Information Retrieval Final Project Proposal

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Our proposal for our project is that we will have a Java/Apache search engine system running and serving up documents via RTFIDF and cosine similarity scoring on a front-end in combination with a python query intent analyzer that will identify the intent of a query and pass that back to the java to display what the current projected intent of the search is to the user as well as offer document/query recommendations based off the intent that was determined. Recommended queries will be clickable which will input them automatically into the search bar and search for them as well as recommended documents will also be clickable that will lead to the document view.

For the query intent - deep neural network implementation we will be training and testing against the BANKING dataset that can be found at this link <https://github.com/PolyAI-LDN/task-specific-datasets/blob/master/README.md>. We also plan to do multiple different activation methods for the neural network that we will be implementing via python. We will be using the ReLU and Leaky ReLU activation functions and will report on the specific differences between the two results in our paper.