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| **COMP1787 (2024/2025)** | **Requirements Management** | **Contribution: 100% of course** |
| **Module Leader:**  **Dr. Aditi Rawal** | **Coursework Term 2 (collabs)** | **Deadline Date:** |
| **This coursework will be marked anonymously YOU MUST NOT PUT ANY INDICATION OF YOUR NAME IN YOUR SUBMISSION ONLY YOUR ID** | | |
| 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. | | |
| **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 or buying coursework from someone else 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.  **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 electronic plagiarism checking.  Any attempt to bypass our plagiarism detection systems will be treated as a severe Assessment Offence.** | | |

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**Coursework Submission Requirements**

* An electronic copy of your work for this coursework should be fully uploaded by 11.30pm (local time) on the Deadline Date.
* The last version you upload will be the one that is marked.
* 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").
* 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.
* You must NOT submit a paper copy of this coursework.
* All coursework 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: <https://www.gre.ac.uk/policies/undergraduate-and-postgraduate-taught>

Detailed Specification

**This coursework must be completed as an individual piece of work. This report should be up to 3000 words excluding reference list.**

You must complete this assignment using the given case study (Edu Path Ltd. Case Study)  
Start by reading the information given in the case study (which is included in this coursework specification).

**Produce all of the deliverables detailed below.**

*Note that your discussions should relate to what you have found in the case study and/or what you have learnt as a result of undertaking the given activities. External sources should be in Harvard style of referencing – we want to see your thoughts, ideas, and interpretations. When you refer to information given in the case study make sure that you refer to it appropriately to support your arguments – don’t just copy text from the case study.*

**Edu Path Ltd (EPL) Case Study**

Edu Path Ltd (EPL) is an organisation that hosts numerous **training events corporate organisations**. The organisation has several corporate partners and manages hundreds of training workshops for its clients.

EPL consists of two main departments, dealing with technical training workshops and motivational coaching/mentoring, and employs about 50 individuals.

A small IT division assists all departments by providing IT support and infrastructure. Over the last 10 years the division has systematically developed a web-based platform for managing some online training workshops. The system has proven to be highly effective and, apart from a few minor issues, clients are happy to use it.

The system currently supports the registration and management of candidates, who can log onto the platform to register for booking training or coaching. EPL Staff can use various built-in tools to evaluate and score applications in order to find the most appropriate training package. Although candidates can indicate preferred training programmes, the application forms are general enough to match to suitable programmes and also offer alternatives in case the programmes are full of their first choice. The system has constantly been enhanced and perfected to provide a highly optimal amount of automation.

**Management team need to track when and how the training is progressing. The system does not support this function well**, the team would like to add notes, activities and deadline dates to each client and the clients can be subsequently reminded of pending processes.

The system needs to support the finance department by keeping track of payments. Currently there is **no automatic communication or synchronisation** between the platform and the organisation’s banking system, and a fair amount of data entry needs to be duplicated on both systems. This has caused some data integrity issues in the past, but the finance department consists of conscientious individuals who minimise the number of mistakes made. Development of a synchronisation system has been given a high priority, as the occurrence of human error is exceedingly unpredictable.

The chief executive of EPL wishes to remain contemporary and, after various consultations, have decided to offer more online workshops and support. They reasoned that early adoption may allow for enough time to establish relationships with more corporate clients. Finally, the **system should be able to support contact with businesses, and individuals, for marketing purposes.**

After careful investigation the current information system would allow for the registration of applicants and the management of funds, there are inadequate facilities to support the application and selection process for online training and motivational coaching.

A meeting was called with Maya Katoch, the head of the IT division, to discuss the addition of these facilities to the system. Maya was highly resistant to immediate integration into the new system and convinced the chief executive that she could build a highly functional prototype system by re-using those parts of the current system that would remain the same and adding new functionalities to investigate the changes required. Once the new system proved to be successful, they could work towards expanding the current system. She also assured the executive that she would finish the prototype within 3 months.

Maya recently completed a course on agile approaches as part of her professional development and, since she has never had the opportunity to apply what she had learnt, she was excited to use an agile approach for the development of the new prototype system. In particular, she was convinced that DSDM Atern would be an excellent choice.

