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| Software Development Revision – Use the table provided to create notes | |
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| Software development process | |
| Explanation of the iterative nature of the software development process |  |
| Description of the purposes of the software specification, and its status as a legal contract |  |
| Explanation of the importance of each stage of the development process |  |
| * analysis |  |
| * design |  |
| * implementation |  |
| * testing |  |
| * documentation |  |
| * evaluation |  |
| * maintenance |  |
| Identification of the personnel at each stage and brief description of their roles |  |
| * client |  |
| * systems analyst |  |
| * project manager |  |
| * programmer |  |
| * independent test group |  |
| Description and exemplification of pseudocode and one graphical design notation (structure diagram or other suitable) including data flow |  |
| Description and exemplification of top-down design and stepwise refinement |  |
| Explanation of the need for systematic and comprehensive testing |  |
| Explanation of the need for documentation at each stage |  |
| Evaluation of software in terms of |  |
| * robustness |  |
| * reliability |  |
| * portability |  |
| * efficiency |  |
| * maintainability |  |
| Description and exemplification of corrective, adaptive and perfective maintenance |  |
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| Software development languages and environments | |
| Description and comparison of |  |
| * procedural |  |
| * declarative |  |
| * event-driven languages |  |
| Comparison of the functions, uses and efficiency of |  |
| * compilers |  |
| * interpreters |  |
| Description of the features and uses of scripting language (including creating and editing a macro) |  |
| Explanation of the need for and benefits of scripting languages |  |
| Description of the use of module libraries |  |
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| High level programming language constructs | |
| Description and exemplification of the following constructs in pseudocode and an appropriate high level language: |  |
| * string operations (concatenation and substrings) |  |
| * formatting of I/O |  |
| * CASE (or equivalent multiple outcome selection) |  |
| Description and exemplification of |  |
| * real |  |
| * integer |  |
| * boolean variables |  |
| * 1-D arrays |  |
| Description and exemplification of |  |
| * procedures/subroutines/subprograms |  |
| * user-defined functions |  |
| * modularity |  |
| * parameter passing (in, out, in/out) |  |
| * call by reference/value |  |
| * local and global variables |  |
| * scope |  |
|  |  |
| Standard algorithms | |
| Description and exemplification of the following standard algorithms in pseudocode and an appropriate high level language: |  |
| * linear search |  |
| * counting occurrences |  |
| * finding min |  |
| * finding max |  |