
92     unsigned int uintItemValue;
93     bool boolIsContraband;
94
95 };
96
97 #endif
98
```