Information Retrieval - Exercise Sheet 2

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Metrics

1. In the notes, we discussed how precision and recall can be used to measure the quality of an answer set. Suggest any other non user-oriented measure that could be used to measure the quality of the answer set. How would this measure interact with precision and recall.

2. The concepts of true positives (where the IR system returns a relevant document), true negatives (where the IR system doesn't return a non-relevant document), false positives (where the system returns a non-relevant document as relevant) and false negatives can be used to reason about IR metrics. Define recall and precision as functions of true positives, false positives etc.

3. The notion of accuracy is often used in machine learning domains and is defined as $(tp+tn)/(tp+tn+fp+fn)$. Why is this not a suitable measure in IR?