# Classification of user requirements as pragmatic quality related and hedonic quality related

Thank you for taking part in this research study. The purpose of the study is to identify the ease or difficulty of classifying user requirements.

Your answers will be treated confidentially. Do NOT write your name on this questionnaire, so that if your responses are published, they can never be linked to you personally. However, it will be necessary to discuss some of your answers with you; so, I will be collecting your e-mail address as an additional item, not on the questionnaire itself. Nevertheless, I will be the only one who will know the connection between your e-mail address and your answers.

Your participation in this study is voluntary. If at any time, you no longer wish to participate, just stop filling in the questionnaire and please return the questionnaire to me. Also, you do not have to answer any question that you are uncomfortable with.

When you fill out this questionnaire, think about your answers carefully and be as honest as you can. There are no right or wrong answers; this is not a test. Simply give your answers according to what you feel right now.

The study will take about one hour and consists of two parts: Part I comprises the main part of this research, namely the classification of user requirements and describing your expertise with respect to the topic of this research; Part II focuses on the experiences you had when you classified user requirements as part of this study.

## Part I: Classification of user requirements

This part asks you to classify each of some user requirements into those that address pragmatic quality, those that address hedonic quality, those that address neither, and those that are ambiguous. A user requirement that is addressing pragmatic quality is said to be *pragmatic*; a user requirement that is addressing hedonic quality is said to be *hedonic*; a user requirement that is addressing neither is said to be *neither;* anda user requirement that is lacking information that is necessary to clearly classify it as pragmatic or as hedonic is said to be *ambiguous*. In real life, in case of an ambiguous requirement, it would be necessary to talk with the users to get the disambiguating information.

Please classify each user requirement by placing “x” in exactly one of the columns in the MS Excel table that are labeled “pragmatic”, “hedonic”, “neither”, and “ambiguous”. If you classify a user requirement as “ambiguous”, please describe what about the user requirement makes it ambiguous in its “Comment” column in the MS Excel file.

Also, please describe any other issues you encountered when classifying a user requirement in its “Comment” column in the MS Excel file.

Please use the following definitions doing your classifications.

A user requirement of a product is related to **pragmatic** quality if any of the following three cases applies:

1. The requirement addresses the product’s relevant functionality to effectively achieving a particular task, i.e., the product’s utility, as it is perceived by the user.
2. The requirement addresses the product’s ways to efficiently access its functionality to effectively achieve a particular task, i.e., the product’s ease of use, as it is perceived by the user.
3. The requirement addresses the product’s overall usefulness, e.g., by aiming at product assessments such as structured, practical, predictable, or simple.

A user requirement is related to **hedonic** quality if any of the following two cases applies:

* 1. The requirement emphasizes the user’s psychological well-being through addressing one of the following nine criteria:
     + 1. Enablement of personal development,
       2. Identification,
       3. Symbolism,
       4. Attachment,
       5. Aesthetics,
       6. Luxuriousness,
       7. Trust,
       8. Physical comfort,
       9. Freedom from risk.
  2. The requirement addresses the product’s overall appeal, e.g., by aiming at hedonic product assessments such as captivating, stylish, beautiful, novel, premium, creative, original, innovative, presentable, integrating, exciting, amusing, thrilling, fun, enjoyable, interesting, pleasant, impressive, motivating, inventive, playful, competitive, or exploratory.

This overall appeal is manifested through emotional expressions such as experiencing fun, enjoyment, happiness, and pleasure.

In classifying a user requirement, always stick to only the explicit information provided by the requirement and do not try to over-interpret it by assigning implicit meaning to it.

If the requirement seems to be both pragmatic and hedonic, classify the requirement as “hedonic”, because in any case, each hedonic quality is built on a pragmatic quality.

If the requirement relates to inherent system properties, such as internal system functions, static properties of software and dynamic properties of a computer system, i.e., if the requirement does not include any keyword that indicates hedonic quality or pragmatic quality, classify the requirement as “neither”.

If the requirement has failed to be classified so far, because it is lacking information that is necessary to clearly classify it as pragmatic or as hedonic, classify the requirement as “ambiguous”.

Please mark your level of expertise in terms of the definitions of hedonic quality and pragmatic quality; please tick only one checkbox:

4: I have already classified user requirements as hedonic, pragmatic, neither, or ambiguous, according to the above definitions in a real project.

3: I understand the definitions of hedonic quality and pragmatic quality in a way that enables me to work with the definitions without the need to refer to other material; I can compare, describe, interpret, and state the definitions and their main ideas.

2: I recall the specific facts of the definitions of hedonic quality and pragmatic quality as provided above, i.e., the specific characteristics of the definitions and the keywords that point to hedonic qualities and to pragmatic qualities, but I am not able to understand and apply the specific facts.

1: I recall only the basic concepts of the definitions of hedonic quality and pragmatic quality as provided above, but I am not able to understand and apply them.

0: I did not know the definitions of pragmatic quality and hedonic quality before.

Please classify the requirements in Sheet 1 and Sheet 2 of the MS Excel table now.

## Part II: Information regarding your experience with the classification of user requirements

II.1: How easy or difficult was it for you to classify user requirements in the adapted user story template as pragmatic? Please tick the checkbox matching your response:

1 Very difficult  2 Difficult  3 Moderate  4 Easy  5 Very easy

II.2: Please describe in detail your experience during the classification of user requirements in the adapted user story template as pragmatic: What caused the easiness or difficulties during the classification?

Click here to enter text.

II.3: How easy or difficult was it for you to classify user requirements in the adapted user story template as hedonic? Please tick the checkbox matching your response:

1 Very difficult  2 Difficult  3 Moderate  4 Easy  5 Very easy

II.4: Please describe in detail your experience during the classification of user requirements in the adapted user story template as hedonic: What caused the easiness or difficulties during the classification?

Click here to enter text.

II.5: How easy or difficult was it for you to classify user requirements as ambiguous? Please tick the checkbox matching your response:

1 Very difficult  2 Difficult  3 Moderate  4 Easy  5 Very easy

II.6: Please describe in detail your experience during the classification of user requirements as ambiguous: What caused the easiness or difficulties during the classification?

Click here to enter text.