COM1003 feedback -- stage 1 -- Updated

Zer Eng (acb16zje) : Total mark 23/30

This document contains feedback on your assignment submission, which has
been updated after a bug was identified in the automated system. Your
mark may therefore have changed.

As before, there are both general and detailed comments. Please read
all of this document carefully. For stage 2, you should take this feedback
into account.

General Comments

Your submission has been marked using an automated system, which
makes use of JUnit, javac, and two profile tools, PMD (https://pmd.github.io)
and Checkstyle (http://checkstyle.sourceforge.net).

This system applies exactly the same checks to each submission, and so is
much more consistent than human marking.

Overall performance

Across all students who submitted work, the median mark was 18/30, and the
maximum mark was 27/30.

Common mistakes

Some students did not follow the instructions for packaging, and so lost
marks because their code did not compile.

If this is you, then for Stage 2, all of your new Connect4 classes should
be in the assignment2017 package, and should import the provided classes
from assignment2017.codeprovided. This means that your code should be in
a folder called assignment2017, with a subfolder called codeprovided
containing the provided classes.

The first line of each class in the assignment2017 package should be:
package assignment2017;

and each codeprovided class should be imported using the following form:
import assignment2017.codeprovided.Connect4Player;

A failure to compile was often associated with a failure of the JUnit tests.

Your code should compile with the command line instruction:
javac assigment2017/PlayConnect4.java (on Mac/Linux) or
javac assignment2017\PlayConnect4.java (on Windows)

Most students lost marks for style. You were asked to adhere to the Google
style guidelines, and the detailed feedback below indicates where there were
problems. This feedback is distilled from more detailed output (often > 1000 lines)
from PMD and Checkstyle.

Detailed feedback

Lines beginning with >> indicate aspects of your submission for which marks were
awarded, and lines beginning with -- indicate areas for improvement.

Code compiles and operates correctly (5 marks available)

>> Code compiles correctly .... 2 marks
>> Code passed JUnit tests .... 3 marks

Design makes use of java OO features (10 marks available)

>> Delegation of responsibilities to different classes .. 2 marks
>> The Connect4Displayable interface is implemented ..... 2 marks
>> The abstract Connect4Player class is extended .... 1 mark
>> The abstract Connect4GameState class is extended ..... 1 mark
>> A rather verbose solution with 777 lines of code ..... 1 mark
-- More detailed feedback on your design is given below.

```
Programming style follows good practice (15 marks available)
-----------------------------------------------------------------
-- Avoid import .*, be specific about what classes should be imported
>> Class and package style ............................ 2 mark(s)
-- One or more of your methods is longer than 40 lines,
   and this impacts readability
>> Coding style ...................................... 5 mark(s)
-- There is a problem with names of classes, methods, or
   other variables in at least one class. Classnames should be in
   CamelCase, everything else in lowerCamelCase
>> Comments present at the head of each class .......... 4 marks
-----------------------------------------------------------------

Total mark = 23 out of 30

-----------------------------------------------------------------
Additional feedback on your design:
acb16zje/assignment2017/Connect4.java:13:
Private field 'game' could be made final; it is only initialized in the declaration or constructor.
acb16zje/assignment2017/Connect4.java:14:
Private field 'red' could be made final; it is only initialized in the declaration or constructor.
acb16zje/assignment2017/Connect4.java:15:
Private field 'yellow' could be made final; it is only initialized in the declaration or constructor.
acb16zje/assignment2017/Connect4.java:16:
Private field 'display' could be made final; it is only initialized in the declaration or constructor.
acb16zje/assignment2017/Connect4ConsoleDisplay.java:19:
Private field 'displayBoard' could be made final; it is only initialized in the declaration or constructor.
acb16zje/assignment2017/Connect4ConsoleDisplay.java:41:
A switch statement does not contain a break
acb16zje/assignment2017/Connect4GameStateTest.java:240:
Avoid reassigning parameters such as 'msg'
acb16zje/assignment2017/KeyboardPlayer.java:50: Avoid if (x != y) ..; else ..;
acb16zje/assignment2017/MyGameState.java:156: Avoid if (x != y) ..; else ..;
acb16zje/assignment2017/MyGameState.java:156:
Avoid unnecessary if..then..else statements when returning booleans
acb16zje/assignment2017/MyGameState.java:234:
Avoid unnecessary if..then..else statements when returning booleans
acb16zje/assignment2017/PlayConnect4.java:11:
All methods are static
 Consider using a utility class instead
Alternatively, you could add a private constructor or make the class abstract to silence this warning.
-----------------------------------------------------------------
```