

# Computer Science MQS21QJ

## PROJECT 2 – FALL 2012

### Scratch Animation and Game

Your task for this project is to create a Scratch game. You are welcome to extend the game we have been working on or create a new one of your choosing.

The requirements of the project are as follows:

- 1) You must develop a fully operational animated game.
- 2) You must write out the pseudocode algorithm for your game, in English, in a text file titled "Project 2 Pseudocode" (doc/pdf/txt/rtf and so forth OK).
- 3) You must incorporate the following into your program:
  - a. At least two sprites with costume changes.
  - b. Key-stroke event handling for moving the sprites.
  - c. Variables (at least 4).
  - d. Loops.
  - e. Conditional blocks.
  - f. Lists (at least 2).
- 4) You must include the following comments within your Scratch project:
  - a. Header comments at the beginning of each of your created methods (sprite actions).
  - b. Comments that sufficiently explain what the code does.
  - c. Project notes that describe the game in moderate detail.

The pseudocode is due no later than **THURSDAY, OCTOBER 11<sup>TH</sup>**, at **11:59PM**.

The code is due no later than **WEDNESDAY, OCTOBER 17<sup>TH</sup>**, at **11:59PM**.

To submit your project, your **pseudocode and Scratch file** must be inside of your Project 2 Dropbox folder within your shared Final Projects folder (**MQS21 Final Projects**).

*Do not include any other files here – only the ones you want graded.*

If you have any questions about this project, do not hesitate to e-mail me or to make an appointment to see me during any one of the tutoring periods.

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## PROJECT 2 RUBRIC – FALL 2012

### Scratch Animation and Game

The following rubric will be utilized in grading Project #2. 28 total points will be available for this project.

<b>Pseudo Code (max 6 points)</b>	6 points	Pseudo Code describes each step of the animation, is organized, and easy to read.
	4 points	Pseudo Code is either missing description, unorganized, or not easy to read.
	2 points	Pseudo Code describes each step of the animation, is organized, or is easy to read.
	0 points	Pseudo Code is missing description and is unorganized and not easy to read.
<b>Methods (max 6 points)</b>	6 points	<i>Efficient</i> programmer-created methods are present and each method is utilized at least once in the animation.
	4 points	Programmer-created methods are present and either each method is utilized at least once in the animation.
	2 points	Programmer-created methods are present, but the methods are not used in the animation.
	0 points	Programmer-created methods are not present.
<b>Key-stroke Events (max 2 points)</b>	2 points	Key-stroke events are used to move the sprite(s) around the game space.
	0 points	No key-stroke control is available for any sprites.
<b>Variables (max 2 points)</b>	2 points	Variables exists that are relevant to the animation and are used somewhere within the code for the animation.
	0 points	A variable does not exist.
<b>Loop (max 2 points)</b>	2 points	A loop exists that is relevant to the animation.
	0 points	A loop does not exist.
<b>Conditional (max 2 points)</b>	2 points	A conditional block exists that is relevant to the animation.
	0 points	A conditional block does not exist.
<b>Lists (max 2 points)</b>	2 points	Suitable lists are included and accessed appropriately.
	0 points	No lists are implemented or used.
<b>Comments (max 6 points)</b>	6 points	Each programmer-created method has a header comment at the start of the method, comments that explain what the code does exist throughout the code for the animation, and comments exist that draw attention to all project requirements.
	4 points	Either each programmer-created method does not have a header comment at the start of the method, comments that explain what the code do not exist throughout the code for the animation, or comments do not exist that draw attention to all project requirements.
	2 point	Each programmer-created method has a header comment at the start of the method, comments that explain what the code does exist throughout the code for the animation, or comments exist that draw attention to all project requirements.
	0 points	Comments do not exist in the code.

Note that one point will be deducted for each day that your project is late.