

**COMP1787**

**REQUIREMENT MANAGEMENT REPORT**

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**Assignment due: 09/01/2021** **Assignment submitted: 26/04/2021**

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# **Section A**

**Business Overview:**

In 2008, Sarah started making jewelry and glass jewelry for friends, but soon realized the demand for her products was quite high so Sarah opened the company "A Touch of Glass by Sarah". Sarah's friend helped her create a Facebook account for the company.

2 years later, Sarah hired 3 glassblowers to produce her designs and Sarah decided to start selling through popular peer-to-peer e-Commerce sites allowing users to market and sell.

In 2016, Sarah's company has grown into a highly profitable small business, employing an experienced team. Teams at TOG are able to contact buyers through third-party systems and communicate with customers through social media, although these systems have some limitations. In addition, the company also manages products designed specifically for customers such as wine glasses and flower vases.

**Problem:**

* Due to large quantity from customers, it makes it difficult to manage orders.
* Due to the management of third parties, it makes it difficult to manage the information of users, businesses, and products.
* The interaction and exchange of opinions between marketers and users is limited.

## **Agile**

Agile is a flexible software development method to get products into the hands of users as quickly as possible. Besides, TOG's website will satisfy all the needs of customers. Even the Agile model can allow Sarah to change the request late. This model can flexibly change direction as required by Sarah, change technology, change the orientation of the web of electronic sales. In particular, when applying the Agile model, we can do small segments of the project (called Iteration or Sprint) which usually last from 1 week to 4 weeks. For each of these segments, the team will do all the necessary work like analyzing requirements, planning specific projects, designing, implementing code according to the set design, testing.

**Some advantages of Agile:**

* With Agile, TOG can preview each segment of the project during development as Agile develops the software in an incremental direction, allowing everyone to see each completed segment. Sarah can then follow the project thoroughly and change requirements with this website at any time.
* Agile divides the TOG project into small parts and assigns each person. Every day, everyone has to meet for a short time to discuss progress and solve any arising problems to ensure compliance with the process project development.

**Some disadvantages of Agile:**

* Fragmented output: TOG corporate commercial website teams design the functions, work on each part in different cycles, the complete output becomes very discrete instead of cohesive.
* The increasing number of employees in the TOG project will be difficult to control. However, we can also regularly test the programmer's code and index capabilities to mitigate this drawback.

**Why use Agile for case study?**

Based on the analysis of Agile method above, I think TOG company should use Agile method in this e-commerce website project. Because, Agile is really suitable for projects that do not have specific requirements on the client side. Furthermore, the commercial website system of TOG company may change requirements, technology, or orientation at any time, so Agile is quite suitable for those changing situations. In addition, the development team can also monitor the progress, can fix bugs quickly based on distributing a large system into small parts. From there, the development team was easy to manage the system and everyone had to meet regularly to analyze the requirements, make a specific plan for the next sprint, and discuss the progress of each employee.

## **Scrum**

Scrum is a regulatory development software based on the Agile methodology. To be successful with the Scrum model, Sarah needs a Scrum Master to direct the project. After that, everyone needs to define the Product Backlog (this is the responsibility of the Product Owner). Next, the Scrum team will estimate and sort the workload based on the Product Backlog list, from there select Sarah's list of requirements to form the Sprint Backlog, and each team member is assigned small work in the Sprint Backlog (completed in a few days). During the Sprint, it is necessary to have a Daily Scrum Meeting and each meeting is timed in about 15 minutes to interact with issues occurring during the Sprint. Ultimately, when Sarah's requirements are fulfilled it means that a Sprint is complete. At this point we need to conduct a Sprint Review Meeting to see how the TOG website is performing and make improvements.

**Some advantages of Scrum:**

* One person can do many things. For example, on the TOG website, developers can experiment as well.
* During the implementation, there are developers of TOG who can promptly correct if the website has data errors, or is not compatible with the browser.
* Sarah can view web pages quickly. From there, Sarah can make additional changes to the functionality or the look.

**Some disadvantages of Scrum:**

* Difficulty in determining the skill level of team members participating in the project.
* Lack of a professional Product Owner to direct, plan projects, select features, develop website as required by Sarah, and who will also be responsible for solving problems for customers in the future.
* Lack of a professional Scrum Master to lead the project process.

