

Specifications: LetterGrade

The LetterGrade enum is an encapsulation of a letter grade in a course. In addition to the obvious specifications illustrated in the UML class diagram, the LetterGrade enum must satisfy the following specifications.

1. The F instance must have a label of "F" and its points attribute must have a value of 0.0.
2. The DMINUS instance must have a label of "D-" and its points attribute must have a value of 0.7.
3. The D instance must have a label of "D" and its points attribute must have a value of 1.0.
4. The DPLUS instance must have a label of "D+" and its points attribute must have a value of 1.3.
5. The CMINUS instance must have a label of "C-" and its points attribute must have a value of 1.7.
6. The C instance must have a label of "C" and its points attribute must have a value of 2.0.
7. The CPLUS instance must have a label of "C+" and its points attribute must have a value of 2.3.
8. The BMINUS instance must have a label of "B-" and its points attribute must have a value of 2.7.
9. The B instance must have a label of "B" and its points attribute must have a value of 3.0.
10. The BPLUS instance must have a label of "B+" and its points attribute must have a value of 3.3.
11. The AMINUS instance must have a label of "A-" and its points attribute must have a value of 3.7.
12. The A instance must have a label of "A" and its points attribute must have a value of 4.0.
13. The toString() method must return the label left-justified in a field of width two, followed by a single space, followed by a '(' , followed by the value of the points attribute in a field of width three with one digit to the right of the decimal place, followed by a ') ' .
14. The fromCode(String code) method must return the instance that corresponds to the given code (i.e., has a label that is the same as code) or null if the code is invalid.