**Software requirements specification review**  Team Echo

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| **Requirement** | **Defect** | **Effect** | **Severity** |
| Cover Page | 2/12/2015 – In the future; doesn’t exist yet. That’s the American date. | Adds confusion to the start of the document. | Major |
| Revision History / Document Approval | Despite the document being listed as V1.1, there is no record of a V1.0—or even V1.1—in the “Revision History” table, nor do there accompany these any entries for “Description”, “Author”, “Comments”. | How is it possible for a developer to confirm that the present document is the most up to date if there is no evidence of version history? | Critical |
| Contents Page | Not clearly numbered. The Table of Contents references “2.2 Product Functions”; “2.3 User Characteristics”; and “2.4 General Constraints” as being on page 3. These sections do not feature on page 3 or anywhere in the document, and it may be the case that they do not fit in the given space at all, which could have the effect of changing the pagination for the rest of the document by shifting the other sections down. | Document is not consistent. The referencing for the document is incorrect. This is critical as it will cause defects when creating the system. | Critical |
| Contents Page | The contents page numbering does not prove similar for all members of the committee. | This led to confusion as different documents within the group had very different layouts, providing page references for talking points to become challenging to find. | Critical |
| Contents Page | The Table of Contents specifies “1.3 Definitions, Acronyms, and Abbreviations” for page 3. Page 3 specifies “Definitions, Acronyms, and Abbreviations” after 1.4 instead of 1.3, inconsistently. | This makes the document inconsistent and makes it unclear for a developer if something has been left out. | Critical |
| Contents Page | Numbering off. | This makes the document inconsistent and makes it unclear for a developer if something has been left out. | Critical |
| Contents Page | Add “page” to after Navigation, Home, and Registration. | This makes it clearer for the developer as it provides a good reference to the page of description. | Major |
| Contents Page | The “Non-Functional Requirements” has subsections in the document proper—3.2.1 to 3.25—that are not listed on the contents. | This makes the document inconsistent and makes it unclear for a developer if something has been left out. | Critical |
| Contents Page | “In order to”. The sentence wording here does not clarify whether the requirements are listed in order—i.e. in logical sequence—so that design can be enabled; or if they are listed simply to enable. | This is not clear and needs to be looked at again and corrected. | Minor |
| Contents Page | Ambiguity; intended; doesn’t exclude others. Who are “representatives” of Pizza IT and the Firebrand Company? Perhaps this should be clarified. | This is not clear and needs to be looked at again and corrected with greater clarification. | Minor |
| Contents Page | “The company targets Computing students at QUB.” This contravenes the “necessary” requirement if it is a wish list; or, alternatively, it is not feasible if it is a testing requirement—we cannot assess concretely the success of how the website targets those students. | This can’t be tested. Needs to be made clearer as to what is desired. | Minor |
| 1.2 | “The company targets Computing students at QUB.” Myriad issues here: QUB is an acronym that has not been expanded hitherto, contravening the review checklist. Secondly, it is not feasible to test the line. | Can’t test this. Acronym is not listed and therefore equates to lacking of specific description of knowledge. | Major |
| 1.4 | Acronyms in the doc are missing. | Could be talking in acronyms and the readers not have any idea what they mean. | Major |
| 1.4 | Secondly, it is not feasible to test the line 1.3 misnumbered as 1.4. |  |  |
| 1.4 | 1.3 misnumbered as 1.4. | This makes the document inconsistent and makes it unclear for a developer if something has been left out. | Major |
| 2.1 | What other fast food websites? What do we assume? Pizza fast food websites are very different from general sites because of customization options. Ambiguous. Needs more detail and clarification; there’s too many. There’s no paradigm. | Ambiguous here and needs more description in terms of examples of websites to refer to. Different people have different examples which could ultimately lead to very different developements for the system. | Critical |
| 2.1 | Contravenes the implementation-free rule: we cannot test that payment is made when the customer calls to collect. | This is untestable code. Therefore could lead to problems. | Major |
| 2.2-2.4 | The contents describes 2.2-2.4 being present. They are missing. | This could be taken as missing information that could be very important. Will lead to wrong design. | Critical |
| 4.1.1 | Logo detail is unclear. What is the logo? Where does it go? | This will could lead to the logo being placed in the wrong place or the wrong logo altogether. | Major |
