

USE CASE MODEL SURVEY

Introduction

Purpose of the system:

The system will give the opportunity of defining custom measurement scales and use them when defining a new metric. In addition, it will be possible to define a metric as a combination of mathematical operations on an input variable or as a combination of operations on one (or more) existing metrics, using a wider set of operations.

Survey Description

Summary of actors

1. User
2. MMDM
3. MetricOwner

Summary of use cases

1. Add collected data to simple metric
2. Create metric satisfying condition
3. Create complex metric
4. Create measurement scale
5. Create range of values
6. Measurement scale editing
7. Range of values editing
8. Metric satisfying condition editing
9. Complex metric editing

Use-Case-Model Hierarchy

The packages in the model, representing a hierarchy are:

- Complex metric creation
- Data collection
- Interpretation model
- Measurement scale creation

Actors

1. **User:**
Generic user of the system. They have access to common parts of the system. They represent the users of the system until they acquire a specific role.
2. **MMDM:**
The Measurement Model Design Manager. They are the users assigned to a Goal as manager of the Metric. They can establish a connection between metric and questions and also create/edit the satisfying condition for the metric.
3. **MetricOwner:**
The user who created a metric. They become MetricOwner from User after creating the metric. They can also edit their metrics.

Use Cases

Name and brief description of each use case:

1. **Add collected data to simple metric:**
This use case represents the process of adding collected data to defined metrics linked and approved to questions. It allows the user to choose the metric to which add collected data and let the user insert data values. The system checks input validity and save the measurement.
2. **Create metric satisfying condition:**
This use case represents the process of creation of a satisfying condition associated to a metric (so, to one or more questions related to one or more goals).
3. **Create complex metric:**
This use case represents the process of creating a new complex metric by any user logged in the system. The user can choose between creating a simple metric or a combination of one (or more) metric(s) using a set of operations. User has to specify a metric's formula complying with a given syntax.
4. **Create measurement scale:**
This use case represents the creation process for a new measurement scale by any user logged in the system. The user chooses the measurement scale parameters and submits the request to the system. The system checks that all the data have been filled and processes the request.
5. **Create range of values:**
This use case represents the creation process for a new range of values by any user logged in the system. The user chooses the range of values parameters and submits the request to the

system. The system validates the data and processes the request.

6. **Measurement scale editing:**

This use case describes the process of editing of an existing measurement scale. The MMDM selects a measurement scale, modifies it and saves it only if it has not been linked to a metric.

7. **Range of values editing:**

This use case describes the process of editing of an existing range of values. The user selects a range of values, modifies it and save the changes only the range of values has not been linked to a measurement scale.

8. **Metric satisfying condition editing:**

This use case describes the editing process of an existing metric satisfying condition. The user selects a satisfying condition, modifies it accordingly to the constraints imposed by the metric to which it has been linked and save the changes.

9. **Complex metric editing:**

This use case describes the editing process of a complex metric. It enables the user to change the specifications for a complex metric after creating it.

Enclosures

