



Subject Name: Software Development 3

Assessment Task 2: Network Architecture Research Assignment

1. Assessment Task Purpose

This assessment item involves the creation of a short researched essay paper. It is intended to require you to explore the impact of network architectures and security mechanisms on a web service that accesses a database. You will use Assessment Item 1 as the focus where appropriate. The deliverable will illustrate to your markers, and to prospective employers, the extent of your understanding of Learning Outcome 2 in the subject outline. You should not be constrained by the scope of your database programming (Assessment Item 1) as this assessment item may be tackled from perspectives ranging from local LAN servers through to massively parallel distributed environments.

2. Assessment Task

Network architectures, cryptography and security all impact on the responsiveness of network based operations. Games, simulations and other web based processing are often very sensitive to network latency and processing loads. Often these constraints have led to less ambitious designs in the networked environment. There have been some innovative approaches to overcoming these constraints.

Your essay paper will explore the impact of the various constraints encountered within the networked environment, the ramification of these constraints, and the approaches tried in minimising the impact.

3. Assessment Task Submission

Your essay paper may be submitted in Microsoft Word, or PDF formats for inspection and marking. The file name should be INFT574Ass2CITxxxxxx.aaa where xxxxxxx is your CIT student number, and aaa is either doc or pdf. Submissions are to be made through CIT eLearn.

4. Assessment Task Submission Date

The final submission must be made before Midnight on Wednesday 13th May 2015.

5. Marking Rubric

Assessment Item	Pass Grade	Credit Grade	Distinction Grade
Submission file format (15%)	File is correctly named, in the correct format (Word or PDF) with student Name and CIT number. Essay has cover page identifying student, and page numbering.	Plus, headers and footers with correct information, and spelling and grammar checked. Material is well referenced with clear expression.	Plus, use of Table of Contents, Headings, Executive Summary, Bibliography, etc. Shows outstanding quality in presentation and clarity and explanation of approach.
Scope of work (40%)	Discussion addresses the basic issues with references to the “classical” solutions. A few references underpin the discussion.	Plus, Additional parts. Gives more detail of the implementation difficulties and solutions. Uses a wide range of references to support the discussion.	Plus, evidence of innovation in the implementation of the requirements. Shows superior knowledge of the area. Outstanding use of references with a significant Bibliography.
Completeness of work (45%)	The ramifications of the basic issues are explained fully, as are the “classical” solutions. References are utilized to support assertions. Some examples are given.	Plus, Use and choice of references indicates a broad understanding of the scope of the topic. Good examples illustrate the discussed concepts.	Plus, evidence of superior intellectual rigour in the approach and completeness of the discussion.