Unit 4.1: Coding

- **Action**: The way that objects change when programmed to do so. For example, *move*.
- **Alert**: This is a type of output. It shows a pop up of text on the screen.
- **Algorithm**: a precise, step-by-step set of instructions used to solve a problem or achieve an objective.
- **Background**: In 2Code the background is an image in the design that does not change.
- **Button**: A type of object that responds to being clicked on.
- **Code blocks**: A way to write code using blocks which each have an object or an action.
- **Command**: A single instruction in 2Code.
- **Co-ordinates:** Numbers which determine the position of a point, shape or object in a particular space.
- **Debug\ Debugging:** Fixing code that has errors so that the code will run the way it was designed to.
- **Design:** In coding, this is a plan for the program showing the visual look of the user interface (the screen) with the objects. The algorithm can be represented as part of the design, showing actions and events.
- **Event**: An occurrence that causes a block of code to be run. The event could be the result of user action such as the user pressing a key (**when Key**) or clicking or swiping the screen (**when Clicked, when Swiped**). In 2Code, the event commands are used to create blocks of code that are run when events happen.
- **Execute**: This is the proper word for when you run the code. We say, 'the program (or code) *executes*.'
- **Flowchart**: A diagram that uses specifically shaped, labelled boxes and arrows to represent an algorithm as a diagram.
- **'If' statement:** A computer uses an IF statement to decide which bit of code to run. IF a condition is true, then the commands inside the block will be run.
- **'If/Else' statement:** A conditional command. This tests a statement. If the condition is true, then the commands inside the 'if block' will be run. If the condition is not met, then the commands inside the 'else block' are run.
- **Input:** Information going into the computer. This could be the user moving or clicking the mouse, or the user entering characters on the keyboard. On tablets there are other forms such as finger swipes, touch gestures and tilting the device.

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- **Nest**: When coding commands are put inside other commands. These commands only run when the outer command runs.
- **Object**: Items in a program that can be given instructions to move or change in some way (action). In 2Code Gibbon, these include character, turtle, button, vehicle, animal, food, shape, number, input and label.
- **Prompt**: A question or request asked in coding to obtain information from the user in order to select which code to run.
- **Implement**: When a design is turned into a program using coding.
- **Predict**: Use your understanding of a situation to say what will happen in the future or will be a consequence of something.
- **Repeat:** This **command** can be used to make a **block of commands run** a set number of times or forever.
- **Repeat until:** In 2Code this command will repeat a block of commands until a condition is met.
- **Run:** Clicking the Play button to make the computer respond to the code.
- **Properties**: These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.
- **Selection**: Selection is a decision command. When selection is used, a program will choose which bit of code to run depending on a condition.
- **Sequence**: This is when a computer program runs commands in order.
- **Timer:** In coding, use a timer command to run a block of commands after a timed delay or at regular intervals.
- **Variable**: A named area in computer memory. A variable has a **name** and a **value**. The program can change this variable value. Variables are used in programming to keep track of things that can change while a program is running.

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Unit 4.2:
Online Safety

- **AdFly:** An online advertising marketplace that allows publishers to monetize their website traffic by placing advertisements on their site.
- **Attachment:** A file, which could be a piece of work or a picture, that is sent with an email.
- **Citation:** Making reference to the original source of a piece of information quotation or image.
- **Collaborate:** To work jointly on an activity or project.
- **Collaborative database:** A collaborative database allows more than one person to access and input data on the database.
- **Cookies:** A small amount of data generated by a website and saved by a web browser. Its purpose is to remember information about the user.
- **Copyright:** When the rights to something belong to a specific person.
- **Data analysis:** The process of interpreting and understanding data that has been collected and organised.
- **Digital footprint:** The information about a person that exists on the Internet as a result of their online activity.
- **Malware:** Software that is specifically designed to disrupt, damage, or gain unauthorized access to a computer system.
- **Phishing:** Practice of sending email pretending to be from reputable companies in order to persuade individuals to reveal personal information, such as passwords and credit cards numbers.
- **Plagiarism:** Taking someone else's work or ideas and passing them off as one's own.
- **Ransomware:** A type of malicious software designed to block access to a computer system until a sum of money is paid.
- **Report:** If content or contact online worries someone, they should report it to a trusted adult such as a teacher or parent.
- **SMART rules:** A set of rules based around the word SMART designed to help you stay safe when online. SMART represents the words Safe, Meet, Accept, Reliable, Tell.
- **Software:** The programs and other operating information used by a computer.
- **Spam:** Messages sent over the Internet, typically to many users, for the purposes of advertising, phishing or spreading malware.

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- **Virus:** A piece of code which can copy itself and typically has a damaging effect on the device, such as corrupting the system or destroying data.
- **Watermark:** Watermarks are used mainly on images or videos to show who the content belongs to.