**Why use Scrum for case study?**

Although the Scrum model is all based on the Agile method, it breaks down large and complex tasks into small chunks and completes a given process. However, Scrum also has an advantage in TOG project because Scrum teams will be given a priority list of work to be completed, fully functional. Each team meeting creates a finished product ready to hand over to Sarah and project management to discuss, comment on and give direction on how to optimize the process and move on to the next sprint. according to the. Therefore, the optimal Scrum model in solving the problem of interaction and exchange of opinions between marketers and users has many limitations faced by TOG Company. Furthermore, in a Scrum team, there are at least 3 elements of work content processing: Product Owner (PO), the Scrum Master and the development team. They understand their duties and responsibilities in the TOG project together to improve the balance of commercial website system. Hence, Scrum will be better suited for project development goals like this TOG ecommerce website.

# **Section B**

# **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.**

After reviewing Sarah's request for e-commerce website TOG, I have below 4 requests that I feel do not match the system of the current website.

**The site must load quickly:** This is not strictly necessary as it will not affect the quality of the website much. While coding the website, Sarah can ask the developer to optimize and reduce the size of the product images put into the website so that the website does not suffer from slow loading and server lag. From there, we can save company resources and use them for other things we need to do.

**As the Glassblower Artist I like the idea of having an e-commerce website, but I don’t want tours of the facility and I don’t want to teach people how to do it. Do not put that part in the system – tell them it cannot be done in time:** For this glassblower's request, I fully agree with them that glassblowing lessons should not be included this system. Because, no one opens and sells glass works, but has to teach customers how to create it. Moreover, if TOG is growing and taking the first steps towards an e-commerce website, it is necessary to avoid competitors in the same industry.

**As a Customer I would like to personalize and create my own designs:** I feel that this requirement is not really relevant and necessary for the site at the moment. The client can create his own design which will lead to TOG's design techniques being exposed if the customer is detrimental to the website. Second, it cannot be controlled if too many designs are created. This results in a slow website system, and consumes company resources.

**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:** Because the TOG website will fulfill the "Website must be safe and secure" request given by Sarah. We will use HTTPS secured over secure transport layer protocols including encryption and integrity of customer data when registering / logging into the TOG website. Hence, I don't think we need to establish any extra level of website security under the Data Protection Act.

# **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.**

|  |  |  |
| --- | --- | --- |
| **ID** | **Requirements** | **Explain** |
| **1** | As customers, they can login / register to the website. The website system needs to have high security of user accounts. The login page for the client can be linked to the social media. | This is really necessary with a commercial website because no one wants their account to be exposed to important information such as bank account number, phone number, email, or home address.  Activating login using social networks is quite popular on the market today. Thanks to these social networking sites, friends and relatives will pay attention to the TOG company's website to increase influence on the market. |
| **2** | As the customer, the website must allow customers to search and browse various products, whether they are logged in or not. The system will display potential items for customers based on their recent purchase or search history (personalization). | This is a very important function in a commercial website because when a visitor queries a truly optimized, custom internal site, they will be more than happy to discover the content or product, they don't even know they need it. Products and relevant content, the highest-grossing items displayed, the customer will be interested in and foster interaction between the customer and the TOG corporate website. From there, the website will increase a large amount of revenue because the TOG website satisfies the needs of searching for their products. |
| **3** | As a Customer I want to be able to change my account details so that my most up to date details are recorded. | This is suitable for customers who mistakenly enter the wrong home address name, or bank account number. Customers will easily change their information to avoid the wrong delivery address or incorrect bank account number (unable to pay the order). |
| **4** | 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. | This functionality is recommended for the website as not all customers need to see marketing announcements. Furthermore, spam or marketing communications that show up over and over again will make customers angry and discouraged, and they will turn to competing companies' websites. |
| **5** | As a Customer I want a choice of delivery slots so that I can arrange my diary appropriately. | Choosing the time of delivery will help customers not have to worry about when their purchased products will be delivered, or avoid calls from the delivery staff. |
| **6** | 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. | This is an extremely necessary function that every website needs to have. With this shopping cart function, customers can optionally add to the basket list of products that match their requirements. Moreover, this shopping cart function will help customers easily return the goods by clicking the "delete" button and the product will be cancel. This helps customers to limit phone calls, emails or text messages to TOG website to request to cancel the product. |
| **7** | As the Operations Director I want to gather statistics on item popularity | Gather statistics on popularity, top-selling products, slow-selling items, so that the company has a strategy to deploy slow-selling items. For example, TOG company may conduct discounts and display slow-selling products on the homepage of the website. This will cause customers to start paying attention to these items. For best-selling products, from the data collected by Operations Director, TOG company will produce more to meet customer needs. |
| **8** | As a Marketing Manager, I want a promotion page so that we can keep our customers informed about current deals. In addition, I would like to be able to send discount codes via email of VIP customers. | Advertising page will include newly launched products, best-selling products of the company TOG to attract the attention of customers. VIP customers will receive preferential treatment through discount codes. The purpose of this is to retain customers longer with the TOG website. Moreover, the discount codes will help VIP customers have more excitement to buy. |