***“Edu Path Ltd (EPL) is an organization that provides corporate training workshops and motivational coaching. It has about 50 employees, including a small IT division that developed a web-based platform for managing online training. The system allows candidate registration, training bookings, and evaluation of applications but lacks key functionalities like tracking training progress, adding client notes, setting deadlines, and synchronizing financial transactions with the banking system.***

***EPL's chief executive aims to modernize by offering more online workshops and improving marketing efforts. However, the current system does not adequately support online training selection and motivational coaching.***

***Maya Katoch, head of IT, proposed developing a prototype system by reusing existing components and adding necessary functionalities instead of immediately integrating changes into the current system. She assured the executive that the prototype would be completed in three months.***

***Excited to apply her recent training in agile methodologies, Maya decided to use DSDM Atern for developing the prototype system.”***

Information about the e-sports scholarship system was gathered during a facilitated workshop and is summarised below in Appendix A.

**Facilitated Workshop Data**

Facilitated Workshop Meeting for New EPL Training System

Agenda

1. Introduction and Terms of reference (10 minutes)
2. Requirement’s exercise (20 minutes)
3. Small group discussion exercise (30 minutes)
4. Feedback and outline requirements plan (30-40 minutes)

Minutes of Meeting held in Meeting Room A Present

* Maya Katoch (Head of IT) (Chair)
* Divu Singh(Finance Team)
* Clive Rogers(Corporate Account Team)
* Anya Peters (Application Management Team)
* Jan Dalton(Application Management Team)
* David Dahl (Executive)
* Maya Lou (Contracted Expert)
* Gill Smith ( Client )
* Angel Wilmott (Secretary to Operations Director)

Apologies - None

**Introduction and Terms of Reference**

Maya Katoch (MK) welcomed all to the meeting and outlined the purpose of the meeting – to identify the main requirements for the new system and set the priority and agenda for the future development.

MK reported that, following the recent meeting with the chief executive, it was decided that the e- training prototype system must be developed as soon as possible, as this is an important avenue for the company to pursue in order to remain contemporary. They wanted to be confident that the system will allow for the registration and selection of appropriate training for the candidates The executive has set a target of getting a prototype system up and running within 3 months of the start of the project, and plan on working with experts to enhance the system.

***“Maya Katoch (MK) led the meeting to define the key requirements for the new e-training prototype system and set priorities for future development. She reported that, following discussions with the chief executive, the system must be developed urgently to help EPL stay competitive.***

***The prototype should support candidate registration and training selection and must be completed within three months. The executive also plans to collaborate with experts to further enhance the system.”***

MK outlined the activities for the rest of the meeting.

**Requirements List Exercise**

Each person was asked to list their requirements for the new system on a form supplied by MK. The following is a summary of those requirement sheets:

1. Divu Singh (Finance Team)

* A **login** facility.
* A **payment** system
* A facility to **keep track of funds**, how they are allocated and where they can be applied.
* We were hoping for the **synchronisation between the system and the organisation’s banking system** and were promised that this would be the next project to be taken on by the IT division. You should build this facility into the prototype.

2. Clive Rogers (Corporate Client Management Team)

* The system should be **fast and responsive**.
* The system should allow for **communication** with businesses, individuals, and other sources of donations
* The system should support **training booking**.
* Management team need to **track training progress** when and how the training is progressing.
* The system should facilitate the collation of **contacts and mailing lists**.

3. Anya Peters (Application Management Team)

* **Categorise** different training programmes.
* **Consult** with the client and experts to find suitable training programme.
* **Compile** the criteria into preliminary application forms.
* There should be **tools** available to help choose the best training. Some of the current tools may work, but many would need to be developed.

4. Jan Dalton (Application Management Team)

* Allow for **real-time changes** to be made to the application forms by the application and management team. This feature is not available on the current system and would be a great help to improve the turn-around time on requested changes.
* Applicants should be able to **track the status of their applications** throughout the selection process.
* We must be able to **notify** applicants whether they were successful.
* Applicants must be able to **select a suitable time and date** to book the session.
* We should be able to **manage active training** by tracking deadlines, setting up notifications and making notes on the system.
* Organize a **virtual celebration** on the website for the CEO's birthday to showcase the company's fun and friendly culture.

5. David Dahl (Executive)

* Remember that **relevant parts of the old system need to be pulled**, integrated into the prototype and tested. Don’t forget about them, they should be part of the requirements. I’m not going to list them – you should know what they are.
* **Maintain consistent branding elements** and design across the website to reinforce our brand identity.

