



HOMWORK 2 - SPRING 2025

HOMWORK 2 - GRADING KEY

1. (17 points) Documentation and coding style:

- Name, ID number and recitation at the top of ALL java files [2 points]
- Precise and correct specifications [5 points]
- Indentation [3 points]
- Variable names [2 points]
- Javadoc Style documentation *(see NOTE). [5 points]

NOTE 1: You only need to submit your .java files. We will use the javadoc *.java command to create the javadoc files.

NOTE 2: YOUR ASSIGNMENT WILL NOT BE GRADED if you submit only *.class files.

NOTE 3: YOUR ASSIGNMENT WILL NOT BE GRADED if you use ArrayList, Vector, LinkedList or any other predefined Java API Data Structures.

2. (15 points) Source code:

- Implementation done as specified (additional methods are OK). [6 points]
- Coding style: flexible, extensible, good use of methods and avoid duplicate code. [4 points]
- Throw an exception back to the calling method if a precondition is violated. [5 points]

3. (68 points) Program correctness:

- Programs compiles without any errors. [15 points]
- Menu operations work correctly:
 - A - Add Train [6 points]
 - N - Next Train [4 points]
 - V - Previous Train [4 points]
 - R - Remove Selected Train [6 points]
 - P - Print Selected Train [2 points]
 - TA - Add Track to Station [6 points]
 - TR - Remove Track from Station [6 points]
 - TS - Switch Track [6 points]
 - TPS - Print Selected Track [3 points]
 - TPA - Print all Tracks [4 points]
 - SI - Print Station Information (**NOTE: This must complete in $O(\text{numTracks})$ time.**) [5 points]
 - Q - Quit [1 point]