# **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.**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Requirements** | **Priority** | **Days** |
| **1** | As customers, they can login / register to the website. The website system needs to have high security of user accounts. The login page for the client can be linked to the social media. | **M** | **3** |
| **2** | As the customer, the website must allow customers to search and browse various products, whether they are logged in or not. The system will display potential items for customers based on their recent purchase or search history (personalization). | **M** | **5** |
| **3** | 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. | **M** | **3** |
| **4** | As a Customer I want to be able to change my account details so that my most up to date details are recorded. | **M** | **8** |
| **5** | As a Customer I want a choice of delivery slots so that I can arrange my diary appropriately. | **S** | **5** |
| **6** | 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. | **S** | **5** |
| **7** | As the Operations Director I want to gather statistics on item popularity. | **S** | **5** |
| **8** | As a Marketing Manager, I want a promotion page so that we can keep our customers informed about current deals. In addition, I would like to be able to send discount codes via email of VIP customers. | **C** | **2** |

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

|  |  |  |
| --- | --- | --- |
| **Priority** | **Requirements** | **Explain** |
| **M** | * As customers, they can login / register to the website. The website system needs to have high security of user accounts. The login page for the client can be linked to the social media. * As the customer, the website must allow customers to search and browse various products, whether they are logged in or not. The system will display potential items for customers based on their recent purchase or search history (personalization). * 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. * As a Customer I want to be able to change my account details so that my most up to date details are recorded. | I set these requirements to M because they are some of the basic requirements that every website wants to gain trust, satisfaction level of customer needs. Login / Register are two important functions that must be in an e-commerce website. It is used to manage customer account information, phone numbers, emails, user addresses and bank account numbers. With that information, the website will easily manage orders based on the phone number and address of the customer. In addition, the security level of the website is also very concerned by users because to avoid hackers taking away customers' account information and customers will be more secure if the website system is well secured. Moreover, customers can exchange goods on the website to help them not be bothered by calls, emails, and order closing messages. Not only that, the website can increase revenue if customers share the products of TOG website through social networking sites, but also this is very convenient for the face of TOG company. People will know TOG's website more, attracting more visitors through sharing on social networking sites. |
| **S** | * As a Customer I want a choice of delivery slots so that I can arrange my diary appropriately. * 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. * As the Operations Director I want to gather statistics on item popularity | These functions are classified as S (Should) by me because they are relatively necessary for the website but not so important. Allows customers to choose delivery locations suitable for their free time. Therefore, they can receive goods quickly and will reduce text messages, phone calls asking about delivery addresses or orders. The item popularity statistics should be included on the website as these are real numbers and those will influence the future direction and product of the TOG website. This will help Sarah and management know which products are selling well, so they will focus on developing these products. For products with low sales, the company will be able to come up with solutions such as product discounts and display on the website's homepage to attract customers with shocking prices. Sarah can also pause production of slow-selling items to optimize raw materials to focus on producing best-selling products. |
| **C** | * As a Marketing Manager, I want a promotion page so that we can keep our customers informed about current deals. In addition, I would like to be able to send discount codes via email of VIP customers. | Should deploy these functions to help customers have a more objective view of the website. For example, the website will prioritize displaying the company's promotional products, best-selling products, and newly launched products to attract shopping needs of customers. Moreover, for VIP customers who have been with TOG for about 1 year, there will be discount codes sent by email. This helps to increase the relationship between TOG and the customer. With the goal of helping customers to achieve the purpose of shopping and the TOG website can serve the visitors well, website personalization is a necessary option. This leads to better user retention and better word of mouth for your brand. |

# **Section C**

# **C1. TOG personnel need 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.**

Legal, social, ethical and professional issues (LSEPI) is one of the factors maintained and controlled by businesses (TOG companies) and the government.

Legal matters will be limited by the law, while social, ethical and professional issues will be strictly regulated by TOG, and will be responsible for complying with the rules to ensure communication. contact information. information and shopping activities of customers on TOG website.

