IS3: Open Assessment Part 1 (Web Evaluation and Design)

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October 2004.

1   Introduction

This question forms the first part of the open assessment associated with the Interactive Systems 3 course. It will be worth 50% of the open assessed marks for this course. The remaining 50% will be reserved for a further question that will cover Rob Sutherland's implementation work. Together these two questions will account for the 25% of the total course marks that are associated with IS3. This exercise should be done in the same teams as the level 3 projects. If this causes any problems then please see me immediately. The write-up and documentation should be conducted individually and the submission must be accompanied by the usual plagiarism form.

2   Designing a Web Site for Road Safety

Road safety is an area of significant importance. In the past, governments and local authorities have used a range of different media to communicate information about the safe use of roads to many different groups, including motorists and pedestrians across all age groups. Increasingly the web is being used in addition to more conventional radio and television broadcasts. Your task is to design and then evaluate a web site to communicate road safety information. You could choose to focus on a particular area, such as central Glasgow, or you could choose a wider region in the UK or abroad. The following sites provide information both for Scotland and for the UK as a whole:

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http://www.srsc.org.uk/
http://www.dft.gov.uk
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You should begin by developing a brief description of the intended user of your site. When you develop this user profile or 'stereotype' you should consider two issues. Firstly, you must target those people who are most likely to be in a position to access your web site. Secondly, within that group you must identify the group of users where you might have the greatest effect in improving overall road safety. For instance, you might design a site for the very young or for particular road users such as motorcyclists. You can look at the UK national road traffic statistics to help inform this decision at `http://www.dft.gov.uk`, look under 'Road Casualties Great Britain, 2003'. You could choose to target your site for groups from outside the UK, if so then please discuss this with me first. You can find statistical information on African road traffic safety information from:

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http://safety.fhwa.dot.gov/fourthlevel/toc.htm
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One of the problems of conducting any exercise using 'live' web sites is that the content is subject to change. I cannot control the format or presentation of these sites. You should consider this when scheduling your work.

3 Prototyping and Evaluation

During the design you MUST remember the needs and attributes of the target users. Also, it is important to remember that there will be big differences even within these user groups. You should remember that any redesign should be accessible to the largest possible proportion of the target user population. After you have identified your intended users, you must design an appropriate web site to provide them with road safety information. Remember that your design must incorporate the navigational and page layout features discussed in the lectures, where appropriate. During the redesign you must also justify your decisions about the way in which you present information to the users.

The redesign work should be described using appropriate sketches of the new interface. You DO NOT need to do any programming at this stage. The next section of the course will introduce user interface development using Java's AWT or Swing libraries. You must, however, identify implementation techniques that might be used to realise your design.

The second stage is to use a formal evaluation technique to provide empirical data that confirms or contradicts your initial ideas about the new site. Your task is to perform this evaluation using a 'low fidelity' prototype. The quality of your work will be assessed both in terms of the findings that you obtain and the evidence that you use to back up your arguments. As part of the write-up, please justify your decision to use a particular technique and explain why you decided not to use other formal evaluation methods. You must use appropriate statistical techniques to analyse the data obtained during your evaluation.

4 Write-Up Guidelines and Marking Scheme

Although this exercise is to be done in teams, all of the write up must be done on your own. Your attention is drawn to the University regulations against plagiarism. The following marking scheme will be applied:

- Identification of users and analysis of information needs (10 marks)

- Site redesign proposals (15 marks)

- Proposed implementation techniques (5 marks)

- Method, conduct and results of formal evaluation (15 marks)

- Presentation (5 marks)

I would strongly recommend that your solutions contain sections headings that reflect this allocation of marks. This will help to ensure that you address each aspect of the problem that has been set in the exercise. The final submission should not exceed 15 A4 pages. The main part of the report should use a serif font at 10 point or above.

5 Submission Guidelines

Your solutions should be handed in not later than 16.30 on the Friday of week 6 via the secured box in Lilybank Gardens. The General Office should be able to direct you to it. Your attention is drawn to the regulations governing late submission and medical problems in the course handbook. The second part of the open assessment will be organised by Rob Sutherland and further details will be provided later this term.