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

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

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| <https://github.com/SDearing/Software_Development_Lifecycles/tree/master> |
| In this document is the different software development lifecycles, with a description, advantages and disadvantages for each one. |

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

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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  Link to your TASK 2 in my sessions:  **Create a Post**  and Explain how risk is managed in the Spiral lifecycle model.  TBD |

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

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

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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  Link to your TASK 4 in my sessions:  **Simple report,** research and describe how technical solutions can be compared.  Also, you can use your ZSL project and explain how did you choose your IDEs, the programming language, and other stuff that you have used in this project. How to compare those options?  TBD |

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

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| <https://github.com/SDearing/ZSL-The-Climate-Menace> |
| In this document is the information about the work we did with ZSL and how we were tasked with developing a app for them. There is more information in the document about when we met with the client and the different milestones of the project. |

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

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| <https://github.com/SDearing/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  You did this in the ZSL project. You need to describe how and when you met with the client. How you wrote the requirements, how and why you changed your project specifications and add a link to your ZSL repo.  In this project you probably used these tools: Text Editor, Presentation Editor (slides), Image Editor (to the assets and prototypes in your project), UNIT (and others IDEs), other tools.  Also, in this project you probably used these techniques: Interviews with the client, Prototyping (for your APP). You should write and add links to your ZSL documentation. |

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

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| <https://github.com/SDearing/Project-02>  <https://github.com/SDearing/Project-03> |
| In each project I have used decomposition to break down the problem, I have also noted the requirements for each project |

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

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| <https://github.com/SDearing/Software_Development_Lifecycles> |
| 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  Link to your TASK 1 in my sessions:  **Week 1:**   * **Simple report** - Research each of the lifecycles given: * - Waterfall * - Evolutionary * - Prototyping * - Spiral * - Rapid Application Development (RAD) * - Traditional X Agile * - Formal / Light Formal   Note how each model works, their advantages and disadvantages and give some examples of software that could benefit from each specific lifecycle. |

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

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

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

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

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**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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