

Comp1787 Requirements Management

ID: GCH210519



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# Introduction

# Section A – Management Summary

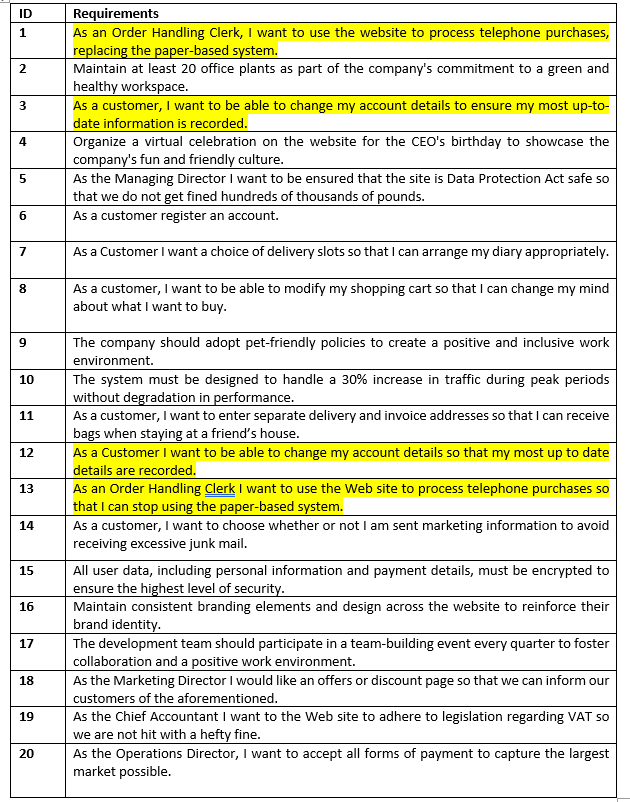
# Section B – High level requirements analysis and MoSCoW prioritisation

For a project to be successful, high level requirements are essential. By definition, they are broad and general statements that outline the main aims and objectives of a project. Thus, high level requirements do not go into great details, but rather provide an overall framework. Defining high level requirements allows to set the scope and direction of the project, and also a foundation to create low level requirements, which are more specific (Dancefloor, 2022).

## B1. Review of the ‘base line requirements’ list

The System Concepts organised Facilitated Workshop session run, which some key members of the Green Groceries attended to, resulted in defining the ‘base line requirements’ list. The list does, however, contain a mix of high level and low level requirements. As discussed above, high level requirements must be defined first, as they create a foundation for other requirements.

The figure below shows the base requirements list. Although there are 20 rows of requirements, the exact requirements count is 18, due to duplication, which are highlighted.



### B1.1 Identify requirements inappropriate to be considered at high level requirements

First, requirements that are not considered to be high level will be identified. In the table below, the non-high level requirements will be defined, and given a reason why they are not appropriate.

|  |  |  |  |
| --- | --- | --- | --- |
| ID | Inappropriate Requirements | Type | Reason |
| 1 | Maintain at least 20 office plants as part of the company's commitment to a green and healthy workspace. | Non-functional requirement | The requirement does not set the foundation to achieve goals that the company wants, which is to expand its market reach and make their products more accessible. |
| 2 | As a customer, I want to be able to change my account details to ensure my most up-to-date information is recorded. | Functional requirement | The requirement is not high level, because there are other requirements, such as creating an account, must be fulfilled first. |
| 3 | Organize a virtual celebration on the website for the CEO's birthday to showcase the company's fun and friendly culture. | Non-functional requirement | The requirement does not relate to the company’s goals. |
| 4 | The company should adopt pet-friendly policies to create a positive and inclusive work environment. | Non-functional requirement | The requirement does not help the company reach their main goal. |
| 5 | The system must be designed to handle a 30% increase in traffic during peak periods without degradation in performance. | Functional requirement | The requirement is too specific when addressing the increase, but can be rewritten to be high level. |
| 6 | As a customer, I want to choose whether or not I am sent marketing information to avoid receiving excessive junk mail. | Functional requirement | The requirement assumes that the customer has been already registered with email, in which case, the requirement of creating an account comes first. |
| 7 | The development team should participate in a team-building event every quarter to foster collaboration and a positive work environment. | Non-functional requirement | The requirement is not related to the goals of the company. |
| 8 | As the Marketing Director I would like an offers or discount page so that we can inform our customers of the aforementioned. | Functional requirement | This is not a high level requirement, as it does not define the direction of the project. |
| 9 | 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. | Functional requirement | The requirement is too specific, but can be rewritten to be considered as high level. |

## B1.2 Update the requirements list

After the going through the list and removing requirements that are not deemed to be appropriate, only high level requirements remain.

