

Manual Grading Rubric (Revised 2021/02/17)

Manual Grading Rubric

Per Cap Description

General

-5 pts	once	If files in the src/ directory are in the default package
-5 pts	once	If test files are in the same package as the classes they are testing
-1 pts	every	Each class, interface, or package name whose name is not descriptive or appropriate (e.g. package "enums" or "interfaces")
-1 pts	every	Each class, interface, or package name whose name is not descriptive or appropriate (e.g. package "enums" or "interfaces")
-5 pts	every	Each block using a variable and a if-else or switch statement instead of polymorphic behavior
-3 pts	every	Each time a String that must have a precise value when an enum or other structured data could have been used.
-3 pts	every	Each group of repeated code that could be refactored into a helper method
-1 pt	-5 pts max	Each group of unwanted uncommented print statements, even if used for debugging
-1 pts	-5 pts max	Each use of "raw types" on any generic type such as List or Hashmap instead of List<String> or HashMap<String, String>

Enumerations

- 1 pts -5 pts Instances of an enumeration are constant and should be named with all upper-max case
- 1 pts every Constructor (if it exist) should be private

Interfaces

- 1 pt every If interface Javadoc comment exists but is vague, not useful, and not using complete sentences
 - 10 pts Each method in an interface that is not documented
 - max
- 1 pt -5 pts Each method comment that exists but is incomplete. Javadoc comments should be written in complete sentences and be descriptive of *what* the method does (not max *how* it does it), have @param, @return, and @throw tags as appropriate.
- 1 pts -5 pts Each use of concrete type instead of interface type on any public-facing method
 - max signature (e.g., ArrayList<> instead of List<>)

Classes

- 1 pt every If class Javadoc comment exists but is vague, not useful, and not using complete sentences
- 2 pts every Class that should be declared abstract but isn't
- 1 pt -5 pts Each instance variable whose name is not descriptive, contain abbreviations, or max are not appropriate (name should represent what that variable stores)
- 1 pt -5 pts Each instance variable that is declared to be of a concrete type when an interface max type could be used instead
- 1 pt -5 pts Each instance variables that are not initialized in the class in which they are max declared or are initialized at the time of declaration instead of in the constructor

-1 pt -5 pts Each instance variables with the incorrect access modifier

max

-2 pts every Each time class data that is not immutable is returned without making a copy

Warning every Each time mutable data is provided to a method and is used to set a field in a class without making a copy

Methods

-1 pt -5 pts Each method (that is not part of an interface) comment that exists but is incomplete. Javadoc comments should be written in complete sentences and be descriptive of *what* the method does (not *how* it does it), have @param, @return, and @throw tags as appropriate.

-1 pt -5 pts max Each method that should have an @Override tag but doesn't

-2 pt -10 pts max Each public method that should be part of an interface but isn't

-2 pts -10 pts max Each public method that does not check inputs for null or otherwise validate as applicable.

-2 pts -10 pts max Each time class data that is not immutable is returned without making a copy (-1) if they are making a copy but not a deep copy

-2 pts -10 pts max Each method that is long and had unwieldy logic (common on how it can be broken down into logical helpers)

Warning every Each time mutable data is provided to a method and is used to set a field in a class without making a copy

Exceptions

-3 pts	-15 pts max	Each try/catch block which catches Exception instead of a specific subtype of Exception
-3 pts	-15 pts max	Each misuse of exception: exception used as a goto or otherwise for non-exceptional situations, such as to return a result from a method. It is okay if an exception is used to handle a Quit action (if something went wrong)
-3 pts	-15 pts max	Each empty catch block with no comment as to why it's empty (if there is a comment but it does not make sense -1 each)