Computing Project
(COMP08053)

Lecture 1

Module Introduction & Overview

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Some background to the Computing Project module…

What employers think…

CBI study of 694 companies which employ 2.4 million people found that:

1 in 7 firms think graduates' reading and writing skills were inadequate

Graduates criticised for sloppy time-keeping, ignorance of basic customer service, lack of self-discipline, inability to work in a team

Graduates lack basic skills in writing clear instructions and solving problems

It was considered that at the very least universities should produce graduates that are market literate, numerate and employable

THE TIMES *May 17 2010*

Some other claims…

Almost half of leading companies failed to find suitable graduates to fill vacancies despite record numbers of students leaving university

In a survey of 217 of the UK's largest companies more than 43% said positions remained unfilled because students lacked basic skills or necessary expertise

Many companies said increasingly they had to recruit from overseas

The Daily Telegraph *January 31 2008*

More claims…

4 out of 10 large employers expect to struggle to fill graduate vacancies due to shortage of graduates with the right skills

Employers say many graduates lack 'soft skills' such as team working

Employers feel that there is an inadequate supply of applicants of sufficient calibre

Employers explain that applicants are normally academically proficient but lack soft skills such as communication as well as verbal and numerical reasoning

BBC NEWS

January 30 2007

What companies want…

Research by talent assessment solutions provider SHL found that the most valued competencies sought by employers are:

Organising & Executing

Analysing & Interpreting

Interacting & Presenting

Supporting & Co-operating

Graduates found to be particularly poor in relation to final two

Recruiter *September 7 2010*

Computing Project module aims to…

Help develop some of the key skills that employers are seeking

as well as

Provide insight into how teams in industry work

Computer project failures

Studies by the British Computer Society have found that:

Only 1 in 8 IT projects can be considered truly successful

In 2004 the cost of project failure across the European Union was €142billion

There is a lack of professionalism in software engineering that could be dangerous in safety critical systems

Britain is failing to produce software engineers and managers with IT and project management skills to commission and execute complex IT projects

Computer project failures

Over the past 10-15 years more than £25billion has been wasted by UK Governments on IT projects that have run over budget, suffered delays or been scrapped

National Audit Office said projects "fundamentally flawed" and ministers in charge guilty of "stupendous incompetence"

Computer project failures

At a Government IT Summit in 2007, the Chief Information Officer of the Department of Work and Pensions (DWP) stated that **7 out of 10** Government IT projects have failed

All types of organisations have experienced significant loses due to IT project failures

They are just not as widely publicised as Government project failures that involve tax payers money

Examples of computer project failures

NHS National Programme of IT　　　**£12.6billion** reported wasted

Defence Information Infrastructure　　**£7.1billion** reported wasted

National Identity Scheme　　　　**£5billion** reported wasted

THE INDEPENDENT　*January 19 2010*

In the creative industries:

It is reported that the International Game Developers Association estimate that **95%** of computer games commercially fail

Some commentators note that many publishers have reported that **10%** of computer games titles make **90%** of the money

Reasons for failures include…

Insufficient communication between different members of project team and end users

No clear requirements definitions

Lack of due diligence at the requirements phase

Overspends in excess of the agreed budgets

Insufficient risk management

Poor delegation and decision-making

How to avoid project failure

This is what some industry experts have to say…

http://link.brightcove.com/services/player/bcpid52515991001?bctid=52554252001

Computing Project Module

Working in multi-disciplinary groups of 3 or 4 assigned by the module staff, students will complete a group-based computing project over a 13 week period

Projects can be a development project (i.e. involve developing a prototype) or a detailed investigative project

Groups can come up with their own project ideas (subject to approval by tutor) or choose of from the list of project ideas provided

Students must develop team working and project managing skills in successfully completing the project

Computing Project Assessment

No module exam – only the group-based project assignment

Each group will be allocated a supervisor – usually the module tutor

In addition, project groups can consult other UWS staff that may agree to act as a mentor/advisor to the group

Some groups may be conducting projects for clients who have initiated the project idea

Computing Project Assessment

Group-Based Project Plan
(Submission: end Week 4) – **10%**

Group-Based Development or Investigative Project
(Submission: end Week 13) – **80%**

Individual Critical Appraisal
(Submission: end Week 13) – **10%**

Peer Assessment Form - to be completed by each group member in which they will evaluate their own contribution to the project, as well as that of each project team member

Computing Project Assessment

All project groups will have to complete progress forms on a regular basis (fortnightly)

In addition, the tutors/supervisors will complete progress forms about each project group

Because tutors/supervisors will be engaging with project groups on a weekly basis we will have very good idea about who in the group is doing what

We will also have a very good idea of which group members are not contributing to their fair share of the work

Computing Project Assessment

Assessment marks can be allocated so that those members who have done the most work get higher marks than members who have not contributed their share

Peer Assessment forms, progress forms and the tutor's knowledge of the group will influence how the marks are allocated with a group

The tutor's decision is final

Computing Project Module

Lectures will provide some of the required knowledge (see Lecture schedule)

Tutors/supervisors will provide individual groups with specific advice and guidance on a weekly basis

Students will be expected to draw on previous relevant knowledge and skills they have gained from other modules

No essential module book to purchase

Computing Project Module

Groups can use contacts that members may have that might provide useful sources of primary data and information (e.g. companies, end users etc)

Do not plagiarise work – all work must be fully referenced and sources clearly provided

Groups are expected to investigate relevant techniques and technologies through independent study

Computing Project Module

Students who do well in modules such as Computing Project are more likely to get the best jobs after graduation because they can demonstrate:

Self-discipline   Initiative

Maturity   Ability to organise and plan

Ability to work effectively in a team

… at an early stage in their studies, as well as start developing an impressive portfolio of work

Computing Project Module

Employers are looking beyond Degree classifications

They want to see <u>evidence</u> of your skills and abilities

The module is about encouraging your personal development and helping make you more employable

Checklist

Should have:

    Module schedule

    List of project groups and tutorial venue/tutor

    Computing Project coursework

    List of project ideas

    Signed the register

Check you are registered on Moodle by next week