| Section 3.1 | Incorrectly numbered section | This will lead to the information being read in the wrong way, or assumption that information is missing. | Critical |
| Functional Requirements | Sections are not numbered like others e.g. 3.1, 3.2, 3.3 | Could possibly lead to information being read incorrectly. | Minor |
| 4.1.3 | What is appropriate Validation? | Untestable code – Ambiguous. Needs to be more specific. | Major |
| 4.1.3 | ‘may’ have Validation | Ambiguous – needs to be definite. Untestable. | Major |
| 4.1.3 | What is ‘user’ input? | Ambiguous – needs to be described. Untestable. | Major |
| 4.1.4 | Page ‘may’ have a title | Ambiguous – needs to be definite. Untestable. | Major |
| 4.1.4 | What ‘title’ is to be used? | Could lead to the wrong page being used as there is no title. | Major |
| 4.1.5 | Inconsistency with page titles. Chiefly Order and Receipt and Login. | Pages could be mixed up and cause problems down the line. | Major |
| 4.1.5 | Ambiguous: “My Account - rest password” | Is this name correct? Could lead to problems. | Major |
| 4.1.6 | Order Pizza page wrongly named | Could cause confusion if this is another page that was not mentioned. | Major |
| 4.1.7 | ‘Common navigation area’? | Ambiguous: what is this? Where does it go? Untestable. | Critical |
| 4.1.8 | Not atomic – needs split up | Information is not clear and concise. Could lead to mistakes. | Minor |
| 4.1.8 | Security issue, conflict with another requirement | “Order” page should only be available if user logged in; direct conflict with what came previously. Will cause web pages to be accessed that are not designed to be accessed from a certain location. | Critical |
| 4.1.9 | What is the ‘log page’? | Could be taken as a new page that has not been mentioned. | Major |
| 4.1.9 | What is the ‘register’ page? | Could be taken as a new page that has not been mentioned. |  |
| 4.1.10 | “directly navigate to the Manage page.” The Manage page does not exist in the document proper nor in the contents. | There is no information regarding the ‘Manage page’. Is there missing information? | Critical |
| 4.1.10 | Not atomic; the requirement starting “In addition” should be a separate requirement | Information is not clear and concise to read. Could lead to mistakes. | Major |
| 4.1.10 | Where do you log out? | Could lead to the logout information being incorrectly positioned. | Major |
| 4.1.11 | Very likely a misspelling here, or at the very least lack of atomicity by virtue of contradiction. Forgot password is said only to be directly accessible from Logout page. No logout page is mentioned in the contents or spec itself. Moreover, it contradicts the requirement in Login page below which is supposed to include direct link to FP. | This could potentially cause the developers to create a redundant page. Down the line it could cause confusion between members of the development team and also the development team and the client. | Critical |
| 4.1.11 | “may” has been frowned on before and should be clarified with specifics or with the word “must”. Context gives an impression of the correct reading—but it’s not worth the risk. | The word “may” is ambiguous. Need a definite direction. | Minor |
| 4.1.12 | Please give what constitutes valid username and password here. Or reference to the valid username section and valid password section. | Reference point 4.1.13 | Minor |
|  | Navigation has a colon of a different font and size. This occurs throughout document. |  | Don’t know what this references |
| 4.1.13 | More detail needed for characters: text; alphanumeric. Specify. | Will not cause any issue down the line. May not be needed. | Minor |
|  | Need maximum length on password. | Can cause serious inconsistency with the login. | Major |
| 4.1.14 | “Register” should be replaced with “Registration” to marry with the subsequent subheading and references in the rest of the doc, specifically 4.1.5 which also reads “Registration.” | Will lead to inconsistency and confusion during the development. | Critical |
| 4.1.14 | See contradiction in 4.1.11 | Will cause confusion and problems down the line. | Critical |
| 4.1.15 | Incorrect: “The system shall enable registered users to register” does not make sense. Perhaps it intends to say “unregistered” users. | Probably a typo but needs to be clarified. | Major |
| 4.1.15 | Appropriate error messages and validation should be shown to the user if required. | Untestable we don’t know what the error message should be or what the validation is. | Major |
| 4.1.15 | First name and last name needed—as separate sections. | Will make it easier to record and search a database | Major |
| 4.1.15 | Completely untestable. | Already stated in 73. | Major |
| 4.1.15 | What is the error message; validation is completely untestable: not quantifiable. | Untestable. | Major |
| 4.1.15 | Necessary requirement violated: clearance given for two separate email addresses, when only a valid unique should suffice. Possible contradiction afterwards if the mistake survives. | This is unclear why would you need two email addresses for the website? | Critical |
| 4.1.16 | Appropriate message”. WHAT IS APPROPRIATE? | Unclear is not testable. | Major |
