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

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

|  |
| --- |
| <https://github.com/Oliver-Slape/Glossary-of-Tech-Terms/blob/master/README.md#-algorithm->  <https://github.com/Oliver-Slape/Wiki#from-code-to-execution> |
| * When the first link is opened, it will display the Glossary of tech Terms, which provides a definition of an algorithm. The second link shows the from Code to Execution section in my Wiki. This demonstrates the aspects to building an application broken down into sections of key importance in order. |

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

|  |
| --- |
| <https://github.com/Oliver-Slape/Glossary-of-Tech-Terms/blob/master/README.md#--2>  <https://github.com/Oliver-Slape/Glossary-of-Tech-Terms/blob/master/README.md#-14> |
| * The first link shows the definition and characteristics of each paradigm. The second link explains the relationship between the paradigms. |

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

|  |
| --- |
| <https://github.com/Oliver-Slape/Project-002#-7>  <https://github.com/Oliver-Slape/Project-002/blob/master/Code.txt>  <https://github.com/Oliver-Slape/Project-002/blob/master/README.md#-29> |
| * The first link shows a flowchart, which is a graphical representation of the algorithm. The third link is an image of the IDE used and the algorithm translated into code. |

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

|  |
| --- |
| <https://github.com/Oliver-Slape/Wiki/blob/master/README.md#debugging>  <https://github.com/Oliver-Slape/Project-003#---3> |
| * The first link explains the debugging facilities found in different IDEs. The second link explains the debugging process. |

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

|  |
| --- |
| <https://github.com/Oliver-Slape/Project-003/blob/master/README.md#---4> |
| * The link demonstrates the coding standard I have used and explains its functionality. |

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

|  |
| --- |
| <https://github.com/Oliver-Slape/Wiki/blob/master/README.md#from-code-to-execution> |
|  |

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

|  |
| --- |
| <https://github.com/Oliver-Slape/Wiki/blob/master/README.md#intergrated-development-environmnet-ide> |
|  |

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

|  |
| --- |
| <https://github.com/Oliver-Slape/Project-003/blob/master/README.md#ide>  <https://github.com/Oliver-Slape/Project-002#-process-of-implememntation-> |
|  |

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

|  |
| --- |
| <https://github.com/Oliver-Slape/Wiki/blob/master/README.md#debugging> |
|  |

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

|  |
| --- |
| <https://github.com/Oliver-Slape/Project-002#-process-of-implememntation->  <https://github.com/Oliver-Slape/Project-002/blob/master/README.md#-relationship-between-algorithm-and-code-> |
|  |

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

|  |
| --- |
| <https://github.com/Oliver-Slape/Project-002/blob/master/README.md#-33>  <https://github.com/Oliver-Slape/Project-002#-34>  <https://github.com/Oliver-Slape/Project-003#---4>  <https://github.com/Oliver-Slape/Project-003#-evaluation-> |
|  |

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

|  |
| --- |
| <https://github.com/Oliver-Slape/Wiki/blob/master/README.md#intergrated-development-environmnet-ide>  <https://github.com/Oliver-Slape/Wiki/blob/master/README.md#text-editor>  <https://github.com/Oliver-Slape/Wiki/blob/master/README.md#text-editor-vs-ide> |
|  |

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

|  |
| --- |
| <https://github.com/Oliver-Slape/Wiki/blob/master/README.md#coding-standards-in-teams> |
|  |