

B336 Advanced Internet Computing

Some Comments on the Assignments

Lecture Objective

- Get you to understand the purpose of the assignments, and their context within this unit.

The Importance of the Assignments

- As I've said in the last two lectures, you should look at the assignments as the framework for learning in this unit.
 - Use the resources in the unit (Unit Reader, online reading recommendations, discussion forum, consultation with the lecturers, etc).
 - Use the lectures and labs to gain the knowledge and skills to complete the assignments.
- If you complete and excel in the assignments, you will have no problems with the exam.

Assignments 1 and 3

- Pretty standard programming requirements.
- Purpose: to assess whether
 - you understand the required technologies (Learning Objective 1)
 - you are able to write software implementing the technologies (Learning Objective 2)
 - you can construct solutions using the software and technologies when faced with a problem scenario. (Learning Objective 3)

Assignments 1 and 3

- Read the assignment descriptions.

Assignment 2

- The most significant part of your assignment work lies in assignment 2.
- Before we go into the specifics of the assignment, let me tell you a story...

What's this to do with Assignment 2?

- In retail goods, which is a free-market environment, the consumer is protected by various mechanisms. A few of them are:
 - The ability to have a good look and to test the goods before buying.
 - The threat of mass rejection for a certain products if enough buyers claims that the product is defective.
 - Product reviews in newspapers, magazines, and now online.
- The scenario in the story of paying before you buy, no information about the goods, etc, would never be tolerated in the retail markets today.

The Nature of Competition

- These mechanisms are in place because of competition.
 - In some respects, competition hurts the retailers since it squeezes their profit margins.
 - In other respects, it helps them by forcing them to be more efficient and effective.
 - But regardless, competition between retailers is in the end what **empowers** the consumers - products will continually be improved by their **ability to choose**, without them forcing it actively.

The Ability to Choose

- Would you not like to have this empowerment in your education?
 - Eg. Would it not be nice to know that if you are not happy with this unit, that you can leave and go take an equivalent unit in another University, and have it credited to your degree.. AND best yet, to know that I know it too!
- Most of you have already learnt to live with **disempowerment.**
 - When units are bad, you know you can complain at the end of it, but there's really not much pressure you can exert for changes to happen in time to benefit you, so you just concentrate on doing the best you can and getting your degree when you finish.

Disempowerment

- The worse thing about disempowerment: you stop looking at your university experience as one of active learning, and it turns into an exercise in knowledge absorption
 - “I’ll turn up for the lecture today and see what the lecturer can tell me that I can use for the rest of my life.”
- In the world of the Internet, where things move at lightning speed, such approaches do not work.

Disempowerment

- Truth be known, many of my units in the past, and even this B336 unit now, does promote disempowerment, however minor.
 - It happens because to a large extent you depend on what we supply to you for decent education.
 - It happens because academics will never have enough time and resources to do ALL that we want to do.
 - It happens because students will NEVER have the ability to change units to their liking at a whim.
- So for the foreseeable future, we will live with this. But at the same time, we will consider how we can change this using the technologies we know.

Am I saying that education should have a free-market model?

- Of course not - that would be ludicrous.
 - A completely free-market approach, where we have no obligations but to deal with students purely as customers, would mean all institutions go into popularity contests.
 - Education is still a basic services that needs to to be regulated to ensure:
 - Equal access and opportunity for all.
 - Responsible content based not solely on the whims and wishes of certain sections of the community (especially the ones which has the most money)
 - ...that's what I believe anyway. You may disagree, and in this assignment you can structure you solution to what YOU believe.

Am I saying that education should have a free-market model?

- ...but that doesn't mean we can't use certain aspects of the free-market to make the education system more effective.

The Nature of Competition

- Anyway, back to the assignment: the basis of efficiency through competition, the cornerstone of consumer empowerment, is this commodity called **INFORMATION**.
 - Who has it?
 - How do you gather it?
 - Where can you store it?
 - How can you transform it?
 - How do you distribute it?
 - Who do you distribute it to?
 - When you distribute it?
 - ...

The Power of of the Internet

- Your task for Assignment 2 is to design ways to use technologies learnt in this unit, and in your other I.T. units in the past, to
 - improve efficiency, and
 - deliver effectiveness
- If you do not believe that the Internet and I.T. has the potential to do that, then
 - Hopefully I will change your mind this semester.
 - But the more important question is: have you slept through all your other units?

Assignment 2 Description

- Read the assignment description from the web site.

What technologies should I use?

- You will learn some in this unit:
 - web services
 - XML
 - etc
- More importantly for now, you should think about all the tools you learnt in the past, and how those fit into a solution.
 - I know for a fact you already have some skills in your arsenal, like creating interactive web-sites, or writing CGI applications.
- You do not implement them all, but you should consider whether ANY or ALL of them are appropriate in your design phase.

What technologies should I use?

- In week 9, I will attempt to tie the elements in all your IT units (past and future) together, when talking about web service solutions.
- But do you want to wait until week 9 to think about it?

One last thing about the exam...

- The sample exam will be out by next Monday.
- Do not look at last year's exam as guide to what is in this year's exam - the unit is completely different.

One last thing about the exam...

- The reasons I want to put up a sample exam this early
 - So that you have an idea what technical level you need to be at by the end of the semester, but then the assignments should sort you out on that.
 - To realise that you are able to depend on fellow students to help you with the assignments, and you can use the code supplied in the unit reader a lot through-out the semester, but when the exam comes along, you are on your own.
 - What I am saying about the exam is, consider the question on the night before your wedding: If you don't think you're going to make it,

GET OUT NOW!