Università della Svizzera italiana Facoltà di scienze informatiche

Information Retrieval Academic Year 2018-19

Course Project N.19: A Music Search Engine

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For this assignment you will work in groups of two people to implement a working prototype of an information retrieval system for a specific task and user needs. The goal of this assignment is to apply the concepts and tools you have learned in the class to a practical, real world, application.

Description

Music Search Engine: a user wants to search in a repository of music and songs like SoundCloud. He would like to submit some keywords to search for a music/song. You have to build a system that crawls Spotify for some very specific music topic (you may use any open source tool for this) and that allows user to search for them based on their textual description. The system has to provide an interface for searching, browsing, and presenting the results. Besides searching the documents by topic, the system should have the following search features:

Automatic Recommendation: In addition to the relevant search results pertaining to the
user query, the user should also be suggested "similar" songs based on, say, genre, title,
mood etc. The ordering among the recommended items are not important. However, you
should mention how did you arrive at the recommendations. For this purpose you can use
any open-source recommenders available.

Submission procedure and evaluation

An important step is the evaluation of your tool. Four students of the class, of your choice, will act as test users of your system and help you in evaluating your system from the point of view of the user experience. System evaluation (i.e. recall and precision) is not required. Please, coordinate with the other groups in order to meet the deadline.

You have to produce a report (max. 10 pages, including cover) of your work and of the evaluation. It will be a concise explanation of how you tackled the design and implementation of the system. The code of the project and the report need to be submitted via iCorsi by the end of the day on 6th December.