

Year 8 Computer Science Learning Outcomes

Unit 1: Developing for the Web

- Describe what HTML is
- Use HTML to structure static web pages
- Modify HTML tags using inline styling to improve the appearance of web pages
- Display images within a web page
- Apply HTML tags to construct a web page structure from a provided design
- Describe what CSS is
- Use CSS to style static web pages
- Assess the benefits of using CSS to style pages instead of in-line formatting
- Describe what a search engine is
- Explain how search engines ‘crawl’ through the World Wide Web and how they select and rank results
- Analyse how search engines select and rank results when searches are made
- Use search technologies effectively
- Discuss the impact of search technologies and the issues that arise by the way they function and the way they are used
- Create hyperlinks to allow users to navigate between multiple web pages
- Implement navigation to complete a functioning website
- Complete summative assessment

Unit 2: Introduction to Python Programming

- Describe what algorithms and programs are and how they differ
- Recall that a program written in a programming language needs to be translated in order to be executed by a machine
- Write simple Python programs that display messages, assign values to variables, and receive keyboard input
- Locate and correct common syntax errors
- Describe the semantics of assignment statements
- Use simple arithmetic expressions in assignment statements to calculate values
- Receive input from the keyboard and convert it to a numerical value
- Use relational operators to form logical expressions
- Use binary selection (if, else statements) to control the flow of program execution
- Generate and use random integers
- Use multi-branch selection (if, elif, else statements) to control the flow of program execution
- Describe how iteration (while statements) controls the flow of program execution
- Use iteration (while loops) to control the flow of program execution
- Use variables as counters in iterative programs

- Combine iteration and selection to control the flow of program execution
- Use Boolean variables as flags