



AP[®] Computer Science Principles

**September 2014
DRAFT RUBRICS**

EXPLORE

ASPECT	PERFORMANCE QUALITY			SCORE
Responses to Written Requirements	There is a minimal connection between the response and the references.	There is some supporting connection between the response and the references.	There is a strong, contextualized connection between the response and the references.	
	1	2	3	
	The innovation's name and intended purpose are unclear or incomplete.	The innovation's name and intended purpose are adequately identified.	The innovation's name and intended purpose are described with clear, rich specificity.	
	1	2	3	
	The report offers minimal technical details or explanations of the role computing plays in the innovation. An inexperienced user would find it difficult to understand the innovation.	The report offers sufficient technical details and explanations of the role computing plays in the innovation. An inexperienced user would find the innovation understandable.	The report offers a wealth of technical details, supported by strong explanations of the role computing plays in the innovation. An inexperienced user would find the innovation understandable and significant.	
	1	2	3	
	Data and the innovation are discussed independently in the report.	The report draws a connection between data and the innovation.	The report demonstrates an analysis of data that is clearly and meaningfully connected to the innovation.	
	1	2	3	
	The report identifies a population and minimally or partially identifies effects on that population.	The report identifies a population and generally identifies significant effects on a population.	The report fully identifies a population and precisely describes significant effects on a population.	
	1	2	3	
The report loosely connects the innovation to its long- and short-term impacts or its beneficial and harmful effects.	The report presents an analysis of the computing innovation and identifies its long- and short-term impacts, and its beneficial and harmful effects, of the innovation.	The report presents a rich analysis of the computing innovation and describes in detail its long- and short-term impacts, and its beneficial and harmful effects, of the innovation.		
1	2	3		

Visual Artifact (and Written Summary)	The visual artifact provides little insight into the potential beneficial or harmful effects of the innovation.	The visual artifact provides some insight by explaining the potential beneficial or harmful effects of the innovation. The artifact demonstrates creativity.	The visual artifact provides deep insight by depicting and clarifying the potential beneficial or harmful effects of the innovation. The artifact demonstrates a high level of creativity.	
	1	2	3	
	The summary identifies a potential beneficial or harmful effect of the innovation with no connection to the artifact.	The summary identifies a potential beneficial or harmful effect of the innovation with some connection to the artifact.	The summary, through detailed description, demonstrates a strong connection between the potential beneficial or harmful effect of the innovation and the artifact.	
	1	2	3	
References	There are at least two references, but the references contain many errors, omissions, or are of questionable reliability and timeliness.	There are at least two references, and those references contain required information but all are not reliable, accessible, and/or recent.	There are at least two references, and all references contain required information. All are reliable, easily accessible, and recent.	
	1	2	3	

CREATE

ASPECT	PERFORMANCE QUALITY			SCORE
Collaborative Program	A simple program demonstrates limited use of the programming elements.	An understandable program demonstrates competent use of the programming elements.	A complex program demonstrates strategic, creative use of the programming elements.	
	1	2	3	
	Little or no evidence of the use of mathematical and logical concepts exists, or there is inappropriate use of abstractions and algorithms.	There is some evidence of the use of mathematical and logical concepts or appropriate use of abstractions and algorithms.	There is evidence of the use of mathematical and logical concepts and appropriate use of abstractions and algorithms.	
	1	2	3	
	The source code is unclear, incorrect, or incomplete.	The source code is mostly correct, logical, and readable.	The source code is correct, logical, and easily readable.	
	1	2	3	
	The video makes a weak connection between the program's purpose and its functionality.	The video makes a moderate connection between the program's purpose and its functionality.	The video makes a clear, strong connection between the program's purpose and its functionality.	
	The response exhibits a lack of focus and a confused description of the program's purpose.	The response articulates the purpose of the program and its connection to the area of focus.	The response effectively articulates the purpose of the program and its connection to the area of focus.	
	1	2	3	
	The programming language is misidentified.	The programming language is mostly identified.	The programming language is clearly and correctly identified.	
	1	2	3	

Collaborative Reflection	The explanation of how the selected code illustrates abstraction is incorrect or incomplete.	The explanation of how the selected code illustrates abstraction is mostly complete.	The explanation of how the selected code illustrates abstraction is well-supported by details.
	1	2	3
	The response refers to the algorithm but excludes an explanation of the purpose of the algorithm.	The response includes an explanation of the purpose of the algorithm, but the explanation lacks detail.	The response clearly describes the purpose of the chosen algorithm and effectively explains the purpose of the algorithm.
	1	2	3
	The response generally describes the development of the program but omits many important steps.	The response describes the important developmental steps of the program, but it includes little or no information about how problems were addressed.	The response describes the important developmental steps of the program, including details that enable the reader to fully understand the process involved in its creation.
1	2	3	
Individual Program	A simple program demonstrates limited use of the programming elements.	An understandable program demonstrates competent use of the programming elements.	A complex program demonstrates strategic, creative use of the programming elements.
	1	2	3
	Little or no evidence of the use of mathematical and logical concepts exists, or there is inappropriate use of abstractions and algorithms.	There is some evidence of the use of mathematical and logical concepts or appropriate use of abstractions and algorithms.	There is evidence of the use of mathematical and logical concepts and appropriate use of abstractions and algorithms.
	1	2	3
	The source code is unclear, incorrect, or incomplete.	The source code is mostly correct, logical, and readable.	The source code is correct, logical, and easily readable.
	1	2	3
The video makes a weak connection between the program's purpose and its functionality.	The video makes a moderate connection between the program's purpose and its functionality.	The video makes a clear, strong connection between the program's purpose and its functionality.	
1	2	3	

Individual Reflection	The response exhibits a lack of focus and a confused description of the program's purpose.	The response articulates the purpose of the program and its connection to the area of focus.	The response effectively articulates the purpose of the program and its connection to the area of focus.	
	1	2	3	
	The programming language is misidentified.	The programming language is mostly identified.	The programming language is clearly and correctly identified.	
	1	2	3	
	The reflection indicates that the work of the partners is primarily independent, with each contributing separate portions of an artifact.	The reflection demonstrates a balance between partners in coordinating the workload to create an artifact.	The reflection demonstrates a high level of cooperation and coordination between partners in sharing the workload to create an artifact.	
	1	2	3	
	The response demonstrates little or no exchange of feedback between partners.	The response explains that partners shared feedback. However, little attention is given either to identifying the most significant feedback that was provided or to how work was reviewed and revised.	The response describes effective sharing of significant feedback between partners, including details about how partners questioned each other and reviewed and revised their work.	
1	2	3		