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| COMP1787 (2019/2020) | Requirements Management | Faculty Header ID: | Contribution: 100% of course |
| Course Leader:  Keeran Jamil | Coursework | Release Date:  20.02.2020 | Deadline Date: 20.04.2020 |
| **This coursework will be marked anonymously YOU MUST NOT PUT ANY INDICATION OF YOUR IDENTITY IN YOUR SUBMISSION** | | | |
| This coursework should take an average student who is up-to-date with tutorial work approximately 50 hours | | | |
| **Learning Outcomes:**  1 Analyse and compare current approaches to requirements management within a development environment.  2 Assess the impact of stakeholders and organisational culture on the development of effective requirements and system development.  3 Relate issues associated with risk, quality, and Legal/Social/Ethical/Professional (LSEPI) to a practical scenario. 1 Analyse and compare current approaches to requirements management within a development environment. 2 Assess the impact of stakeholders and organisational culture on the development of effective requirements and system development. 3 Relate issues associated with risk, quality, and Legal/Social/Ethical/Professional (LSEPI) to a practical scenario. 1 Analyse and compare current approaches to requirements management within a development environment. 2 Assess the impact of stakeholders and organisational culture on the development of effective requirements and system development. 3 Relate issues associated with risk, quality, and Legal/Social/Ethical/Professional (LSEPI) to a practical scenario. | | | |

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| **Plagiarism is presenting somebody else's work as your own. It includes: copying information directly from the Web or books without referencing the material; submitting joint coursework as an individual effort; copying another student's coursework; stealing coursework from another student and submitting it as your own work.  Suspected plagiarism will be investigated and if found to have occurred will be dealt with according to the procedures set down by the University. Please see your student handbook for further details of what is / isn't plagiarism.** All material copied or amended from any source (e.g. internet, books) must be referenced correctly according to the reference style you are using. Your work will be submitted for plagiarism checking.  Any attempt to bypass our plagiarism detection systems will be treated as a severe Assessment Offence. |

#### Coursework Submission Requirements

#### **An electronic copy of your work for this coursework must be fully uploaded on the Deadline Date  using the appropriate link.**

#### **For this coursework you must submit a single PDF document.  In general, any text in the document must not be an image (i.e. must not be scanned) and would normally be generated from other documents (e.g. MS Office using "Save As .. PDF"). An exception to this is hand written mathematical notation, but when scanning do ensure the file size is not excessive.**

#### **There are limits on the file size (see the relevant course Moodle page).**

* Make sure that any files you upload are virus-free and not protected by a password or corrupted otherwise they will be treated as null submissions.
* Your work will not be printed in colour. Please ensure that any pages with colour are acceptable when printed in Black and White.

#### **You must NOT submit a paper copy of this coursework.**

#### **All courseworks must be submitted as above. Under no circumstances can they be accepted by academic staff**

The University website has details of the current Coursework Regulations, including details of penalties for late submission, procedures for Extenuating Circumstances, and penalties for Assessment Offences.  See <http://www2.gre.ac.uk/current-students/regs>

**Detailed Specification**  
Firstly, read the information given in the case study (which is attached to this coursework specification).

Then produce **all** of the deliverables detailed below.

**Important instructions**

* **Do not use previous student’s coursework** as a basis for your work. It will be identified.
* **Do not use any material from books, academic papers, the internet or any other source** when writing about the process and carrying out your critical reflection. It is your own views that are required.
* Any attempt to use other people’s material in your coursework, whether taken from a classmate from another source, will result in you receiving **a lower mark** and possibly being awarded **zero**.
* **Do not copy the whole case study into your report.** Only submit the work you have completed.
* Ensure that you can successfully upload a file to the correct submission area **prior to the deadlines.**

**Deliverables**

There are **three** sections to this coursework. Make sure that you complete all three sections.