|  |  |  |
| --- | --- | --- |
| ID | High Level Requirements | Reason |
| 1 | As an Order Handling Clerk, I want to use the website to process telephone purchases, replacing the paper-based system. | The requirement is suitable to be high level, because it sets the foundation for low level requirements related to purchases process and methods. |
| 2 | As the Managing Director I want to be ensured that the site is Data Protection Act safe. | The requirement is high level, because it sets the direction of the project to be compliant with the Data Protection Act. |
| 3 | As a customer, I want to register an account. | To expand the company’s reach, having customers to be part of the community is important. This requirement allows that, and also creates opportunities for more features. |
| 4 | As a customer I want a choice of delivery slots so that I can arrange my diary appropriately. | The requirement is suitable to be high level, as it is broad. It is also important to make customers feel they are in control. |
| 5 | 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. | The requirement lets the customer to freely change products in case they change their mind during selection. |
| 6 | The system must be designed to handle increased traffic during peak periods without degradation in performance. | The requirement ensures that the developers pay attention to the performance of the system from the very beginning. |
| 7 | As a customer, I want to enter separate delivery and invoice addresses so that I can receive bags when staying at a friend’s house. | Similar to the requirement with ID no. 4, it is important for the customer to have control over their purchases. |
| 8 | All user data, including personal information and payment details, must be encrypted to ensure the highest level of security. | The requirement ensures that the platform is safe to use, and also compliant with legal requirements related to data protection. |
| 9 | Maintain consistent branding elements and design across the website to reinforce their brand identity. | The requirement is paramount if the company’s goal is to expand. Having a brand image is essential to be recognizable, thus growing the reputation. |
| 10 | 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. | The requirement guarantees that the website is legal. |

## B2. Usage of the MoSCoW/Timebox rules to prioritise the requirements in the updated ‘high level requirements list’

### B2.1 Updated ‘high level requirements list’ with prioritisation

After updating the list to only have high-level requirements, setting priorities with the usage of MoSCoW and Timebox rules is an important step, as it shows what is needed and what can be optional.

|  |  |  |  |
| --- | --- | --- | --- |
| ID | High Level Requirements | MoSCoW Priority | Timebox duration |
| 1 | As an Order Handling Clerk, I want to use the website to process telephone purchases, replacing the paper-based system. | Could have | 7 days |
| 2 | As the Managing Director I want to be ensured that the site is Data Protection Act safe. | Must have | 7 days |
| 3 | As a customer, I want to register an account. | Could have | 3 days |
| 4 | As a customer I want a choice of delivery slots so that I can arrange my diary appropriately. | Should have | 5 days |
| 5 | 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. | Must have | 3 days |
| 6 | The system must be designed to handle increased traffic during peak periods without degradation in performance. | Should have | 7 days |
| 7 | As a customer, I want to enter separate delivery and invoice addresses so that I can receive bags when staying at a friend’s house. | Should have | 5 days |
| 8 | All user data, including personal information and payment details, must be encrypted to ensure the highest level of security. | Must have | 10 days |
| 9 | Maintain consistent branding elements and design across the website to reinforce their brand identity. | Must have | 5 days |
| 10 | 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. | Must have | 7 days |

### B2.2 Explanation about prioritising the requirements and justifications for the decisions made

In this section, there will be clarifications for the approach behind the prioritisations of the requirements.

|  |  |  |  |
| --- | --- | --- | --- |
| ID | High Level Requirements | MoSCoW Priority | Justification |
| 1 | As an Order Handling Clerk, I want to use the website to process telephone purchases, replacing the paper-based system. | Could have | The platform will still work without this feature, as it is only replacing a system, which can be already used. |
| 2 | As the Managing Director I want to be ensured that the site is Data Protection Act safe. | Must have | Without fulfilling this requirement, the platform would not comply with DPA, which can result in legal consequences, and also damage the reputation. |
| 3 | As a customer, I want to register an account. | Could have | Customers can still purchase goods without an account. |
| 4 | As a customer I want a choice of delivery slots so that I can arrange my diary appropriately. | Should have | Although this requirement does bring convenience for the customers, it is not necessary. |
| 5 | 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. | Must have | An essential functionality which must be implemented in the e-commerce website. It enhances user experience by providing flexibility. |
| 6 | The system must be designed to handle increased traffic during peak periods without degradation in performance. | Should have | Improving the performance for occasional peak periods can be good, however, the platform can still work without the upgrade. |
| 7 | As a customer, I want to enter separate delivery and invoice addresses so that I can receive bags when staying at a friend’s house. | Should have | This is a quality-of-life feature that the customers can appreciate, but it is not necessary. |
| 8 | All user data, including personal information and payment details, must be encrypted to ensure the highest level of security. | Must have | Data privacy is important, if gaining customers’ trust is the goal. The platform would also comply with legal requirements related to data protection. |
| 9 | Maintain consistent branding elements and design across the website to reinforce their brand identity. | Must have | The goal of the company is the expand its reach, and having a consistent branding is key to achieve this goal. |
| 10 | 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. | Must have | This requirement must be fulfilled, as it is a legal obligation. Failure to comply will result in legal consequences. |

# Section C – Legal, Social, Ethical, and Professional issues

## C1. Management summary identifying LSEPI

### C1.1 Legal issues

Legal issues in computer science refers to the possible legal consequences of using computer software and hardware. Information security, privacy, and intellectual property are all frequently addressed by these. Given the ongoing development of digital technologies and the legal frameworks that support them, this is an area of law that is changing constantly (StudySmarter, n.d.).

