

CodeX Remix Task

MISSION 9: Game Spinner	PROJECT: Game Spinner v.2	# HOURS: 1-2
PROJECT GOALS: Students will apply their knowledge of lists and random numbers to build a problem-solving application.	EXTRA PROJECT MATERIALS: <ul style="list-style-type: none"> • none 	VOCABULARY: <ul style="list-style-type: none"> • Index • Loop • Logic operators
LEARNING TARGETS: <ul style="list-style-type: none"> • I can apply properties and uses of an index to simplify my code. • I can use variables to make my code more efficient. • I can use the CodeX library to improve my simulation. 		
SUCCESS CRITERIA: <ul style="list-style-type: none"> <input type="checkbox"/> Program the CodeX to generate to spin clockwise or counterclockwise depending on which button is pressed. <input type="checkbox"/> Program the CodeX to beep each time the Arrow moves. 		

RUBRIC:

CSTA Standard	Basic (3)	Proficient (4)	Mastered (5)
Documentation			
2-AP-10 Use flowcharts and/or pseudocode to address complex problems as algorithms.	Incomplete flowcharts.	Flowcharts provided for each process.	Flowcharts provided for each process. Evidence of revisions and improvements made.
Algorithms and Programming			
2-AP-11 Create clearly named variables that represent different data types and perform operations on their values.	No variables; variables not named appropriately.	Variables used and named correctly in most instances.	Variables are used and named correctly in each process as needed.
2-AP-13 Decompose problems and subproblems into parts to facilitate the design, implementation, and review of programs.	Code is not organized or readable. No comments.	Code is sometimes organized into problems and subproblems in order to make it organized and readable. Comments used inconsistently.	Code is decomposed into problems and subproblems, making it easy to follow and read. Comments are clear and easy to understand.
2-AP-16 Incorporate existing code, media, and libraries into original programs, and give attribution.	No incorporation of existing code.	Some incorporation of existing code; not attributed properly.	Existing code is incorporated and attributed properly.
3A-AP-14 Use lists to simplify solutions, generalizing computational problems instead of repeatedly using simple variables.	No use of lists where appropriate.	List used somewhat correctly.	Lists are used to make code more efficient.
Debugging			
2-CS-03 Systematically identify and fix problems with computing devices and their components.	Code bugs not identified; little or no documentation of fixes.	Code bugs mostly identified and fixed; adequate documentation of fixes.	Code bugs identified and fixed; extensive documentation of fixes.