

```
1  /*****
2  * Dalton Nofs
3  * Login ID: nofs5491
4  * CS-102, Summer 2017
5  * Programming Assignment 3
6  * ConsolePrint class: general use program printer
7  *****/
8
9  public class ConsolePrint
10 {
11     String buffer = ""; // Buffer string for data to be sent to console
12
13     /*****
14     * Method: printDatabase()
15     * Purpose: writes out the entire database
16     *
17     * Parameters: Database: printBase: database to be printed
18     * Returns: Void: nothing will be returned
19     *****/
20     public void printDatabase(Database printBase) throws IllegalArgumentException
21     {
22         int arrayCount = 0; // local arraycount for cycling through the database
23         arrayCount = printBase.getArraySize();
24
25         // Check the status of the database
26         if(arrayCount <= 0)
27         {
28             throw new IllegalArgumentException("Database is empty!\n");
29         }
30
31         // Loop semesters
32         for(int index=0; index<arrayCount; index++)
33         {
34             int numCourses = printBase.get(index).size();
35             // Loop courses
36             for(int index2=0; index2<numCourses; index2++)
37             {
38                 // Add the class attributes to the buffer
39                 buffer += printBase.getArrayPosition(index, index2).getCourseNumber() + ": " +
40                     printBase.getArrayPosition(index, index2).getCourseTitle() + " (" +
41                     printBase.getArrayPosition(index, index2).getCreditCount() + "). " +
42                     printBase.getArrayPosition(index, index2).getTermTaken() + " " +
43                     printBase.getArrayPosition(index, index2).getYearTaken() + " " +
44                     printBase.getArrayPosition(index, index2).getCourseGrade() + " ";
45
46                 // Check to see if excluded from GPA calc
47                 if(printBase.getArrayPosition(index, index2).getExcludeFlag().equals("Y") ||
48                     printBase.getArrayPosition(index, index2).getExcludeFlag().equals("y"))
49                 {
50                     buffer += " (excluded).\n";
51                 }
52                 else{buffer += ".\n";}
53             }
54         }
55         System.out.println(buffer); // Print the entire database
56         buffer = ""; // clear the buffer
57     }
58 }
```