6. Maya Lou (Contracted Expert)

* Applicants must be able to **register** on the system.
* Applicants must be able to **view available training sessions**.
* The system should **automatically inform** users of completed actions, such as registration or the successful submission of an application.
* When applying the system should allow for applicants to **supply any context sensitive information**.

7. Gill Smith (Corporate Client )

As a customer I **do not** have to phone up and **answer all of those stupid questions** before being put through to a human being

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| **Name** | **Team/Role** | **Needs** |  |
| Divu Singh | Finance | * ~~Login for users~~ * ~~Payment system~~ * ~~Track and manage funds (money)~~ * ~~Synchronization with the banking system~~ | * Login facility * Payment system * Fund tracking and allocation * Synchronization with banking system |
| Clive Rogers | Client Management | * ~~Fast and responsive~~ * ~~Communication (chat) with businesses and donors~~ * Book training sessions * ~~Track training progress~~ * Save contacts and mailing lists | * Fast and responsive system * Communication with businesses and donors * Training booking support * Training progress tracking * Contact collation and mailing lists |
| Anya Peters | Applications | * ~~Sort training programs~~ * ~~Help clients pick the right training by consulting with an expert~~ * Create simple application forms * ~~Tools to help choose training~~ | * Categorization of training programs * Consultation with clients and experts for training selection * Preliminary application forms * Tools to assist training selection (some existing, some new) |
| Jan Dalton | Applications | * ~~Edit application forms anytime~~ * ~~Let applicants check their status~~ * ~~Notify if selected (successful)~~ * ~~Let users pick training time and date~~ * ~~Track training, set reminders, add notes~~ * ~~Online event for CEO’s birthday~~ | * Real-time modification of application forms * Applicant status tracking * Notification of application success * Training session scheduling * Active training management (deadlines, notifications, notes) * Virtual celebration for CEO’s birthday |
| David Dahl | Executive | * ~~Keep useful old system parts~~ * ~~Make design and branding the same everywhere~~ | * Integration of relevant parts from the old system * Consistent branding and design across the system |
| Maya Lou | Expert | * ~~Register new users~~ * Show available training * ~~Notify users when actions are done~~ * ~~Let applicants add extra details~~ | * Applicant registration * Viewing available training sessions * Automated notifications for completed actions * Context-sensitive information submission in applications |
| Gill Smith | Corporate Client | * No long phone questions before talking to a real person | * Eliminate unnecessary pre-call questioning before connecting to a human representative |

**Deliverables:**

There are three sections to this coursework. Make sure that you complete all three sections. This report should be up to 3000 words excluding reference list**.**

**Section A – Produce an Executive Summary (20% of the marks)**

The case study tells us that the head of the IT division, Maya Katoch, has decided to recommend one of the approaches associated with Agile Methods to the executive of EPL Ltd. Produce a management summary explaining whether Agile based methods would be an appropriate method to use.

Outline any advantages/drawbacks that you perceive. Give examples from the Case Study to support your answer.

Executive summaries should consider the following components:

* It is a summary of the whole report with the main findings. Think of an executive summary as a more condensed version of your whole report.
* Highlight the key advantages of the Agile approach as compared to any other with well researched citations.
* To be written in third person
* Capture the reader's attention.
* Make sure your executive summary can stand on its own.
* Write it last once you have finished the sections B and C.

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

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| Write a summary of the entire report once Sections B and C are completed. |
| Explain why Agile methods (like DSDM Atern) are appropriate for EPL’s prototype development. |
| Highlight advantages (e.g., flexibility, collaboration, rapid iteration) and drawbacks (e.g., challenges in stakeholder involvement or timeline pressures). |
| Use case study examples (e.g., Maya’s prototype timeline and iterative approach) and well-researched citations for comparison with other methodologies. |
| Write in the third person, ensure it captures attention, and is concise but detailed enough to stand on its own (500-750 words). |

**Section B – High level requirements analysis and MoSCoW prioritisation (40% of the marks)**

**\*Cái requirement nào phụ hợp và cái nào không để chốt functional requirements**

The case study provides details (including minutes) of a Facilitated Workshop session run by Maya Katoch and attended by a number of the key staff in the organisation.

