CS4313 Project Description

February 3, 2010

1 Introduction

This project will be to produce an online auction site, similar in functionality to eBay, ubid and bidz.com. The basic functionality should allow users to register, bid on and sell items, as well as perform various seraches, e.g. list all auctions selling Porsche 911, or list all auctions selling porcelain thimbles with a reserve less than EUR10.

2 Project Overview

A web site is required which will (at least):

- Allow users to register
- Browse/search auctions (users shouldn't have to be logged in to do this)
- Allow registered users to make bids on items
- Conduct auctions (user with the highest bid buys the item, and the item is removed from the list of things for sale)
- Inform all those who bid on that particular auction of the outcome, i.e. the seller should be told who bought it and for how much, the winner that they won the auction and everyone else that they didn't, and how much it went for.
- Allow the web site administrator to delete or temporarily ban users and to remove abusive or offensive user ads
- Allow the administrator to change the time that auctions will end (this will be needed when grading the project)
- Perform as much validation and provide as much error resistance as is feasible

The web site can be implemented in any language/technology of your choice, but only PHP and MySQL will be supported by the module and staff. That is, accounts on webservers and database servers will be provided for PHP/MySQL and help will be available on all aspects of PHP and MySQL at weekly meetings.

The database **must** be hosted on the testweb2 server used in practicals.

3 Deliverables

The module has the following deliverables:

- Deliverable 1: Design. (30%)
 - Due Friday 5pm, Week 6.
 - All database tables
 - List of all major processes
 - Flowcharts
 - Mock ups of main pages
 - Email one document (in PDF only) with everything in it. Include a table of contents.
- Deliverable 2: Database Implementation (5%)
 - Due Friday 5pm, Week 7.
 - All database tables defined on the database server
 - Email one document (PDF) with the final tables
- Deliverable 3: Prototype (5%)
 - Due during weekly meeting in week 9.
 - Most of the functionality should be operational at this stage
 - Email a report (PDF) detailing the status of each of the major process in Deliverable 1.
- Deliverable 4: Final Implementation (50%)
 - Due Friday 5pm, Week 11.
 - Description of all functionality
 - Final Database Tables
 - All HTML pages
 - All PHP scripts
 - List of copied material and sources
- Deliverable 5: Project Demo.

- Some time in week 12.
- Testing will include
 - * All basic functionality
 - * Review of extra items

There is an additional 10% participation grade. This will be given out based on how each group performs in the weekly meetings, e.g. a group that can discuss their work will score highly, while groups who have little to say will be marked lower. Each week, one team member will act as group leader; the group leader will be responsible for describing the work done that week and is expected to be familiar with work done by other members. However, everyone is encouraged to join in with the discussions, particularly if the leader is struggling with something.

3.1 Proportion of the work

Each week, a brief report must be filled out (an example will be distributed in lectures in week 3) outlining what work was done, what will be done in the following week, who is responsible for each part and what proportion of the total work for that week each person did.

If the work is always shared equally, then each person will be given a 33% share, or, in the case of a four person group, they should be given a 25% share.

Each week, this must be emailed to Conor.Ryan@ul.ie using the following subject line:

Subject: [CS4313] [Week X] [Group Y] Progress

Where X is the week number and Y your group number. This must be sent every week, regardless of whether or not there is a deliverable due. You should **always** have a copy of this report at each group meeting, signed by each group member. If it isn't signed by everyone, it won't be processed.

These mails will be processed by a mail filter, so please make sure you use the proper format, i.e. *exactly* as described. Failure to send in the mail properly will result in a late penalty (deducted from participation), although each group is allowed to send one badly formatted mail without penalty.

There will also have to be a report like this submitted in week 12, giving an overall contribution. This will carry extra weight, so can help identify people who didn't get credit for work early on.

When sending the email portions of the deliverables, the following subject should be used:

Subject: [CS4313] [Week X] [Group Y] Deliverable Z

Where X and Y are as above, while Z is the number of the deliverable. Do **not** send an attachment in anything other than PDF.

Finally, when sending these mails, copy **everyone** in your group.

3.2 Group Marking

All group projects suffer from the *credit assignment problem*, that is, how to fairly reflect the work each member put into the project. The proportion of work each person did will be an average of all the reports handed in, with the final one counting for three times as much.

Thus, the average contribution that each person makes can be calculated by:

$$(W5 + W6 + \dots W11 + (W12 * 3))/10$$

where WX refers to Week X. In the case where everyone did 33% of the work all the time, everyone will get the same mark. However, where someone did more, they will get a higher proportion of the total marks.

At the end of the semester, the total marks will be calculated on a per-group basis, and then modified on an individual basis so that anyone who did less than 33% gets less, while anyone who did more gets a higher mark.

Similarly, for a four person group, if everyone gets 25% at the end of the semester, they will all get the same mark.

3.3 Retrospective Marking

There can be **no** retrospective marking. That is, once the proportions are handed up and agreed to, they can not be changed. If you believe you have a problem with your group it is crucial that you report it *immediately*.

4 Project Marking

The exact breakdown won't be made available, but the final project will be graded on the following:

- Core functionality
 - Does the site do everything in the *Project Overview*?
- Additional functionality
 - Is there evidence that the group tried to add value to the project? Or did they just do the bare minimum?
- Look and Feel
 - Is the site good to use? Does it look like a real auction website? Does it have an individual feel?

5 Plagiarism

It is acceptable to use images from the web, but in your final report you must list where each item came from. This must be done for **every** item you take from somewhere else.

The following counts as plagiarism:

- Copying anything without identifying it and its source in the final report
- Copying any sort of logos
- Copying any code

The penalty from plagiarism varies according to the severity, but the *minimum* penalty will be zero for the deliverable in which the plagiarised item appears.

It is the responsibility of *everyone* in the group to ensure that something isn't accidently plagiarised. If someone in your group illegally copies something everyone in the group will be penalised.

6 Meetings

Weekly meetings with Conor will start in **Week 5**. Each group will have a meeting (with just them) every week. You will be expected to demonstrate your progress, but will also have an opportunity to ask technical questions. There will also be tutorials and practicals *every week*, so the total contact time for this module is probably more than most, but the onus is on you to ask questions.

7 Advice

Group work like this can be fun and rewarding. However, it can also be frustrating and enraging. To maximize the quality of your experience, please heed the following advice:

- Respect your group; always turn up for meetings, both those with Conor and those with just the group.
- Be honest with your group. If you genuinely didn't do something in a particular week, admit it.
- Keep Conor informed. If there are any problems it is important to get them sorted out as soon as possible.
- Keep informed. The deadlines are subject to change. We don't plan on changing any, but some may be pushed back due to unforeseen circumstances. It is possible that the only way in which you will hear about this is through the website, so make sure you check it at least once a week.

- Get the mail subjects right. If you use the wrong subject line you risk not getting credit for the work you did. Don't leave all the responsibility to one person; whoever mails in the reports should copy the other group members on the mail.
- Research your project *before* meeting with your group in week 3. Be aware of how other auction sites work by taking a look at them.
- Don't be dazzled by other sites. The project is about using PHP and MySQL to interrogate a database, and not only can virtually every piece of functionality you need can be reduced to this, so too can most other websites. When researching/discussing the project, don't lose sight of how you will implement the functionality.