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| Pearson  Higher Nationals in | | | |
| Computing | | | |
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| Unit 34: | | Systems Analysis & Design | | |
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| **Issue** | **1** | | |



Higher National Certificate/Diploma in

Computing

Assignment Brief

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| Student Name/ID Number |  |
| **Unit Number and Title** | **34: Systems Analysis & Design** |
| Academic Year |  |
| Unit Tutor |  |
| **Assignment Title** | **IFR Belts (IFRB) - Analysis and Designing Methodologies** |
| **Issue Date** |  |
| Submission Date |  |
| IV Name & Date |  |

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| **Submission Format** |
| The submission is in the form of  Part 01   * An individual written report.   Part 02   1. 10 Min Power Point Presentation 2. Feasibility Report 3. Individual Report   Part 03   * 10Min Power point presentation   Part 04   * System Design Documentation * Individual Report   Your individual report should be written in a concise, formal business style using single spacing and font size 12. You are required to make use of headings, paragraphs and subsections as appropriate, and all work must be supported with research and referenced using the Harvard referencing system. Please also provide a bibliography using the Harvard referencing system |

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| **Unit Learning Outcomes** |
| LO1 Evaluate the strengths and weaknesses of the traditional and agile systems analysis methodologies.  LO2 Produce a feasibility study for a system for a business related problem.  LO3 Analyse their system using a suitable methodology  LO4 Design the system to meet user and system requirements |
| **Assignment Brief and Guidance** |
| **Scenario**    **IFR Belts (IFRB)** is a leather belt manufacturer based in Hampshire. The premises are rather old Victorian buildings although the offices are quite pleasant and comfortable. The present owners are an Australian couple who bought the company five years ago. IFRB is a medium-sized company with an IT department that has a reputation for delivering software systems that are fit for purpose, but are never delivered on time.    **Rose Kiln Training and Consultancy (RKTC)** provide training and consultancy in the following agile approaches; DSDM Atern, Scrum and XP. They have recently trained the senior management and the software development team at IFRB in the use of DSDM Atern as an Agile project management and delivery approach.  With support from the Agile coach at RKTC, IFRB are now ready to develop a new stock control system  that will replace the old paper based system and is likely to include at least the following functionality:     * receive information relating to customer orders – carried out by the Assistant Stock Controller (M); * Print reports relating to customer orders – carried out by the Assistant Stock Controller (S); * Create sales orders and send them to suppliers in order to satisfy the customer sales orders for the coming month – carried out by the Stock Controller (M); * Create lists of items that are required to complete a particular customer sales order – carried out by the Assistant Stock Controller (M); * Create a daily report of customer orders that have been completed – carried out by the Assistant Stock Controller (M); * Delete customer orders from the system once they have been completed – carried out by the Stock Controller (C); * The new work flow system should have the following levels of access (M):   Report and update – for the Assistant Stock Controller;  Report, update and delete – for the Stock Controller.   * The new work flow system should be able to print information relating to customer orders at a rate of 15 per hour (M).   The above list has been prioritized using MoSCoW. The owners of IFRB have stated that the new stock control system should be fully operational by the 24 of December 2018. The owners of IFRB are aware that requirements may change during the project and they are happy with this.  You will be project managing the analysis and design stage of the new system. Your first task is to update the in-house team on the developments in new methodologies used to analyse systems. Most of the in-house team use only the more traditional approaches and few are fully aware of the agile methodologies which are growing in popularity.  **Part 01**  Your task is to produce a written report which will cover the following:   1. Describe the main phrases of the System lifecycle 2. Compare and contrast the strengths and weaknesses of the traditional and agile systems analysis 3. Critically evaluate the different systems lifecycle (traditional and agile) models which can be used for this project. 4. Select the best option of them and communicate the reasons for your choice.   **Part 02**   1. Create a power point presentation to explain its importance and components of a feasibility report. 2. Provide a feasibility report which assessing the impact on different feasibility criteria on the system investigation for the above business problem. 3. Provide a separate report to cover the followings:  * fact finding techniques * Compare and contrast the different fact finding techniques * What are the Fact finding techniques you have used to collect the user requirements?   **Part 03**  As a system analysist your CEO ask you to present information about the different methodologies use to system analysis. Provide a power point presentation to evaluate the effectiveness of the different analysis methodologies and justify the choice of the analysis methodology for the above scenario  **Part 04**   1. Design a fully functional system to meet the above system and user requirements and provide the System design documentation. (Draw a DFD, flow charts and use case diagrams and ERD) 2. Produced a report to assess the effectiveness of the system design reference to the methodology used and how the design meets user and system requirements. |
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| Learning Outcomes and Assessment Criteria | | |
| Pass | Merit | Distinction |
| **LO1** Evaluate the strengths and weaknesses of the traditional and agile systems analysis methodologies | | **LO1 & 2**  **D1** Critically evaluate the strengths and weaknesses of the traditional and agile systems analysis methodologies, including the transition problems faced by organisations that move from the traditional to the agile approach. |
| **P1** Discuss the strengths and weaknesses of the traditional and agile systems analysis methodologies. | **M1** Compare and contrast the strengths and weaknesses of the traditional and agile systems analysis methodologies. |
| **LO2** Produce a feasibility study for a system for a business – related problem | |
| **P2** Produce a feasibility study for a system for a business related problem. | **M2** Evaluate the relevance of the feasibility criteria on the systems investigation for the business related problem. |
| **LO3** Analyse their system using a suitable methodology | | **LO3 & LO4**  **D2** Justify the choice of the analysis methodology used in the context of the business problem. |
| **P3** Analyse a system using a suitable methodology for a business – related problem | **M3** Evaluate the effectiveness of the analysis in the context of the methodology used. |
| **L04** Design the system to meet user and system requirements | |
| **P4** Design a fully functional system to meet user and system requirements for the business related problem. | **M4** Assess the effectiveness of the system design with particular reference to the methodology used and how the design meets user and system requirements. |