**Section: Programming (Advocate: Manish Gadhvi)**

**Provide a definition of what an algorithm is and outline the process in building an application.**

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| <https://github.com/SDearing/Glossary-of-Tech-Terms#programming-terms>  <https://github.com/SDearing/Glossary-of-Tech-Terms#the-process-of-building-an-application> |
| In the first link there is a definition of what an algorithm is  In the second link the process of building an application is outlined. |

**Give explanations of what procedural, object orientated and event driven paradigms are; their characteristics and the relationship between them.**

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| <https://github.com/SDearing/Glossary-of-Tech-Terms>  <https://github.com/SDearing/Glossary-of-Tech-Terms/blob/master/README.md#the-relationship-between-coding-paradigms-object-oriented-procedural-event-driven> |
| In this document all paradigms are described and differences between them have been described. |

**Write a program that implements an algorithm using an IDE.**

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| <https://github.com/SDearing/Project-02#flowchart>  <https://github.com/SDearing/Project-02#ide>  <https://github.com/SDearing/Project-02#finished-code> |
| This project was completed by designing an algorithm (flowchart) then implementing that algorithm into a IDE to make my completed coded solution. |

**Explain the debugging process and explain the debugging facilities available in the IDE.**

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| <https://github.com/SDearing/Glossary-of-Tech-Terms#the-debugging-process>  <https://github.com/SDearing/Glossary-of-Tech-Terms#the-debugging-facilities-available-in-the-ide> |
| The first link leads to an explanation of the debugging process  The second link leads to an explanation of the debugging facilities available in the IDE  Step over |

**Outline the coding standard you have used in your code.**

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| <https://github.com/SDearing/Project-03#coding-standards>  <https://github.com/SDearing/Project-02#coding-standards> |
| In both projects I have outlined the coding standards I use, in the **development plan** section. |

**Determine the steps taken from writing code to execution.**

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| <https://github.com/SDearing/Glossary-of-Tech-Terms#the-steps-from-writing-code-to-execution> |
| Under the header **The Steps from writing code to execution** I go through the stages needed for written code to be executed. |

**Analyse the common features that a developer has access to in an IDE.**

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**Use the IDE to manage the development process of the program.**

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| <https://github.com/SDearing/Project-02#first-milestone> |
| In both this project an IDE was used to complete the programming stage (screenshots in link projects) |

**Evaluate how the debugging process can be used to help develop more secure, robust applications.**

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| TBD |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Examine the implementation of an algorithm in a suitable language. Evaluate the relationship between the written algorithm and the code variant.**

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| <https://github.com/SDearing/Project-02> |
| In this project I have compared my flowchart with my actual finished code and noted down the differences and similarities and why these changes occurred. |

**Critically evaluate the source code of an application which implements the programming paradigms, in terms of the code structure and characteristics.**

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| TBD |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Evaluate the use of an IDE for development of applications contrasted with not using an IDE.**

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| TBD |
| Please provide a short (between 3 to 8 well considered, fully proofread and reflected sentences) explanation that justifies why the evidence/links you have provided is suitable as evidence of this requirement |

**Critically evaluate why a coding standard is necessary in a team as well as for the individual.**

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| <https://github.com/SDearing/Why-a-Coding-Standard-is-Necessary/blob/master/README.md> |
| In this documentation there is an article critically evaluating why a coding standard is necessary. |