INB344 / INN344 : Assessment 2

Title: Search Engine Technology project
Brief description: Project to implement software using at least one technique based on search engine technology and evaluation of the technique implemented.
Individual or Group: Individual
Weight: 35%

The assessment will include the final product (software) as well as project milestones and presentation.

Software (20% to 60%) – Due October 24th 9am

Marking

Marks for the software will only be given for a fully functioning program. The amount of marks obtained will depend on the level of challenge the project presents. There are three levels: easy (worth 20%), medium (worth 40%) and standard (worth 60%). In order to avoid disappointment, and if you decide to develop a project not proposed in the examples, make sure to discuss your plan with the lecturers and tutors and they will let you know how much you can expect for this and if it is not maximal offer suggestions to increase the challenge. A project can be a component of a larger project developed in a different unit or in your company if you are working.

Core requirements

Functionality: the program should implement at least one technique used in the general architecture of search engines. It can be natural language processing, indexing, relevance measures, etc.

Evaluation: A strategy for evaluating the software must be defined and implemented. The program has to be delivered with evaluation tools and materials if they are developed specifically (interfaces for user studies, gold standards, measures against gold standards, etc.).

External libraries: you may use existing open source libraries as part of your software.

Programing language: you may choose to develop the software in any language you feel comfortable with.

Interface: depends on your project. However you are strongly encouraged to offer a web-based demonstration, as it will be a valuable element of your portfolio when you will look for a job.

Criteria

Functioning program
Level of challenge

Implementation of an evaluation strategy

Project Milestones

Project milestones are project activities led in groups during tutorial time of the lectures or workshops. If you are unable to attend (for valid reasons) contact your tutors in order to arrange alternatives. While they do generally require some preparation, this preparation is directly related to the final outcomes (software, presentation and report) and therefore is not considered as additional work. This should also help you manage and distribute the workload for this project across the last 4 weeks.

Walk through Design (5%) – August 28th /29th

This first walk through is to discuss the design of your projects in groups. You are expected to present the requirements and a general architecture of your project. You are also expected to comment or question on other projects presented in your group. This milestone is an opportunity to think about potential problems you might not have yet foreseen by exchanging ideas with your group.

Criteria: active participation

Project Pitch (5%) – September 18th/19th

For this milestone you will have to prepare 1 slide to "sell" your idea in 2 minutes maximum to the audience (the class). The first point you need to convince on is the significance of your project (e.g. why is it important? how many users are you expecting? Is there anything similar already existing?), that is why should we "invest in it"? The second point you need to argue is the amount of work required to develop the project (what are the main components and/or interface elements to develop? why is it not trivial? how much open source software will you reuse?), which roughly corresponds to the mark you are expecting for it.

The project pitch can be used to introduce the final presentation.

Criteria: quality and organization of the slide, timing of the talk, communication (presence, articulation, etc.)

Walk through Development (5%) – October 9th /10th

This second walk through is to discuss the development of your project in pairs or small groups. This implies that by this date the project is already in development, the architecture fully defined, and some components already implemented. You will present the details of your progress to your group and comment and suggest ideas on other projects in your group. If you are encountering some roadblocks or not sure what is the best course of action for a particular component, this is a great opportunity to bring it up. By this date you should be aware of all other projects in the class therefore you may chose to join a group where you have a particular interest to learn about a given project.

Criteria: active participation, progress in the development.

Report and presentation peer review (5%) – October 16th /17th

This group session is meant to prepare you for the final presentation and the final report, both by providing you with constructive feedback but also making you experience the review process. You must bring a draft of both (see final requirements below). In pairs or small group, you will exchange reports and produce a review against the criteria, and test-drive the presentations to each other and review against the criteria. The review must be constructive and not only point out weaknesses but also offer ideas for improvement.
Criteria: production of constructive feedback.

Final Presentation (10%) – Due October 24th 9am

The final presentation should include the motivations for your project, the general architecture, some details of your implementation (use of external libraries, some novel algorithm or formula for relevance, rules or regular expressions, etc.), a demonstration of your software, the evaluation strategy and the evaluation results. The expected duration is 10 minutes. If you cannot participate on the 6th of June (for valid reasons), you may provide a video instead. In this case make sure you provide it well in advance to ensure no technical issues will be encountered.
Criteria: Structure, progression, authenticity, ability to raise interest, communication and quality of the presentation support.

Final Report (10%) – Due October 24th 9am

The final report should include the motivations for your project, some background information and references (i.e. existing similar projects or products), the general architecture, some details of your implementation (use of external libraries, some novel algorithm or formula for relevance, rules or regular expressions, etc.), a demonstration of your software, the evaluation strategy and the evaluation results.
Criteria: Structure, background and references, clarity, presentation quality (figures, tables, graphs), grammar, appropriateness of the proposed evaluation, quality of the discussion of the results.