**TG function scoring method**

**Classification**

the TG function, after assessing an input image, will return a set of strings naming the detected features. The 'golden' set of words for the same picture are being compared, by presence. The comparison takes under account that there is an assurance that overlaying categories are resolved prior to the test (e.g. pants and dress can't appear in the same set per image).

* **Positive classification** (PC) – meaning the same 'words' appear in two sets.
* **Negative classification** (NC) – meaning the TGfunction set words doesn't contain a 'word' that exists in the 'golden' set.
* **Positive wrong classification** (PWC) – meaning the TGfunction gave a 'word' that does not exist in the 'golden' set of words.

The scoring of this section is generally weighted (W vectors) but till a weighted influence will be issued, it is generally a vector of ones (still incorporated in the scoring formula):

(N stands for number of elements)

**Results ranking / order**

The order of the result is directly affected by the FP distancing method. The results are images, and will be referred as exact matches or not (binary) of the golden results images set.

**Correct order** (CO) – comparing the order of a resulted image that exist in the 'golden' image set, and appears by the same order of flush but not at the same spot, and weighted sum by its distance from its local set location – e.g. if an image is ordered after an image that was before it in the 'golden' set, it gets the weight of 1, if it is after it but further by x wrong images (be it non-existent in the 'golden' set or wrongly ordered images) it will be weighted down (as shown below).

**Existing but not in correct order** (NCO) – the sum of calculated x images away from last ordered image in results set, vs. its distance y from that same image in the 'golden' images set.

**Non existing** (NE) – the sum of 'golden' images which does not exist in the result images set.

The scoring of this section is generally weighted by distance (images as instances) and the missing images are fully weighted (full negative effect):

X is an image of result set, G is an image of 'golden' set. X is an index of last ordered image in results set.

The above gives us two scoring results. It is possible to incorporate the two into one (eather by averaging, weighted average, engineered average ore other methods…. TBD