IA Teacher Grading CheckList

Criterion A: Planning (6 marks)

The success criteria identified in criterion A will be used in criterion D to evaluate the effectiveness of the product.

\_\_\_\_ Identified client

\_\_\_\_ Shows evidence of consultation with client

\_\_\_\_ Proposed project is justified

* Why is the product being developed?
* Is this particular product an effective solution for solving problem?

\_\_\_\_ List of appropriate criteria for evaluating the success of the product

* The success criteria are listed in the form of bullet points.

Criterion B: Solution overview (6 marks)

* The student must provide a record of tasks and a design overview that includes an outline test plan.
* The Record of tasks form must be used.
* The record of tasks and design overview must refer to the product proposed in criterion A.

\_\_\_\_ Record of tasks is detailed and complete

* Provides chronology of the key events in planning, designing, developing, testing and implementing the solution.
* Provides list of other issues that may arise that may affect the development of the solution.

\_\_\_\_ Design overview detailed and complete

* Are design methodologies appropriate to the type of product being designed?
  + Structure chart
  + System Flowchart
  + Inputs and Outputs
  + Flowcharts
  + Pseudocode
  + UML Diagram
  + CRC Cards
* Demonstrates different levels of draft design, such as the overall structure and the internal layout of the product itself.
  + Prototyping
  + Class Structure
  + Data File Structure

\_\_\_\_ Includes outline test plan

* Shows evidence of a testing plan that addresses the main areas of functionality of the product.
* How do you know program works correctly? Is Accurate?
  + Test data

\_\_\_\_ Extended writing shows clear understanding of how product was development

Criterion C: Development (12 marks)

* The student must identify techniques used in developing the product.
* The student must explain the techniques, with screenshots, that were used to develop the product identified in criterion A, explaining why they have been used and why they are adequate for the task.

\_\_\_\_ Demonstrates high level of complexity and ingenuity in addressing Criterion A

* Presents a list of the techniques used in developing the product.
* Techniques may include algorithmic thinking, data structures, software tools and user interface. This list need not be exhaustive but should illustrate how the major components of the product were developed.
  + Data Structures (array, linked list, stack, queue, binary tree, hash table, etc.)
  + OOP (encapsulation, polymorphism, inheritance )
  + Methods
  + File IO (text files, serialization)

\_\_\_\_ Characterized by appropriate use of existing tools

* Existing tools such as code libraries, software packages are used appropriately.
  + Foundation classes (String, Scanner, ArrayList, LinkedList, PrintWriter, etc.)
  + Swing classes

\_\_\_\_ Techniques are adequate for the task and use is explained

* Provides evidence of algorithmic thinking.
  + Iteration
  + Repetition
  + Searching
  + Sorting
  + Recursion
  + Methods
* Explains techniques used in the development of the product and reasons why they are appropriate to it
  + Screenshots
  + Exemplar data
  + Reference information in appendix.

\_\_\_\_ All sources are identified

* Reference material such as templates, program code, applets or other materials that have been used or modified are acknowledged.

Criterion D: Functionality and extensibility of product (4 marks)

This criterion assesses the extent to which the product:

* functions, as evidenced in the video
* can be expanded and modified by future users as evidenced in the design and development documentation.

\_\_\_\_ Video shows that the product functions well

\_\_\_\_\_ Some expansion and modifications of the product are proposed

* Product is designed so that it can be maintained by another party and/or be further developed. The design of the product includes appropriate folder and data structures, intuitive file and/or class naming conventions and, where appropriate, comments in the code.

Criterion E: Evaluation (6 marks)

* The student must evaluate the effectiveness of the product based on feedback from the client/adviser. This must include direct references to the success criteria identified in criterion A.
* The student must recommend proposals for the future improvement of the product.

\_\_\_\_ Product is fully evaluated against the success criteria identified in criterion A

\_\_\_\_ Shows feedback from the client/adviser

\_\_\_\_ Recommendations for further improvement of the product are realistic

* Provides feedback and the evaluation of the specific performance criteria to recommend possible future developments to the product. Recommendations explain the benefits of these developments.