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A modified framework for labeling images based on human computation and robust technique

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Abstract: Huge amount of information is being posted on the web on daily basis. Users need to be provided with tools to enable them to search for this vast amount of information. Information Retrieval systems have been designed and developed trying to help users to locate their information of interests. The web contains different kinds of information. Such as, text, audio, video and other multimedia objects. Among all of those data types, the text is the only one that is processed and searched perfectly. Image is a multimedia object and the image searching and retrieving is a major challenge in the web search because the difficulty of defining the object(s) in each image and for other related issues. Before, the human computation technique is used to help labeling the images upon their objects, which is a very time consuming process. This research proposes a technique to determine all images in the web that looks alike to an already labeled image and then assign them the same label. Thereafter, the human computation techniques will be applied only to one of these similar images instead of applying the same computation to all of those images. This way we are minimizing the needed computations.