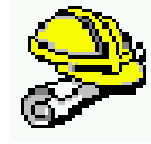


M.Sc in Management Sciences and Operations Research



Project: To develop a Project Management simulation for the service sector (provisional)

Sponsor: Maxine Ward / Financial Services company

Supervisor: Andrew Martin

Background:

'Contract & Construct' is a computer-based interactive simulation that supports the teaching of concepts and practice of project management, and features in the Project Management option of term 3. It takes the form of a construction project, with players selecting contractors to undertake various project tasks, then dealing with many situations that are presented at various times during the simulated project. Players' performance is continuously assessed against objectives of time, cost; quality, safety and morale, and a history of decisions is maintained. The program has been running for several years; it has two versions; the original written in Delphi, and an Internet version whose site contains further details including a demonstration (www.contract-and-construct.com). The simulation is written in such a way that it can relatively easily be customized for different industries. In this case the client would like to use a version that is oriented to the service sector.

Objectives:

1. To become familiar with current implementations of contract-and-construct, including an enhanced internet version that is not yet deployed.
2. To research into the key differences between the service sector and the manufacturing sector, focusing on financial services vs construction, especially regarding the types and characteristics of project they undertake.
3. To choose a typical / suitable service sector project and research in detail to establish typical events and options that tend to occur. Consultation with practitioners is an important element of this stage. Assess the extent to which the project can follow the pattern established for Contract & Construct.
4. To implement and test a version of Contract-and-Construct that encapsulates this knowledge and provides a suitable experiential simulation for the client by September 2005.

Pre-requisite skills and outlook

- Interest in project management and the service sector.
- Inter-personal communication and knowledge elicitation skills
- Reasonable confidence in applications development in either/both of Delphi or ASP. Note however that the emphasis will be on gathering the project event insights and dependencies rather than innovative coding.