| 4.1.17 | “including” doesn’t clarify parameters. Does it mean “limited to”? or not? |  | Major |
| 4.1.18 | Contradicts number 4.1.17—links to Registration and Contact on 17 but nothing about Login. Which of the two pages do they want. | Does they want links to all three pages, if not which of the two? Will cause inconsistency between the client expectations and the developers output. | Critical |
| 4.1.19 | Is the textual information on the company something we should be investigating ourselves? There’s repetition there, you see, so we want to know if we can question that—it negates the whole purpose of the “About” page. But that’s conjectural. | Possible confusion in the development stage or in website navigation. | Major, possibly. |
| 4.1.20 | Should the address of the company be given here? Style, zoom, location. |  |  |
| 4.1.20 | Critically, there’s only one way to collect pizza. | Customer confusion over store location. | Critical |
| 4.1.20 | Is the link going to appear on this page or a new one; interactive or static? | Customer confusion over store location. | Critical |
| 4.1.20 | Perhaps the map would be worthwhile having on the Contact page, too. You would expect it. Please clarify. | Possible website navigation confusion. | Major |
| 4.1.21 | New tab/window—which one is it? |  | Major |
| 4.1.22 | After Hours? The system is supposed to be 24/7. What does After Hours mean here? | Customer confusion | Critical |
| 4.1.22 | Do we want a map here? We indicated above that this might be ideal. People need to know where this place is, or else the system is uncertain. | Website navigation confusion. | Critical |
| 4.1.23 | Unclear: user e-mail clients. A lot of people use online e-mail. When you hit a link and get Outlook client or something, fewer people use that, these days. It’s outdated. It should probably just be e-mail address to copy to e-mail client. It might be worth keeping in place, but students do not seem wont to use it. | Unwanted feature and unprofessional design | Critical |
| 4.1.24 | Can we test this? There are many different email clients. Untestable. | Untestable | Critical |
| 4.1.24 | States: “as soon as possible” is untestable. | This statement is untestable and too vague. | Critical |
| 4.1.24 | Appropriate validation is defined, but “including” should be replaced with “the following validation.” | Should be adjusted to appear more professional. Will not be problematic. | Minor |
| 4.1.24 | Poor security, even with the included validation. | The same password should not be sent out; the system itself should send out a random code. Once user types that in, the user should be prompted to change password. | Critical |
| Ordering Pizza Page | The subsections here all refer to the “Ordering page.” Afford it the full “Ordering Pizza page” title to keep the document consistent. | Adjusting this will help keep a consistent tone throughout the document. | Major |
| 4.1.26 | How the selection of toppings will work with the image selection from 4.1.25? | Whatever pizza you order, there’ll be an image. But if you add and take away toppings, the image will be the same—it’s hard to have that many permutations. Other websites have that functionality and you asked to be consistent with other fast food. | Major |
| 4.1.26 | First time we hear about shopping cart. That should be identified beforehand. Is it a page in and of itself, or is it a pop-up? | Without earlier mention of this functionality under the ‘web site pages’ section or other section, this function has appeared out of no-where and hasn’t been supplied with any information relating to its availability on web pages. More information will be required with regards to what web pages the shopping cart function extends to and if it does have its own web page for use. | Critical |
| 4.1.26 | It doesn’t state how the toppings are selected. Do you use a button, combo box, drop down box, image, etc. | Information on what functionality is required here in order to navigate the toppings for ordering. This information is required in order to continue with the design of this point. | Major |
| 4.1.26 | States: “a” shopping cart? Does this imply we have a remote one up at the top of the page, like a widget, or is it a separate page? | This further adds to the confusion of the use of the shopping cart within the website, like will it only be available as a function on some web pages? | Major |
| 4.1.27 | Items and pricing list doesn't exist. They should be listed properly. | This information is critical to completing this point within the document, as to accompany with the points 4.1.25 and 4.1.26; and to comply with the implementation of the shopping cart. | Critical |
| 4.1.27 | There’s implied here that we should know a lot of detail about the company, but we can’t. What happens if prices change? | Considering changes in pricing to the products offered on the website, and even products offered here, a function should be added and made available to the Pizza IT Company. | Major |
