

## **CA557: Information Access**

### **Continuous Assessment**

**Dublin City University**  
**School of Computing**

#### **Introductory Issues**

- Submission Deadline: Friday 29th April 2005 (end of semester 2). Please note that a penalty will be applied for late submission without good reason.
- CA Weighting: 30%
- Your report should be placed in the appropriate box in L1.14.
- For this assignment you should work in teams of two. You are free to choose who you work with. In my opinion, one MECT and one MECB would make a good team.
- Please email me [cgurrin@computing.dcu.ie](mailto:cgurrin@computing.dcu.ie) by 5.00pm Friday 1<sup>st</sup> April giving the title of your report and the names of your team members. Let me know by this deadline if you have been unable to form a team.
- Each team should submit a single joint report.

#### **Aim of the Project**

The aim of this assignment is to provide you with an opportunity to examine some of the topics covered in CA557: Information Access in greater detail. In completing the assignment you should demonstrate effective use of material taken from the module lecture notes and reading beyond these. Your reading can be from any source including books, journals and research proceedings from the library and material from the WWW. The analysis of the techniques in your report should seek to identify aspects which you consider to be their strengths and weaknesses, and, if possible, you should develop ideas for extensions to these methods which you believe may be worthy of investigation.

## The Assignment

For the assignment you are required to perform an analysis and develop a specification for a proposed new information retrieval application. In addition you need to discuss how this new application could form the basis for a successful start-up company. The application that is the subject of this report should be a novel application bringing together material from topics studied in CA557.

Your system should be based on the existing techniques for information retrieval and related applications. Thus it should be possible to build and evaluate a prototype system based on your specification document.

There are lots of possibilities for new information retrieval applications based on the technologies covered in the module. Some ideas are:

- Video Retrieval System
- A Video Summarization System
- A Web Image Search Engine
- A Multimedia Web Search Engine
- A Relevance Feedback Engine for Multimedia Information Retrieval
- Novel use of Markup for Information Retrieval
- Linkage-Based Information Retrieval for the WWW (this should NOT be just a description a standard PageRank algorithm)
- or you can choose your own topic if you wish.

If you have an idea for a new information retrieval application and are not sure if it is suitable please feel free to contact me.

## Format of Submission

Your submission should be in the form of functional specification for a research project to investigate your proposed system. Your report should include the following sections:

- Include the following disclaimer at the top of the first page of your report.

*A report submitted to Dublin City University, School of Computing for module CA557: Information Access, 2004/2005. I hereby certify that the work presented and the material contained herein is my own except where explicitly stated references to other material are made.*

- A title describing the topic to be addressed in your CA.
- Your names, email addresses, classes, and student ID numbers.
- A short (150 word maximum) abstract overviewing the contents of your CA. It should be possible for someone with a background in information retrieval to read and understand this abstract without needing to make reference to the report itself, and to have a clear idea about topic explored of your report.
- The main body of the report should include numbered sections (and where you feel appropriate subsections) as follows:

- An overview of the objectives of your system. Include details of what the system will do, how it will do it and what constraints or limitations your system will have. **(10%)**
- A functional description of the system. Give details of the architecture and algorithms to be used. Include an analysis of the pros and cons of your design. **(50%)**
- Implementation and evaluation plan. Explain how the system would be implemented and evaluated. **(15%)**
- A discussion of how your system could form the basis of a successful e-commerce start-up. **(25%)**
- A list of the references used in your research giving full publication details. You should cite these references in your report at relevant points. For each reference you should aim to include the following details as appropriate: author(s), title, year of publication, conference/journal, pages, volume no.

### **Other Issues**

There is no single correct format for this CA. Every project will be different, even having different headings and emphasising different aspects as possible. You may use a combination of presentation formats. These might include short sections of essay style prose, bullet points of key points, clearly labelled diagrams, equations, pseudo code, and possibly other formats.

Your report should include no more than 2,000 words, excluding the abstract and reference list. The number of pages will depend on the number and size of diagrams, lists, etc, but should typically be in the region of 7 - 10 pages.

You should NOT include any code as part of your submission. This is an analysis, design and specification assignment, not an implementation task.

Unacknowledged copying of text and diagrams is plagiarism. The disclaimer at the head of your report states that you are aware of the need to acknowledge material included in your report which is not original.

### **Marking Criteria**

The following can be said of a perfect submission:

"You have written an excellent and well structured report. The writing and other presentations in the report is clear and concise. You have provided full reference details of your sources and you show clear evidence of reading and analysis beyond material provided in lectures. You have shown excellent judgment in your choice of relevant material from your sources. You have compared and contrasted the material from your reading, and commented thoughtfully on aspects which you feel to be strengths and weaknesses of the techniques used.' Your discussion of how your system could form the basis of a successful e-commerce start-up is well thought-out and logically presented."

The following gives the criteria for assessment against this ideal:

*H1*

You have written a very good and well structured report. You have clearly described the motivation and specification of your system. Your analysis and design are well integrated, and include material beyond that covered in lectures. You have compared and contrasted techniques clearly, and displayed insights into their relative merits. Your e-commerce discussion is well founded and acceptably presented.

*H2*

Your report is good but the structure may not be smooth or some points may not be well explained. You have shown good evidence of limited background reading. You have made a basic attempt to critically analyze the methods covered in your report. Your e-commerce discussion is acceptable and acceptably presented.

*Pass*

You have written a complete report, but it has some weaknesses in its structure. You show very little sign of background reading and your report is limited and difficult to follow. Your e-commerce discussion is weak.

*Fail*

Your report is incomplete/missing. There is no evidence of background reading. Your presentation is poor and difficult to follow and your e-commerce discussion is weak and shows little thought.