HW 4 Critique

1   REQUIREMENTS

I will use this section to lay out the directions and focuses of the Homework assignment.

The focus of Homework 4 was "splitting (atomizing) requirement statements and organizing them in a logical hierarchy," according to the assignment sheet. This included some focal points such as using a strong, active voice, atomizing each statement to contain "one and only one item per requirement statement," and writing measurable requirements.

2   ERRORS

I will use this section to talk about what I did wrong in the Homework assignment.

> I retyped my original homework assignment in Section 3. I will reference this for my mistakes.

The first mistake I made in this assignment is switching back and forth between a strong, active voice (e.g., It **must** do this) and a passive voice (e.g., It **may** do this). For Question 1, I use passive voice in all the following sections:

- **1.1**
- **1.1.1**
- **1.1.2**

I also use a passive voice for the **Accuracy** and **Expandability** sections of Question 2.

Another set of errors that I made was not fully atomizing each requirement statement. In Question 1, section **1.1.3** has a single requirement statement that could be split into multiple requirement statements. To be specific, the statement "name, office, user number, serial number, and types," should be expanded into five different requirement statements that each highlight one part of the singular statement. These would all fall under a section **1.1.3** that reads, "The query will report specific data," which would also include the current sections of **1.1.4** and **1.1.5** as subsets.

Using ambiguous statements or words, as I did in Question 2's **Accuracy** section, is another fault in my initial submission. The statement, "The system should *reliably* display the correct information," contains the word *reliably*, which I used to mean *always*. However, this use of language is unverifiable because reliably is not a word with an objective meaning. What one might mean to be reliable could be unreliable to another. This issue is coupled with the fact that the statement itself is not characteristic of a non-functional requirement. Currently, it's not a specific description that outlines *how* the system will operate. For example:

> The system shall support fifty concurrent users.

Finally, the last major mistake that I made was my labeling of the sections in Question 2. The style of labeling should match that of the style of labeling in Question 1. Instead of an outline-style hierarchy of points, I simply added titular-labels to each section. This is the simplest fix in which I must change **Usability**, **Accuracy**, and **Expandability** to **1**, **2**, and **3**.

3   ORIGINAL ASSIGNMENT

I will use this section to post my original assignment from last semester.

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1   QUESTION 1

1.1   THE SYSTEM MAY BE QUERIED.

1.1.1   The query may contain a user number

1.1.1.1   The query will report all equipment assigned to that user.

1.1.2   The query may contain a serial number.

1.1.2.1   The query will report the assignment for that computer.

1.1.3   The query will always show name, office, user number, serial number, and types.

1.1.4   If a user is not assigned, this is reported

1.1.5   If a computer is not assigned, this is reported

2   QUESTION 2

Usability
   The system must be able to be used by all employees with a user number.

Accuracy
   The system should reliably display the correct information, given a proper input.

Expandability
   The system should be able to add more features in the future.

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4   CORRECTED ASSIGNMENT

I will use this section to post my new, corrected assignment.

3   QUESTION 1

3.1   THE SYSTEM MAY BE QUERIED.

3.1.1   Users will be able to query the system with a user number.

3.1.1.1   The query will report all equipment assigned to *the user with that user number*.

3.1.2   Users will be able to query the system with a serial number.

3.1.2.1   The query will report the assignment for *the* computer *with that serial number*.

3.1.3   The query will return a report containing user data then computer data.

3.1.3.1   The query report will contain user's name.

3.1.3.2   The query report will contain the user's office.

3.1.3.3   The query report will contain the user's user number.

3.1.3.4   The query report will contain the information that a user is not assigned a computer if the user is not assigned a computer.

3.1.3.5   The query report will contain the serial numbers of each computer assigned to a user.

3.1.3.6   The query report will contain the type of computer assigned to a user.

3.1.3.7   The query report will contain the information that a computer is not assigned to a user if the computer is not assigned a user.

4   QUESTION 2

4.1   THE SYSTEM WILL RETURN QUERIES IN UNDER ONE SECOND.

4.2   THE SYSTEM'S DATABASE WILL BE ON COMPANY PREMISES.

4.3   THE SYSTEM WILL BE AVAILABLE TO ALL EMPLOYEES.