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| **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.**

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| <https://github.com/HORNETJOE/lifecycle-models/blob/master/README.md#waterfall> |
| 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.**

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| <https://github.com/HORNETJOE/lifecycle-models/blob/master/README.md#spiral> |
| The link above will direct to the Spiral lifecycle model in the lifecycle model repository |

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

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| <https://github.com/HORNETJOE/Glossary-of-tech-terms/blob/master/README.md#feasibility-report> |
| The link above will direct to the glossary of tech terms which contains the definition of a feasibility report |

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

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| <https://github.com/HORNETJOE/Effectiveness-Analysis/blob/master/README.md#effectiveness-analysis> |
| The link above will direct to the lifecycle model repository which shows that different lifecycle models are compared through  advantages and disadvantages |

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

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| <https://github.com/HORNETJOE/ZSL-The-Climate-Menace> |
| The link above will direct to the front page for the ZSL project which shows that we work with a business and used specified  Software to meet their needs. |

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

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| <https://github.com/HORNETJOE/ZSL-The-Climate-Menace/blob/master/README.md#client-meetup> |
| The link above will direct to the front page of the ZSL which contains documentation that was record throughout the project. |

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

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| <https://github.com/HORNETJOE/Glossary-of-tech-terms#epics-stories-versions-and-sprints> |
| The links above will direct to the front page of the project 1 repository which shows that the requirements for that project where  Meet with the final version of the project. |

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

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| <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.**

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| <https://github.com/HORNETJOE/Glossary-of-tech-terms/blob/master/README.md#feasibility-report> |
| The link above will direct to the glossary of tech terms which contains the components of a feasibility report |

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

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| 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.**

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| <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.**

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

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

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| <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.**

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| <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.**

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| 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.**

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| 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 |