At the end of the session a list of ‘high level requirements’ was produced described in the case study. Maya Katoch was disappointed to see that some of the members of the workshop did not seem to understand the format of well-defined high-level requirements. It was clear from the requirements sheets that a couple of individuals did not put effort into the exercise. The collection of requirements listed in case study contain some that are not appropriate set of requirements for developing a system, as a number of the requirements do not meet our criteria for a ‘high level requirement.’

**Remember, high-level requirements are often documented in a Requirements Specification at the beginning of a project. As the project progresses, these high-level requirements are refined, expanded, and broken down into more detailed low-level requirements during the requirements analysis phase. This process helps ensure that all stakeholders have a common understanding of what the system is intended to achieve and provides a basis for developing and testing the system.**

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

B1:  Review the ‘high level requirements’ list given in the case study and identify any of the requirements that you feel are not appropriate to be high-level requirements, giving your reasons for this.

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| Review the provided requirements. |
| Identify which requirements are not high-level functional requirements (e.g., vague goals or operational-level tasks). |
| Explain why each is inappropriate (e.g., “Organize a virtual celebration” isn’t a system function). |

B2:  Rewrite, and add to, the list to end up with a total of 8-10 ‘updated’ high level **functional** requirements that you feel are required for building the system. Briefly justify the need for each of your high-level requirements against information you have gathered from the case study.

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| Create a list of 8-10 high-level functional requirements based on the case study. |
| Examples: "Enable synchronization with the banking system," "Facilitate real-time updates to application forms," "Automate applicant notifications." |
| Briefly justify each requirement using the case study details. |

B3: Use the MoSCoW/Timebox rules to prioritise the requirements in your updated ‘high level requirements list’.

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| Categorize each requirement into Must Have, Should Have, Could Have, Won’t Have (MoSCoW) based on importance and feasibility. |
| Timebox the priorities for clarity on what needs to be delivered in the prototype. |

Your answer to section B should be in the region of 750-1000 words

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

C1: EPL needs to start considering Legal, Social, Ethical and Professional Issues (LSEPI) in relation to its day-to-day operations. They also need to appoint a Data Controller. Produce a management summary explaining (a) the role of the Data Controller within the organisation and (b) any legal, social, ethical, and professional issues that EPL may be faced with. As a part of your answer to (b) provide one practical example from the case study that relates to each aspect of LSEPI. Your answer to C1 should be in the region of 500-750 words.

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| Data Controller Role: Define the responsibilities of a Data Controller (e.g., ensuring compliance with GDPR, managing personal data securely). |
| LSEPI Considerations: Identify legal (e.g., GDPR compliance), social (e.g., user accessibility), ethical (e.g., data confidentiality), and professional (e.g., system reliability) issues for EPL. |
| Provide one example from the case study for each LSEPI aspect. |

C2: Produce a management summary outlining the purpose of the **BCS Code of Conduct**. As a part of this, provide a practical example for each of the four BCS Code of Conduct sections to illustrate a professional issue that a System developer contracted to EPL may need to consider. Your answer to C2 question should be in the region of 500-750 words.

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| Outline the purpose of the BCS Code of Conduct (e.g., ethical professionalism, integrity in IT systems development). |
| Provide practical examples for each section of the BCS Code   * Public Interest: Ensuring user-friendly systems for clients (e.g., removing unnecessary phone interactions). * Professional Competence and Integrity: Following industry best practices in system integration. * Duty to Relevant Authority: Respecting EPL policies and objectives during prototype development. * Duty to the Profession: Using Agile methodologies responsibly to enhance the profession’s credibility. |

**Conclusion and assumptions made (5% of the marks) –** Make sure to provide a strong conclusion.

**\*State any assumptions made (e.g., timeline for prototype delivery, level of stakeholder engagement).**

**References (**To be done in Harvard style) **and English Proficiency - (5% of the marks)**

**\*Include references for Agile methods, MoSCoW prioritization, GDPR, BCS Code of Conduct, and other research.**

**Assessment Criteria (Breakdown):**

Section A - Executive Summary- 20%

Section B - High level requirements analysis and MoSCoW prioritisation40%

Section C - Legal, Social, Ethical and Professional issues30%

Conclusion and assumptions - 5%

Harvard Style of referencing and English Proficiency - 5%