

## The English Martyrs Catholic School and Sixth Form College

ICT Year 8	Module 1	Module 2	Module 3
<u>Topic Theme and</u> <u>Intent</u>	Gain an understanding of technologies used for <b>online communication</b> with a focus on <b>legal</b> issues. Develop <b>animation</b> skills using traditional and digital methods and design a product for a very specific purpose and audience.	Know the way in which the pioneers of Computer Science influences <b>problem solving</b> and <b>logical thinking</b> by using Boolean logic, truth tables and sorting algorithms. Produce a <b>game</b> in Kodu to further develop programming skills.	Develop an understanding of the main aspects of <b>graphic design</b> including moral and ethical issues. Build a mock-up of an <b>interactive app</b> including a multimedia assets and interactivity between the user and the app.
<u>Knowledge</u>	<ul> <li>Enhanced techniques in how to use technology safely, respectfully, responsibly and securely.</li> <li>Using multiple applications for a creative project designing for a given audience focused on design.</li> </ul>	<ul> <li>Solve computational problems using a non-textual language.</li> <li>Simple Boolean logic and the storing and execution of instructions.</li> <li>Create, re-use and revise digital artefacts for a given audience.</li> </ul>	<ul> <li>Using multiple applications to create creative projects, using assets and designing for an audience.</li> <li>Hardware and software components used to make up computer systems and communication.</li> </ul>
<u>Skills</u>	Recognise <b>inappropriate content</b> and protect legal rights when sourcing assets online. Create a project, utilising skills across <b>multiple software applications</b> to design for a known audience.	Modular game design in <b>Kodu</b> to solve computational problems. Representation of numbers in <b>binary</b> and using simple logic to develop efficient logic circuits, truth tables and use sorting algorithms.	Collecting appropriate <b>assets</b> for multiple <b>creative projects</b> with attention on design and usability. Understanding of <b>interactivity</b> and how hardware and software components work.
<u>Literacy Links</u>	Reading – Analyse content of a website and determine trustworthiness.  Writing – Structure advanced searches using syntax tools & describe legislation.  Oracy – Class discussion on key topics and peer discussion on legal issues.	Reading – Analyse problems to identify solutions which are structured logically.  Writing – Structuring code against the syntax of the language.  Oracy – Class debate on the positive and negative impact of video games.	Reading – Research and identify client requirements by analysing text.  Writing – Respond to the needs of a client and justify design decisions made.  Oracy – Teacher and peer review of work focused on product improvements.
Essential Vocabulary	Copyright, Frame, Keyframe, Onion Skin, Plagiarism, Search Engine, Tween	Binary, Cipher, CPU, Decipher, Denary, Logic Gates, Truth Table, Visualisation	Bitmap, Colour Scheme, Hierarchy, Interactivity, Navigation, Panel, Vector

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