Software Engineering

**Assignment 2 - Report**



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7.1.

- The purpose of using interface Comparable is to apply method compareTo() to classes of the Student type hierarchy, makes them *comparable* and then we can sort them in orders. Furthermore, in class Engine, we will declare objects as a TreeSet of Student, in order to do so, according to Java API, collection type TreeSet can only be applied for classes which already have implemented Comparable or Comparator.

- The purpose of using interface Document is to apply method toHtmlDoc() to classes of the Student type hierarchy, so that objects of this type hierarchy can generate a simple HTML document from the current state of itself.

(a) Yes. We can use interface Comparator instead of Comparable.

(b) We can create methods toHtmlDoc() manually in class Student then override them in