AP Computer Science
Project Resubmission Guidelines

You may "upgrade" your final project per the following guidelines. The upgraded project will be due 30 days from the date that you receive the Lewbric for your first submission.

1. **Gold Level Upgrade (Missing elements and/or algorithms)** – You may upgrade your program to include any missing elements and/or algorithms (e.g., student-designed superclass, for-each loop, use of class `ArrayList`, traversal of an `ArrayList`, use of an interface, etc.) You may earn up to 50% of the points back for each of these missing elements and algorithms.

   For example, if a project earned 70% on the original submission, and all missing elements and algorithms were fixed or added, then the final grade would be "upgraded" to an (70 + 0.5*30) = 85%.

   Note: You may also choose to write a completely new project subject to the maximum score rule above. In the example above, if a completely new project is written with all the complete elements and algorithms, a maximum score of 90% could be earned. <u>If this option is chosen, a new proposal and UML diagram is needed within 10 days from the date your Lewbric was returned.</u>

2. **Platinum Level Upgrade (Two-dimensional array)** – You may earn an additional 20% of the points back on your project if item 1 above is completed <u>AND</u> a 2D array is added to your program the includes the following elements:
   a. using a 2D array as an instance variable in a student-designed class (superclass, abstract, or concrete),
   b. populating the 2D array in the constructor of a student-designed class using a nested for-loop.
   c. writing a "getter" method that returns the 2D array in "rectangular format" as type `String` using a nested for-each loop.
   d. writing a "brain method" that "moves" data in the 2D array (e.g., one row of data is moved to one row directly above or below it, columns of data are moved, etc.)
   e. the "brain method" above must be called within the context of a loop.
   f. passing the 2D array into OR returning a 2D array from a brain method that has been modified as described in (d) above.
   g. the 2D array must play an integral role in your game/program.

   For example, if a project earned 70% on the original submission, and all missing elements and algorithms were fixed or added along with the 2D array requirements above, then your final grade would be "upgraded" to a (70 + (0.5+0.2)*30) = 91%.

3. **Final Submission** – To earn the "upgrade" points, the following must be completed.
   a. Email Mr. Lew a .zip file that includes your upgraded project and a PDF of your "Project Resubmission Form" **<u>by 8:00 am of your due date</u>** (30 days from the date you received the Lewbric for your first submission).
   b. YouTube video link for your project. This link can be included in the body of the email
      i. The video should be between 2-3 minutes long.
      ii. The video should explain the basic operation of the program along with any special features.
      iii. The video will be posted on the website on the page for your project.