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Unit 4.3:
Spreadsheets

- **Average:** A number expressing the typical value in a set of data. Also known as the mean. It is calculated by dividing the sum of the values in the set by their number.
- **Budget:** The amount of money available to spend on a project.
- **Calculations:** The process or result of adding, subtracting, multiplying, or dividing or a combination of these operations.
- **Chart:** A diagram that represents data. Charts include graphs and other diagrams such as pie charts or flowcharts.
- **Column:** Boxes running vertically in a spreadsheet.
- **Data:** A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
- **Decimal place:** The position of a digit to the right of a decimal point. In 2Calculate, the number of decimal places to be displayed can be chosen.
- **Equals to tool:** This shows if an answer to a calculation is correct or not.
- **Format Cell:** The way that data is displayed in a cell. For example, using units such as £ or $.
- **Formula:** A group of letters, numbers, or other symbols which represents a scientific or mathematical rule. The plural of formula is **formulae**.
- **Formula Wizard:** The formula wizard helps a user create formulas which perform calculations on selected cells. For example, adding, multiplying, average, total.
- **Line graph:** A line graph is used to display information which can change over time. For example, temperature at different times of the day.
- **Percentage:** '*per*' '*cent*' means number of parts per hundred.
- **Place value:** This is the value of each digit within a number. For example 354, the 3 = 3 hundreds, the 5 = 5 tens and the 3 = 3 ones.
- **Random number tool:** This tool, when clicked, will generate a random number.
- **Resize:** This is used to reduce or increase the size of a sheet in 2Calculate.

- **Row:** Boxes running horizontally in a spreadsheet.
- **Set image:** Images in 2Calculate can be given a value. For example, an apple 1 a pear 2 etc.

- **Spinner tool:** This tool changes a number to the right of it by one each time an arrow is pressed.
- **Timer:** This tool counts in seconds. If a number is placed to the right of it, it will increase it by 1 each second.
- **Totals:** This tool will total anything in the cells below, next to or diagonal to it.

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Unit 4.4:
Writing for Different Audiences

- **Campaign:** An organised course of action to achieve a goal.
- **Format:** The way in which something is arranged or set out.
- **Font:** A set of type which shows words and numbers in a particular style and size.
- **Genre:** The style or category type of a piece of art, music or writing.
- **Opinion:** A view or judgment someone forms about something, not always based on fact.
- **Reporter:** A person who reports news or conducts interviews for the press or broadcasting media.
- **Viewpoint:** The way someone sees or thinks about something.

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Unit 4.5:
Logo

- **Debugging:** The process of identifying and removing errors from computer hardware or software.
- **Grid**: The template around which the 2Logo turtle moves.
- **Logo:** A text-based coding language used to control an on-screen turtle to create mathematical patterns.
- **Logo Commands (e.g. FD, BK, RT, LT)** : A list of commands inputted into 2Logo to move the turtle around the screen.
- **Multi Line Mode:** Type several lines of commands in the text area.
- **Pen Down:** Lowers the screen pen so the 2Logo turtle draws a line on the screen.
- **Pen Up:** Raises the screen pen so the 2Logo turtle doesn't draw on screen.
- **Prediction**: When you say what is going to happen when you run the instructions.
- **Procedure:** Pieces of Logo text with a procedure name that can be run by calling them by name. Saves time if you want to print to screen lots of the same shape.
- **Repeat:** A set of instructions that is run a specified number of times.
- **Run Speed**: The speed at which the 2Logo turtle moves around the screen.
- **SETPC:** Set pen colour to a given colour.
- **SETPS:** Set the thickness of the pen's line.

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Unit 4.6: Animation

- **Animation:** The process of adding movement to still objects.
- **FPS (Frame Per Second):** The number of frames played per second.
- **Frame:** A single image in an animation.
- **Onion skinning:** A process where the shadow image of the previous frame is present to help you line up the objects of the animation correctly.
- **Pause:** To temporarily stop the animation.
- **Stop motion:** A technique whereby the camera is repeatedly stopped and started, for example to give animated figures the impression of movement.

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Unit 4.7:
Effective Searching

- **Balanced view:** Presenting opposing points of view fairly and without bias.
- **Easter eggs:** An unexpected or undocumented feature in a piece of computer software or on a DVD, included as a joke or a bonus.
- **Internet:** A global computer network providing a variety of information and communication facilities.
- **Key words:** A word or a group of words an Internet user uses to perform a search in a search engine.
- **Reliability:** The degree to which the result of something can be depended on to be accurate.
- **Results page:** Where the answers to a search are displayed.
- **Search engine:** A program that searches for and identifies items in a database. Used especially for finding sites on the World Wide Web.

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Unit 4.8:
Hardware Investigators

- **Components:** Parts inside the computer casing.
- **CPU:** The 'brains' of the computer, where all the calculations take place.
- **Graphics Card:** Also known as a video card and used for displaying images.
- **Hard Drive:** Where the computer stores all your documents, pictures, games and videos.
- **Hardware:** The physical parts of a computer or device.
- **Input:** How information enters the computer.
- **Motherboard:** Main printed circuit board of the computer.
- **Network Card:** Used to connect the computer to a network such as the Internet.
- **Output:** Where information leaves the system.
- **Peripherals:** Parts that are attached to the computer case.
- **RAM:** Allows programs to store information to help the computer run quickly.
- **Software**: The programs that run on the computer.

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Unit 4.9:
Making Music

- **BPM:** Beats per Minute. Changing the BPM changes the speed of the music.

- **Dynamics:** How loud or quiet a sound is.

- **Harmonious:** Notes which sound tuneful and pleasant together.

- **Melody:** A sequence of notes which make up a tune.

- **Pitch:** How high or low a sound is.

- **Pulse:** The steady beat of a piece of music.

- **Rhythm:** A pattern of long and short sounds and silences.

- **Tempo:** How slow or fast a piece of music is.

- **Texture:** The different sounds you can hear in a piece of music.

- **Synths:** Short for synthesizer. Electronic musical instrument sounds.

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