**Assessment Criteria**

**Section A** – 20% of the marks

**Section B** – 30% of the marks

**Section C** – 30% of the marks

**Grading Criteria**

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| --- | --- |
| **A**  **70%-100%** | * Demonstrate a thorough understanding of the issues surrounding the application of Agile/SCRUM/RAD/DSDM to a development environment. * Demonstrate a thorough understanding of high level requirements analysis and MoSCoW prioritisation; * Apply the MoSCoW rules sensibly, demonstrating a clear understanding of the need for incremental delivery. * Demonstrate a thorough understanding of the Legal, Social, Ethical and Professional issues and how these impact a developer. * Demonstrate a thorough understanding of the role of the professional and, in particular, the BCS code of conduct. * Bring original thought to the argument; |
| **B**  **60%-69%** | * Demonstrate a good understanding of the issues surrounding the application of Agile/SCRUM/RAD/DSDM to a development environment. * Demonstrate a good understanding of high level requirements analysis and MoSCoW prioritisation; * Apply the MoSCoW rules sensibly, demonstrating a good understanding of the need for incremental delivery. * Demonstrate a good understanding of the Legal, Social, Ethical and Professional issues and how these impact a developer. * Demonstrate a good understanding of the role of the professional and, in particular, the BCS code of conduct. * Bring some original thought to the argument; |
| **C**  **50%-59%** | * Demonstrate understanding of some of the issues surrounding current development methodology approaches. * Demonstrate understanding of some of the issues surrounding the application of Agile/SCRUM/RAD/DSDM to a development environment. * Demonstrate understanding of some the issues relating to high level requirements analysis and MoSCoW prioritisation; * Apply the MoSCoW rules in a sensible way demonstrating some understanding of the need for incremental delivery. * Demonstrate an understanding of the Legal, Social, Ethical and Professional issues and how these impact a developer. * Demonstrate an understanding of the role of the professional and, in particular, the BCS code of conduct. * Identify some practical examples relating to the above |
| **D**  **40%-49%** | * Demonstrate a basic understanding of the issues surrounding the application of Agile/SCRUM/RAD/DSDM to a development environment. * Demonstrate a basic understanding of high level requirements analysis and MoSCoW prioritisation; * Apply the MoSCoW rules in a basic way. * Demonstrate a basic understanding of the Legal, Social, Ethical and Professional issues and how these impact a developer. * Demonstrate a basic understanding of the role of the professional and, in particular, the BCS code of conduct. |

**Lizzie’s Leather Belts**

**Lizzie’s Leather Belts Web-based Order Handling System**

Lizzie’s Leather Belts is a medium-sized company which sells over 50 different styles of leather belt.

The company is 10 years old and has grown steadily over the last year mainly due to an aggressive marketing drive aimed at local retail outlets. They would now like to expand further by making their leather belts available to the general public via a Web site that must be deployed in 3 months from now.

Lizzie’s Leather Belts do not have their own software development department and contract out their software development projects. However, the Managing Director is frustrated by the problems associated with previous traditional 'waterfall' projects, in particular the lack of support for changing requirements. After several interviews with various software development companies she has decided that Lizzie’s Leather Belts will use True Concepts to develop their Web site using a SCRUM and Agile concepts.

**Lizzie’s Leather Belts Personnel**

**The Managing Director** – the driving force behind the project and the budget holder. She has also put aside time in a busy diary to be available for this project.

**The Finance Director** – keen to be involved, but can be prone to doing a perfect job and is always too busy to attend meetings.

**The Operations Director** – has been with the company for 2 years and was a senior team member from the business community on an Agile software development project at a previous job. Also responsible for the Order Handling Clerks and happy to make at least one available for the project and empower them to make decisions. Keen to be involved and has made space in his diary. Well informed about what is going on in the company.

**Chief Accountant** – generally represents the Finance Director at meetings and is empowered to make decisions on behalf of the Finance Director. Has worked in all departments within the company over the years. Passed accountancy examinations 2 years ago.

**The Warehouse Manager** – not available for the project, but happy to make at least one

Warehouse Operative available for the project and empower them to make decisions on her behalf.

**The Marketing Director** – available for the project and is also a certified Workshop Facilitator and Agile Project Manager.

**True Concepts**

True Concepts is an Agile software development consultancy located on the same industrial estate as

Lizzie’s Leather Belts. They have purpose built rooms for SCRUM stand up meetings and Facilitated workshops and use the DSDM Atern framework for all of their software development projects. True Concepts assign a dedicated team for each of their projects. The team can be located on-site or off-site.

**True Concepts Personnel**

**Julie** – available for the project, she is a very good programmer with a good working knowledge of Web development and a good communicator.

**Jeff** – available for the project, he is an excellent Web developer, but has been known to have stand-up arguments with customers.

**Sophie** – available for the project, she has good Web site development skills and works for the

Samaritans in her spare time.

**Jonathan** – available for the project, he has worked on several Agile development projects as a

Team Leader and has a very good understanding of Web site development.

**Ken** – available for 2 days a week throughout the project and has a good understanding of Web development and testing.

