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

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

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| Link: <https://github.com/matthewsides/SDCL-Methodologies/blob/master/README.md> |
| The evidence is situated under the heading “SDLC Methodologies” in the README.md for the GitHub repository (SDLC Methodologies).  This evidence is applicable as it covers iterative and sequential software life cycle models, how each model works, advantages, disadvantages and examples of what software may benefit from each specific lifecycle. |

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

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| Link: <https://github.com/matthewsides/SDCL-Methodologies/edit/master/README.md> |
| The repository "SDCL-Methodologies" holds all the evidence relating to the above criteria and is applicable as it explains in brief how risk is managed in the spiral lifecycle model. |

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

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| Link: <https://github.com/matthewsides/Thiago-Viana-Tasks/blob/master/Feasibility-Reports.md> |
| The evidence is provided in the repository "Feasibility Reports", and is applicable as it defines feasibility reports, explains the components and the purpose which is in line with the criteria. |

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

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| Link: https://github.com/matthewsides/ZSL-Green-House-Menace/blob/master/README.md |
| This evidence can be found under the "Specification" heading and sub heading "IDE", delving into the IDE, used and the factors what lead to choosing said IDE as well as the decision to use the language that was applied during the ZSL project explaining all the factors that were and should be considered during the choice of IDE, Language, etc. This links to the criteria as it shows evidence of technical solutions being compared and also how they may be compared and what to (requirements). |

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

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| Link: <https://github.com/matthewsides/ZSL-Green-House-Menace> |
| This evidence is documented in the ZSL repository, as the project backlog details information as to when the client was met for the review of the project evidencing development, whilst documentation of meetings were also noted in the gant chart. Moreover the requirements or specifications can be seen under the subheading "specifications" as well as in the heading "project backlog" that details as to what the client is looking for as well as the conceptual design of the game. |

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

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| Link: https://github.com/matthewsides/ZSL-Green-House-Menace/blob/master/README.md |
| This is documented under the "specification" heading and sub heading "IDE" as it mentions the tools and techniques used to carry out a software investigation, stating the IDE, language and other software and why they were used in this instance. |

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

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| Links: <https://github.com/matthewsides/Project01-TraceBall/blob/master/README.md> |
| The evidence may be found in two links with the README.mds of the repository’s linked meeting the criteria as the requirements, epics and user stories are all covered and addressed in the documentation. The process of addressing user and software requirements consisted of attaining a brief with information detailing a project, there after breaking the project down into Epics, which in turn were condensed into user stories, leading to and then covering the high functional and non-functional requirements of the project application. |

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

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| Link: <https://github.com/matthewsides/SDCL-Methodologies> |
| The evidence can be found in the "SDCL-Methodologies", which covers and goes into in-depth research one each lifecycle, noting the advantages, disadvantages, how it works and examples. |

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

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| Link: <https://github.com/matthewsides/Feasibility-Reports/blob/master/README.md> |
| The evidence can be found in the repository "Feasibility-Reports" on GitHub, whilst the evidence in the README.md is suitable to the criteria as it explains the purpose linking into the other criteria mapped above, as well as the components and lastly impact. |

**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  TO DO (you can leave it blank now, we are going to address this un future sessions) |

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

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| Link: <https://github.com/matthewsides/CMM/blob/master/README.md> |
| This constitutes as evidence as the README.md in the repository "CMM" defines CMM and pertains to the levels and also two approaches that may be taken using CMM that may improve software quality. |

**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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| Link: <https://github.com/matthewsides/SDCL-Methodologies> |
| The evidence can be found in the "SDCL-Methodologies" repository and constitutes as meeting the criteria as it explains how the life cycle works, advantages and disadvantages with examples. |

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

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| Link: <https://github.com/matthewsides/Feasibility-Reports/blob/master/README.md> |
| This evidence is applicable to the criteria as it assesses the impact of different feasibility criteria in relation to a software investigation. The evidence may be found under the heading "Impact of different feasibility criteria" in the README.md. |

**Critically evaluate how the use of the function design paradigm in the software development lifecycle can improve software quality.**

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

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