

Criterion A - Problem Specification

Recommended word count: 300 words

In this document students will attempt to describe the problem and why a computational solution is appropriate.

They will state a set of measurable solution requirements/success criteria. These criteria will be addressed in Criterion D - Development and Criterion E - Evaluation.

For example, if you decide to make a game you will attempt to justify why a computational solution is appropriate:

Weak justification	I chose to make an educational game because I enjoy programming games.
Strong justification	The project is situated within the domain of educational gaming. A computational solution is appropriate because algorithms can dynamically generate questions, track player performance, store progress data, and adapt difficulty levels based on previous responses. These capabilities would be difficult to implement using non-computational methods.

Success criteria/requirements can be presented as a list eg:

Success Criteria / Program Requirements

ID	Success Criteria/Requirements
SC1	The user will login to the system with a username and password (or create an account)
SC2	The "instructions" button will load a page explaining how to play the game
SC3	The "play" button will load 10 questions from a text file into the program
SC4	<i>When answering questions, only "A", "B", "C", "D" will be accepted - other inputs will be rejected</i>
SC5	When answering a question correctly, the player will earn a point and be displayed as a score on the screen
SC6	If the player is on a run of 5 or more consecutive correct answers, the level of difficulty increases.

SC7	When a round of 10 questions is completed, the player will be asked if (s)he wants to continue to the next round. Selecting “no” will end the game; selecting “yes” will allow the player to continue
SC8	When the player plays the game again, different (random) questions will be loaded into the program
SC9	The player’s name and score will be added to a leaderboard showing the top 10 scores

Anywhere between 8 and 15 success criteria would be appropriate.

Your video must demonstrate the success criteria (including your attempts to break the system) and you only have 5 minutes maximum.