

## COS80001 - Software Development for Cloud Computing

### Assignment 7:

#### Research Proposal for Cost-Effective Data Reliability



- Graded as High Distinction (Individual Work)

**Due (same as for the Distinction grade):**

1. **23:59 Monday June 9**: softcopy submission to Blackboard

*Note: This is a hard deadline with zero tolerance: no submission by the deadline means a mark of distinction maximum*

2. **Wed/Thu June 11/12**: hardcopy at the 10-minute individual interview

*Note: The interview time will be informed later on Blackboard. No high distinction grade will be eligible for no-show on time.*

## Background

Please read the CCGrid'2012 research paper available at:

<http://www.ict.swin.edu.au/personal/yyang/papers/CCGrid2012Li.pdf>

It is essential that you try to understand this paper as much as possible. You are strongly encouraged to read more related scholarly publications from the references of the paper and/or search Swinburne library databases.

## Objectives

1. Java development using your existing AWS EC2 instance (i.e. micro only) to obtained benchmarking parameters described in Section VI.A of the above CCGrid'2012 paper. Similar to what are shown in Table I of the CCGrid'2012 paper, you only to do checking for file WLi/A7.jpg on AWS S3, i.e. "ti.micro" for "CTP time (standard). Please describe your experiment setting and results.
2. Based on your understanding of the CCGrid'2012 paper, propose a new research problem related to the paper, i.e. on cost-effective data reliability and argue about its importance.
3. Write a literature review on this topic to argue about the novelty of your proposed research problem. List your references at the end of the proposal.
4. For the research problem proposed by you, design a potential approach for solving it.

### Notes:

1. For Objective 1, due to the environment change, your time may be different to that

shown in Table I for the CCGrid'2012 paper.

2. For Objectives 2-4, you need to read more research papers and ideally a “research methods” related textbook available in the library.
3. This is a rather open assignment. Your creative thinking, design and arguments are critical. However, they need to be convincing and thoughtful. Your submission will be combined with the interview to determine whether it is satisfactory for this grade.

## Submission

You are required to submit a report focusing on the objectives listed above – softcopy to Blackboard and an identical hardcopy at the start of your interview:

1. The document must contain your name, student id, and unit code as well as a title (e.g. Submission for Assignment 7).
2. The experiment setting and results as well as Java code for Objective 1.
3. The research proposal for Objectives 2-4 is around 1500 words.

The proposal is assessed jointly with the interview.

## FAQ

### **What happens if assignment submission is graded as ‘insufficient’?**

You will have to accept the fact that your final mark will be a distinction maximum. There is no second chance.

### **What happens if a student is unable to submit the assignment?**

If you are unable to submit due to medical reasons, then a doctor certificate will have to be shown.