**Table 1: Base lined list of requirements for the Web site**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Requirements** | **Priority** | **Days** |
| **1** | As the Managing Director I want a monthly report showing the percentage of belts that have been sold via the Web site so that I can get a feel for the benefits, in terms of profit, that we are getting from the Web site. |  | **3** |
| **2** | As a customer I want to be able to modify my shopping cart so that I can change my mind about what I want to buy. |  | **5** |
| **3** | As a Customer I want to enter separate delivery and invoice addresses so that I can receive belts when staying at a friend’s house. |  | **3** |
| **4** | As the Finance Director I want all online transactions to be secure so that our customers feel safe. |  | **6** |
| **5** | As the Managing Director I want to be ensured that the site is Data Protection Act safe so that we do not get fined hundreds of thousands of pounds. |  | **8** |
| **6** | As the Marketing Director I want an ‘About Page’ so that we can promote the finer details of the brand. |  | **3** |
| **7** | As a Customer I want a choice of delivery slots so that I can arrange my diary appropriately. |  | **5** |
| **8** | As the Warehouse Manager I want to place an ‘out of stock’ message on appropriate belts so that customers do not end up having to wait for ages due to belts being out of stock. |  | **5** |
| **9** | As the Operations Director I want to accept all forms of payment so that we can capture the largest market possible. |  | **5** |
| **10** | As a Customer I want to choose whether or not I am sent marketing information so that I do not get loads of junk mail. |  | **2** |
| **11** | As a Warehouse Operative I want to check delivery addresses so that I can place orders with similar postcodes in the same delivery batch. |  | **3** |
| **12** | As a Customer I want to be able to change my account details so that my most up to date details are recorded. |  | **3** |
| **13** | As an Order Handling Clerk I want to use the Web site to process telephone purchases so that I can stop using the paper-based system. |  | **2** |
| **14** | As a Customer I want to have belts gift wrapped and sent to an address other that than my own so that I don’t have to bother wrapping and delivering presents. |  | **4** |
| **15** | As a Student I want discounts on belts so that I can look cool at parties for minimal cost. |  | **3** |
| **16** | As a Customer I want to be sent an SMS message to remind me when my belts are going to be delivered so that I am in when they arrive. |  | **3** |
| **17** | As a Customer I want daily emails to let me know the status of my order because I get nervous when I don’t know what is going on. |  | **4** |
| **18** | As the Marketing Director I would like an offers or discount page so that we can inform our customers of the aforementioned. |  | **3** |
| **19** | As the Chief Accountant I want to the Web site to adhere to legislation regarding VAT so we are not hit with a hefty fine. |  | **2** |
| **20** | As a customer I want to be able to process returns via the Web site so that I do not have to phone up and answer all of those stupid questions before being put through to a human being. |  | **4** |

**Section A – Management Summary (20% of the marks)**

The case study tells us that the Management Director has decided to recommend one of the approaches associated with Agile Methods to the team of True Concepts. The Agile Method that they would prefer would be SCRUM with Agile.

Produce a management summary explaining whether SCRUM with Agile concepts would be an appropriate method to use for the project. Outline any advantages/drawbacks that you perceive. Give examples from the Case Study to support your answer.

**Your answer should be in the region of 750-1000 words.**

**Section B – High level requirements analysis and MoSCoW prioritisation (30% of the marks)**

Table 1 of the case study provides details of a Facilitated Workshop session run by the True Concepts consultants and attended by a number of the key staff in the organisation of Lizzie’s Belts.

At the end of the session a list of ‘Base line requirements’ was produced.

**This list is inappropriate as a set of requirements for developing a website, as a number of the requirements need to be sorted out to meet the criteria for a ‘high level requirement’ - *remember, a high level requirement should be a functional requirement that can be delivered to the user as part of an incremental approach using a timebox (or number of timeboxes).***

Using the information given **throughout the case study** to help you, complete the following:

B1. Review the ‘base line requirements’ list given in table 1.

B1.1 Identify any of the requirements that you feel are not appropriate to be considered at high level requirements, giving your reasons for this.

B1.2 Rewrite, and add to, the list to end up with a total of 8-10 high level requirements (functional and non-functional) that you feel are required for building the website. Briefly justify the need for each of your high level requirements against information you have gathered from the case study.

**Your answer to B1 should be in the region of 750-1000 words**

B2. Use the MoSCoW/Timebox rules to prioritise the requirements in your updated ‘high level requirements list’.

B2.1. Produce an updated ‘high level requirements list’ clearly showing the prioritisation you have given to each of your requirements.

**There is no word limit for the answer to B2.1.**

B2.2 Explain how you set about prioritising the requirements and justify your reasons for the decisions that you made.

**Your answer to B2.2 should be in the region of 500 words.**

**Section C – Legal, Social, Ethical and Professional issues (30% of the marks)**

C1.Lizzie’s Leather Belt’s personnel needs to start considering Legal, Social, Ethical and Professional Issues (LSEPI) in relation to its day-to-day operations.Produce a management summary identifying Legal, Social, Ethical and Professional issues that a system developer for the company would need to be aware of. Provide **two** practical examples from the case study that relate to **each** aspect of LSEPI identified.

**Your answer to C1 should be in the region of 500-750 words**

C2.Produce a management summary outlining the purpose of a professional body, such as the British Computer Society. As a part of this, provide a practical example for each of the **four** BCS Code of Conduct sections to illustrate how the professional body may guide the choices and decisions of their members.

**Your answer to C2 should be in the region of 500-750 words.**