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

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

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| <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#sdlc-methodologies>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#what-is-sdlc>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#waterfall-method>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#spiral-model>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#evolutionary-model>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#prototype-model> |

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

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| <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#how-risk-is-managed> |
| 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.**

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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 |
| TBA |

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

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| <https://github.com/s-j-pearce/HND-VG-PROJECT-1#ide-used-and-features>  <https://github.com/s-j-pearce/HND-VG-PROJECT-2#ide-used-and-features> |
| 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? |

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

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| <https://github.com/s-j-pearce/HND-VG-ZSL-AMAZING-ANIMAL-RESCUE#ii-first-client-meeting-2nd-october-2017>  <https://github.com/s-j-pearce/HND-VG-ZSL-AMAZING-ANIMAL-RESCUE#v-concept-pitch-17th-october-2017>  <https://github.com/s-j-pearce/HND-VG-ZSL-AMAZING-ANIMAL-RESCUE#vi-adapting-to-feedback> |
| 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. |

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

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| <https://github.com/s-j-pearce/HND-VG-ZSL-AMAZING-ANIMAL-RESCUE#ii-first-client-meeting-2nd-october-2017>  <https://github.com/s-j-pearce/HND-VG-ZSL-AMAZING-ANIMAL-RESCUE#v-concept-pitch-17th-october-2017>  <https://github.com/s-j-pearce/HND-VG-ZSL-AMAZING-ANIMAL-RESCUE#vi-adapting-to-feedback>  <https://github.com/s-j-pearce/HND-VG-PROJECT-1#ide-used-and-features>  <https://github.com/s-j-pearce/HND-VG-PROJECT-2#ide-used-and-features> |
| 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/s-j-pearce/HND-VG-ZSL-AMAZING-ANIMAL-RESCUE#design-documentation>  <https://github.com/s-j-pearce/HND-VG-PROJECT-1>  <https://github.com/s-j-pearce/HND-VG-PROJECT-2>  <https://github.com/s-j-pearce/HND-VG-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  In each project you are addressing the requirements using EPICS, USER STORIES and creating documentation to your projects. You should state this here and add the links to all your projects documentation. |

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

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| <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#sdlc-methodologies>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#what-is-sdlc>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#waterfall-method>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#spiral-model>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#evolutionary-model>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#prototype-model> |
| Link to your TASK 1 in my sessions:  **Week 1:**   * **Simple report** - Research each of the lifecycles given:   1. - Waterfall   2. - Evolutionary   3. - Prototyping   4. - Spiral   5. - Rapid Application Development (RAD)   6. - Traditional X Agile   7. - 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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| <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#sdlc-methodologies>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#what-is-sdlc>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#waterfall-method>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#spiral-model>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#evolutionary-model>  <https://github.com/s-j-pearce/SDLC-Methodologies/blob/master/README.md#prototype-model> |
| Link to your TASK 1 in my sessions:  **Week 1:**   * **Simple report** - Research each of the lifecycles given:   1. - Waterfall   2. - Evolutionary   3. - Prototyping   4. - Spiral   5. - Rapid Application Development (RAD)   6. - Traditional X Agile   7. - 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. |

**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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| 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) |