One legal issue that Green Groceries personnel would need to consider is data privacy. As the company collects and stores customer data such as names, addresses, phone numbers, and payment information for providing services, they have a legal responsibility to protect this information from unauthorized access, use, or disclosure.

### C1.2 Social issues

Social issues in information technology are defined as anything related to the use and development of technology that negatively affects the health or well-being of an individual, a group of individuals, or society at large (Solix, n.d.).

According to the company, they had experienced challenges while working on waterfall project, therefore there was a decision to change to Agile, specifically Scrum. Although they are collaborating with System Concepts to help create a platform, the personnel of the company can still have doubts about the new direction, which may impact the performance of the overall project.

### C1.3 Ethical issues

Ethical issues in computer science are the moral dilemmas that arise from using technology. These include concerns about privacy, security, fairness, and how technology affects people's lives. Using digital technology and computer resources in a manner that upholds the rights of others is known as ethical computer use. Computer ethics can act as a moral compass for regulating conduct about the usage of the Internet and computer (StudySmarter, n.d.).

In ecommerce, ethical considerations arise regarding the collection and use of customers' personal data. Customers should provide explicit consent for the use of their data and the company must communicate clearly about its intended use. The company has a responsibility to safeguard customer data through robust security measures, such as encryption and regular audits. Providing clear privacy policies, options for customers to review or update their information, and the ability to opt out of marketing communications are the keys for transparency. These practices ensure that customer privacy is respected and trust is maintained in online transactions.

### C1.4 Professional issues

Professional issues refer to a wide range of difficulties, considerations, and obligations that professionals in face during the course of their careers. These problems can occur in a variety of settings, from specific assignments and projects to broader organizational dynamics. Professionals have to deal with these issues while maintaining moral principles, fulfilling their professional duties, and making constructive contributions to their workplaces and the world at large (Finerman, 1975).

Miscommunication can be a significant professional issue in the collaboration between Green Groceries and System Concepts. For example, if there is a lack of clarity or misunderstanding regarding project requirements, timelines, or expectations between the two sides, it could lead to delays, or even project failure. Addressing miscommunication promptly and proactively is essential to ensure the successful delivery of the online platform and maintain positive working relationships between all parties involved.

## C2. Management summary outlining the purpose of a professional body

According to Science Council (2017), a professional body is an association of individuals engaged in a particular profession or occupation, whereby the organisation oversees the knowledge, skills, conduct, and practices of its members. A leading professional body that represents those working IT is the British Computer Society (BCS).

The BCS has the Code of Conduct to establish a set of shared principles and standards that every BCS member adheres to. These principles serve as a foundation for building a responsible computing profession characterized by competence, integrity, and diversity. By signing up to the code, members demonstrate their commitment to working in the public interest and accepting their professional duty. The code aims to uphold the reputation of the profession, promote responsible computing practices, and ensure that BCS members contribute positively to society (BCS, n.d.). There are exactly four Codes of Conduct.

1. “You make IT for everyone”

In the pursuit of their profession, IT professionals must prioritize public health, privacy, security, and environmental wellbeing. They should respect the rights of others and conduct their activities without discrimination based on various factors such as sex, sexual orientation, race, religion, or disability. Furthermore, they should strive to ensure equal access to IT benefits for all sectors of society and actively promote inclusivity whenever possible.

1. “Show what you know, learn what you don’t”

In the domain of professional competence and integrity, IT professionals are dedicated to upholding ethical standards and ensuring their work aligns with their expertise. They commit to undertaking only tasks within their professional competence, refraining from claiming expertise they lack. Continuously honing their skills and knowledge, they stay updated on technological advancements, procedures, and standards relevant to their field. Moreover, they diligently familiarize themselves with pertinent legislation, ensuring compliance in their professional duties. Embracing diversity of thought, they value alternative viewpoints and offer and accept honest critiques. They prioritize preventing harm to individuals, property, reputation, or employment through conscientious actions. Furthermore, they reject any form of bribery or unethical inducement, maintaining the integrity of their profession and promoting ethical conduct within the IT community.

1. “Respect the organisation or individual you work for”

In fulfilling their duty to relevant authority, IT professionals commit to carrying out their responsibilities with care and diligence, adhering to the requirements set forth by the relevant authority while exercising professional judgment. They strive to avoid conflicts of interest and accept accountability for their work and that of their colleagues under their supervision. They maintain confidentiality, refraining from disclosing confidential information for personal gain or benefitting third parties without authorization. Moreover, they uphold transparency and honesty in their interactions, refraining from misrepresenting information or exploiting others' lack of knowledge or experience.

1. “Keep IT real. Keep IT professional. Pass IT on”

As a BCS member, IT professionals serve as ambassadors for the industry, promoting it positively and supporting colleagues in their personal and professional growth. They uphold the reputation of the profession by avoiding actions that could bring it into disrepute and actively work to improve professional standards. Additionally, they uphold the reputation of BCS, The Chartered Institute for IT, and maintain integrity and respect in their professional relationships with members of BCS and other professions. Moreover, they actively encourage and support fellow members in their professional development.

# Conclusion

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