St George's Central CE Primary School and Nursery

Computing Y5/6 – What is the programme?

What will we learn:

- To represent a program design and algorithm.
- To create a program that simulates a physical system using decomposition.
- To explore string and text variable types so that the most appropriate can be used in programs.

- To use the Launch command in 2Code Gorilla
- To program a playable game with timers and score pad.

| Prior Learning	Future Learning in KS3	Vocabulary	
In Y3/4 I learnt: • How to design algorithms using flowcharts. • How to design an algorithm that represents a physical system and code this representation. • How to use selection in coding with the 'if' command. • How to understand and use variables in 2Code. • A deeper understanding of the difference between timers and repeat commands	**Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems** **Understand several key algorithms that reflect computational thinking** **To write code in binary** **Understand how instructions are stored and executed within a computer system**	Action	Types of commands, which are run on an object. They could be used to move an object or change a property.
		Abstraction	A way of de-cluttering and removing unnecessary details to get a program functioning.
		Algorithm	A precise step by step set of instructions used to solve a problem or achieve an objective.
		Button	An object that can trigger an event in response to being clicked.
		Called	A line of code that triggers a function to be executed.
		Coordinates	Numbers which determine the position of a point, shape or object in a particular space.
		Decomposition	A method of breaking down a task into manageable components. This makes coding easier as the components can then be coded separately and then brought back together in the program.
		Event	Something that causes a block of code to be run.
		Function	A block or sequence of code that you can access when you need it, so you don't have to rewrite the code repeatedly. Instead, you simply 'call' the function each time you want it.

Resources that are going to help me achieve my learning.
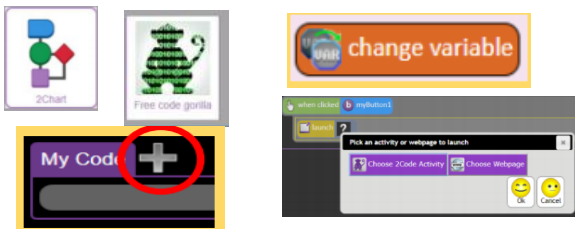
Fun Facts:
- Spacecraft often run using old-fashioned computer systems because engineers are confident their programs do the job well and making a new one is risky and expensive. NASA's reusable spacecraft, the Space Shuttle, went into space using a computer designed in the 1970s. It had less code than most of today's mobile phones!
- In 2009, Swedish programmer Markus "Notch" Persson released the first version of *Minecraft*, a building game he'd made. By 2014, *Minecraft* had around 100 million registered users and was sold to Microsoft for $2.5 billion.

'Never settle for less than your best'

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