|  |  |
| --- | --- |
| **HN Computing Criteria Mapping Document – Semester A 2017-2018** | |
| **Student Name:** | Williams, Joe |

**Software Development Lifecycles (Advocate: Thiago Viana)**

**Describe two iterative and two sequential software lifecycle models.**

|  |
| --- |
| <https://github.com/HORNETJOE/lifecycle-models/blob/master/README.md> |
| The link above will direct to the lifecycle models which contains explanations on what the different lifecycle models each with an explanation on what it is with examples. |

**Explain how risk is managed in the Spiral lifecycle model.**

|  |
| --- |
| <https://github.com/HORNETJOE/Spiral-lifecycle-model-and-feasibility-report> |
| 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 |

**Explain the purpose of a feasibility report.**

|  |
| --- |
| <https://github.com/HORNETJOE/Spiral-lifecycle-model-and-feasibility-report> |
| 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 |

**Describe how technical solutions can be compared.**

|  |
| --- |
| <https://github.com/HORNETJOE/lifecycle-models> |
| 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 |

**Undertake a software investigation to meet a business need.**

|  |
| --- |
| <https://github.com/RebootGames/ZSL-The-Climate-Menace> |
| 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 |

**Use appropriate software analysis tools/techniques to carry out a software investigation and create supporting documentation.**

|  |
| --- |
| <https://github.com/RebootGames/ZSL-The-Climate-Menace> |
| 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 |

**Explain how user and software requirements have been addressed.**

|  |
| --- |
| <https://github.com/HORNETJOE/Project01>  <https://github.com/HORNETJOE/Project02>  <https://github.com/HORNETJOE/Project-3> |
| 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 |

**Describe, with an example, why a particular lifecycle model is selected for a development environment.**

|  |
| --- |
| <https://github.com/HORNETJOE/lifecycle-models> |
| 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 |

**Discuss the components of a feasibility report.**

|  |
| --- |
| <https://github.com/HORNETJOE/Spiral-lifecycle-model-and-feasibility-report> |
| 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 |

**Analyse how software requirements can be traced throughout the software lifecycle.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links |
| 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 |

**Discuss two approaches to improving software quality.**

|  |
| --- |
| <https://github.com/HORNETJOE/Capability-Maturity-Model-CMM-/blob/master/README.md> |
| 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 |

**Suggest two software behavioural specification methods and illustrate their use with an example.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links |
| 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 |

**Differentiate between a finite state machine (FSM) and an extended- FSM, providing an application for both.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links |
| 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 |

**Assess the merits of applying the Waterfall lifecycle model to a large software development project.**

|  |
| --- |
| <https://github.com/HORNETJOE/lifecycle-models> |
| 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 |

**Assess the impact of different feasibility criteria on a software investigation.**

|  |
| --- |
| <https://github.com/HORNETJOE/Spiral-lifecycle-model-and-feasibility-report> |
| 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 how the use of the function design paradigm in the software development lifecycle can improve software quality.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links |
| 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 |

**Present justifications of how data driven software can improve the reliability and effectiveness of software.**

|  |
| --- |
| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links |
| 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 |