

IA Teacher Grading

Candidate ID: _____

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.

Marks	Description
0	The response does not reach a standard described by the descriptors below.
1-2	An appropriate scenario for investigation for an identified client is stated. The rationale for choosing the proposed product is identified. The criteria for evaluating the success of the product are generally inappropriate.
3-4	An appropriate scenario for investigation for an identified client, providing evidence of consultation, is stated. The rationale for choosing the proposed product is partially explained and includes some appropriate criteria for evaluating the success of the product.
5-6	An appropriate scenario for investigation for an identified client, providing evidence of consultation, is described. The rationale for choosing the proposed product is justified and includes a range of appropriate criteria for evaluating the success of the product.

CheckList

____ 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.

Score _____

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.

Marks	Description
0	The response does not reach a standard described by the descriptors below.
1-2	The record of tasks and the design overview, including an outline test plan, are limited. From this information it is difficult to see how the product was developed.
3-4	The record of tasks and the design overview, including an outline test plan, are partially complete. They provide a basic understanding of how the product was developed.
5-6	The record of tasks and the design overview, including an outline test plan, are detailed and complete. From this information it is clear how the product was developed.

CheckList

____ 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

Score _____

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.

Marks	Description
0	The response does not reach a standard described by the descriptors below.
1-4	The use of techniques demonstrates a low level of complexity and ingenuity or does not address the scenario identified in criterion A. It is characterized by limited use of existing tools. There is no explanation of why the techniques are used or how they are adequate for the task. Sources are used but are not identified.
5-8	The use of techniques demonstrates a moderate level of complexity and ingenuity in addressing the scenario identified in criterion A. It is characterized by some appropriate use of existing tools. There is some attempt to explain the techniques used and why they are adequate for the task. All sources are identified.
9-12	The use of techniques demonstrates a high level of complexity and ingenuity in addressing the scenario identified in criterion A. It is characterized by the appropriate use of existing tools. The techniques are adequate for the task and their use is explained. All sources are identified.

CheckList

____ 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.

Score _____

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.

Marks	Description
0	The response does not reach a standard described by the descriptors below.
1-2	The video shows that the product functions partially. Some expansion and modification of the product is possible but difficult.
3-4	The video shows that the product functions well. Some expansion and modifications of the product are straightforward.

(This criterion should be completed as two parts and does not require any additional written documentation)

CheckList

____ 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.

Score _____

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.

Marks	Description
0	The response does not reach a standard described by the descriptors below.
1-2	There is a limited attempt to evaluate the product against the success criteria identified in criterion A. There is limited evidence of feedback from the client/adviser and any recommendations for further improvement are trivial or unrealistic.
3-4	The product is partially evaluated against the success criteria identified in criterion A including feedback from the client/adviser. Recommendations for further improvement of the product are largely realistic.
5-6	The product is fully evaluated against the success criteria identified in criterion A including feedback from the client/adviser. Recommendations for further improvement of the product are realistic.

CheckList

____ 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.

Score _____

Score	
Criterion A	_____
Criterion B	_____
Criterion C	_____
Criterion D	_____
Criterion E	_____
Total	_____