| 4.1.27 | If this is a pizza company, it could be anticipated that there are more extras than just toppings. | If the implication is that extras are just toppings, then the sentence is perhaps too prolix; there is no need to comment of extras—just say toppings. If you intend to add more extras, note that this will need to be expanded on or changed to provide its own requirement for extras. | Minor |
| 4.1.28 | Order Pizza page wrongly named. | Could cause confusion if this is another page that was not mentioned. | Major |
| 4.1.29 | Order Pizza page wrongly named. | Could cause confusion if this is another page that was not mentioned. | Major |
| 4.1.29 | How does the site handle removing items? | Unclear. Need further explanation on in what way the page removes items. Is it like Amazon where removing doesn’t affect the page beyond removing the item. | Major |
| 4.1.30 | Order Pizza page wrongly named. | Could cause confusion if this is another page that was not mentioned. | Major |
| 4.1.30 | “this should then direct the user to a page to schedule collection” | Ambiguous; it is uncertain what the writer intends. Is there a desire to reach the Schedule Page? That should be made clear. | Critical |
| 4.1.31 | Numbering error in requirement reference of 3.1.29. Should it be 4.1.32? | Directing to incorrect requirement makes reference redundant. | Critical |
| 4.1.31 | “20 minute collection” is impossible to test. | Can’t be done. Moreover, it is not within the tester’s remit to ensure that. | Critical |
| 4.1.32 | Not a feasible requirement. | Is this realistic in real-world? | Major |
| 4.1.32 | Gives min and max value. Not clear when contrasted with previous requirement. | Conflicting. Inconsistent to previous requirement. | Critical |
| 4.1.32 | Time discrepancy. +45 minutes. Inconsistency? | Conflicting. Inconsistent to previous requirement. | Critical |
| 4.1.32 | Is it realistic that a user can place a pizza order a week in advance of collection? | Realism of a user remembering an order placed up to 7 days ago. Do we get a reminder for “later” order? | Major |
|  | What’s a unique order reference? Is it alphanumeric? | Ambiguous: what is this? How does it link to a database? Does it? What does it do and how does it behave? | Critical |
| 4.1.34 | “Confirmed date and time”. | How is it confirmed? Unclear. | Critical |
| 4.1.35 | “appropriate message” should probably give specifics. | Ambiguous. What is appropriate? Unclear. | Critical |
| 4.1.35 | Requirement is too long. | More beneficial to have shorter, clearer requirements. | Minor |
| 4.1.35 | Should be asking for old password as a security measure. | Security issue. Could present serious flaws. | Critical |
| 4.1.35 | “Appropriate validation on size and type of password…” | Unclear. No telling of the validation for the new password. If the same as old password, there’s no existing rule that precludes that. | Major |
| 4.1.35 | “Appropriate validation on size and type of password…” | This is untestable code. Could lead to further problems. | Major |
| 4.1.35 | My Account – rest password. | Unclear. Does this imply there is a My Account and then a Rest Password bit? We noted that earlier, too. | Major |
| 4.1.35 | “appropriate message” | This is untestable code. Could lead to further problems. | Critical |
| 4.1.35 | “appropriate validation” | This is untestable code. Could lead to further problems. | Critical |
| 3.2.1 | 24/7 for the whole year. | Not feasible. Validation needed; checks and balances needed. What does available mean in this context? It’s a universal convention but we want details. | Major |
| 3.2.1 | “Shall not crash. “ | This is untestable code. Could lead to further problems. | Major |
| 3.2.2 | “The system should prevent unregistered users or registered and not logged in users from accessing restricted parts of the site.” | Needs rewritten. Grammar is problematic. Sentence structure is difficult. | Major |
| 3.2.2 | Lack of referencing. | For ease, refer back to the restricted sections. | Minor |
| 3.2.2 | “The system should prevent unregistered users or registered and not logged in users from accessing restricted parts of the site.” | More security needed; this seems scant—does security not pervade more parts of the site? | Critical |
| 3.2.2 | Whenever system is referred to at start, the jargon is in italics. Here, it isn’t. But is that correct? We need to consult a style guide. |  |  |
| 3.2.3 | “most common mobile devices” | Untestable | Major |
| 3.2.3 | “on desktop” | Too broad, ambiguous and untestable. | Major |
| 3.2.3 | Selection of browsers | Browsers are too specific; should be all Chrome and IE. | Major |
| 3.2.3 | IE 1 is too old. | Too expensive to target for. | Major |
| 3.2.3 | 7 inch Amazon Fire? | Strangely specific. Same for the rest. | Major |
| 3.2.3 | Despite listing Apple devices, Safari is not mentioned on the target browsers. | Safari is the primary browser for Apple products. It’s contradictory that it should work on Apple devices but not Safari. | Critical |
| 3.2.4 | “easy to use”; “fast transactions” | Ambiguous and untestable. | Major |
| 3.2.4 | 3.2.4 comes up twice. | Does not look professional. May cause confusion. | Minor |
| 3.2.5 | “without notable transaction delay” | Untestable. | Major |