HOMEWORK 5 - SPRING 2023

HOMEWORK 5 - 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 *(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 or any predefined Java API Data Structures.

2. (13 Points) Source Code

- Implementation done as specified (additional methods are OK) [8 points]
- Throw an exception back to the calling method(s) if a precondition is violated. [5 points]

3. (70 Points) Program Correctness

- Program compiles without any errors. [12 points]
- StoryTree class can be written to / read from a file.
  - File can be written. [4 points]
  - File can be read (user notified if invalid file). [4 points]
- User can play a game to completion. [10 points]
- The following editor menu options are supported:
  - V: View the cursor's position, option and message.. [6 points]
  - S: Select a child of this cursor (options are 1, 2, and 3).. [6 points]
  - O: Set the option of the cursor.. [4 points]
  - M: Set the message of the cursor.. [4 points]
  - A: Add a child StoryNode to the cursor.. [6 points]
  - D: Delete one of the cursor's children and all its descendants.. [6 points]
  - R: Move the cursor to the root of the tree.. [2 points]
  - Q: Quit editing and return to main menu.. [1 points]
- Erroneous input handled "gracefully." (Appropriate Error messages displayed to the user.) [5 points]

4. (7 points) Extra Credit

- StoryTree can support up to 10 StoryTreeNodes. [2 points]
- Extra credit functions work correctly:
  - Return to Parent. [2 points]
  - Win Probability. [3 points]