**Legal:**

Spam and the Law: Spam is an unsolicited mass e-mail that the recipient has not requested to receive. Spam is also known for presenting potentially offensive content to users without identifying who received it. However, in some cases, the content may not be age appropriate or violate Vietnamese law.

Intellectual Property: Copyrights, Trademarks and Trade Secrets: Intellectual property law governs ideas and products of the mind including copyrights, trademarks of TOG company. This law will help the TOG commercial website protect intellectual property rights, as well as prevent infringement of the property of the company or others.

TOG's website is copyrighted to prevent unhealthy individuals from copying information, product images, program codes on the TOG website. In addition, if the TOG Website allows users to post product information or images, an agreement with the Terms of Use is required, which the user must submit before posting any content. This agreement must include statements stating that users are not authorized to post copyrighted material, as the site is not responsible for authenticating their content as original and the user will be solely responsible for any copyrighted material, any acts of appropriation, any action resulting from the client's post content. Because, if a user violates a copyright on the TOG Website, then their agreement to the Terms of Use may protect the TOG website.

**Society:**

Currently, TOG's commercial website is developing, customers will not need to wait for reply messages via facebook as before. In addition, customers can add or delete products at the website with the shopping cart function without having to receive spam messages for the purpose of canceling orders.

**Ethic:**

Ethics is a set of standards that governs behavior, establishing fundamental values ​​for responsible action and practice in a professional community. The website must state all possible situations in the privacy policy.

Ethical standards are generally agreed upon for Web professionals who have developed years of experience and many standards are inherited from other professions. Examples of ethical behavior towards TOG Corporate Web Experts include:

* Do not send spam or mass e-mail when the customer does not ask.
* Do not knowingly distribute malicious program code such as a virus.
* Be honest with customers and don't charge too high a fee for technical services they might not understand.

TOG transaction website must keep user information absolutely confidential, especially transactions related to bank accounts. In addition, the customer's account will be deleted in the database system after 6 months.

The TOG website can show a history of using detailed information about how user data (orders, transactions, product searches) is used on the Website.

**Professional:**

TOG Company guarantees 100% to customers about the fastest delivery possible, on time required by customers, no counterfeit goods, poor quality goods.

TOG's website will serve customers enthusiastically with a professional marketing team that will help customers find the right products for their needs, the newest and hottest products of the website.

# **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.**

As a specialized body, the British Computer Association (known as the BCS, Institute of Information Technology), is responsible for setting professional rules and standards that guide members to behave in specialized topics. It is expected that these rules and professional standards will be higher than those established by general law and that they will be enforced through disciplinary action that could result in expulsion from membership.

The members must exercise their own judgment (which should be made reasonable) to meet the requirements of the rule and seek advice if in doubt.

The BCS Code of Conduct enables TOG co-workers to thrive as professionals, ensuring that no employee is penalized for pointing out areas of interest or conflicts of interest.

**Community profit:**

**Example 1:** The TOG commerce website promotes access to the benefits of IT and seeks to foster inclusion of all sectors of society wherever opportunity is available.

Next, TOG Company is concerned with the legal rights of third parties such as protecting personally identifiable data to prevent theft or revealing the identity of customers or individuals in the company, and at the same time respect copyrights, patents and other intellectual property.

**Professional competence and integrity**

**Example 2:** TOG's commercial website commits to provide services as required but within the scope of TOG's capabilities to avoid affecting TOG's reputation when it fails to meet high requirements from customers.

TOG company members should understand and follow good practices outlined in the rules, standards, conventions or protocols relevant to their area of ​​expertise.

The laws applicable to the performance of professional responsibility for each employee in the TOG may include laws applicable to the geographic area in which each TOG employee is performing his or her professional responsibility.

The individuals in TOG company will hone the necessary skills, constantly develop professional knowledge, maintain a sense of technology development to serve customers in the best and most conscientious way possible.

**Obligations to Related Agencies**

**Example 3:** Each individual in TOG must have responsibility in work carefully avoiding mistakes, working diligently to support colleagues in the company.

Minimize situations of work conflict between employees in the TOG.

Do not allow any employee to misrepresent or conceal information about the execution of purchases and sales of products, systems or services on the TOG website.

**Professional obligation**

**Example 4:** As a member of the BCS as well as of the TOG company, colleagues in the company are responsible for sharing IT knowledge and understanding with each other when necessary, and at the same time encouraging and assisting members to deliver develop their careers.

Each TOG member accepts, fulfills his or her individual obligations to maintain his career and does not take any action that would make the job worse.

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