# COMP90007: Internet Technologies Project Assignment

This document explains the various steps that are required to complete research project part of the assessment.

This assignment has two parts:

Part A: Technical Essay on a topic of your choice in Internet Technologies (See below in this document)

Part B: A project work involving measurement of delay, jitter and bandwidth on Internet (To be introduced after Week 6).

## Both the parts are done in individually. Timeline

No.	Activities	Dates*
1	Part A release	Weeks 6
2	Choosing a topic	Week 6-7
3	Specification for Part B	Week 7 (After the mid-semester test)
4	Part A-Submission of Technical Essay	Week 9
5	Part A-Peer Review	Week 10
6	Part A- Reflection	Week 11
5	Submission of the Project report (Part B)	29/5/2016

<sup>\*</sup> Dates are Tentative and subject to change.

#### The first Step Instructions

Please note that both parts are done individually. During Week 6-7, explore the topics presented you below. You will need to

choose a topic from the list for your task in Part A.

You can choose one of the topics in the list. You can also choose any of your favourite Internet technology topic.

## **Topics List**

- 1. Mesh networking
- 2. RFID Networking
- 3. Content Distribution Networks
- 4. Peer to Peer networking.
- 5. Software Defined Networking
- 6. Internet of Things
- 7. Passive Optical Networks
- 8. IP address lookup algorithms
- 9. Fibre to Home Technologies
- 10. Detection of steganography

- 11. Internet video-on-demand
- 12. Heterogeneous networks (HetNets)
- 13. IP prefix hijacking
- 14. Network coding
- 15. Sensor Networks
- 16. Honeypots for network security
- 17. WiMAX in rural communities
- 18. P2P streaming
- 19. BGP routing stability
- 20. IPv6 deployment
- 21. IPv6 address auto configuration
- 22. Vulnerabilities in HTML5.
- 23. ad hoc networking

Other topics may be suitable. Please consult the lecturer/tutor if you wish to select an alternative topic. Please discuss about the topics in your workshops.

A link to library's Melbourne Uni Super Search is available from the LMS page. You should log into this site and search for recent journal and conference articles on the topics.

#### The Second Step

Complete the task as given the specification below. Any instructions or modifications mentioned on the Research Project Page on LMS will be part of the specification. We will also provide more information about the project on the LMS pages in coming weeks.

#### Part A: Project - Specification

The project involves writing a technical essay on a topic chosen by you. It has two parts; preparation of essay and submitting to PRAZE (7%) and peer review and writing a reflection to the review (3%), together contribute to 10% of the total mark for the subject. You can use the text book and the lectures as a starting point.

#### **Written Technical Essay**

Students will also submit a 800 word technical essay on the topic.

The report will be in survey form, any reader should be able understand the scope of the topic, its history, different approaches, benefits and drawbacks, related topics, and comparisons. This report will require you to cite multiple references (e.g. books, papers, websites, etc). You are also required to have a conclusion section about your evaluation and critique on the topic (such as: many of the approaches failed due to . . . etc).

The essay will be due by Sunday 8/5/2016. We will send the instructions for uploading closer to the submission time. Late reports will not be accepted except under special circumstances.

## Marking Criteria Written Essay (7 marks)

10% Format and Structure

40% Coverage of the Major Themes within the Topic including Technical details.

30% Critical Evaluation

10% Use of Accessible Examples

10% Quality of Sources Cited

#### Peer Review and Reflection (3 marks)

After submitting the essay, you will participate in a Review phase, which is then followed by a Reflection phase. In the review phase, you will be allocated 3 random essays written by your classmates for the activity. You will then input your review (a small paragraph of 50 words each for an essay should be sufficient) of the allocated works. In the reflection phase all reviews on your essay will be made available. You will then write a short reflection paragraph based on the reviews. This will comprise 3 out of the 10 marks allocated for the project.

Academic honesty and plagiarism: Students who submit for assessment the work of other students will be penalised by the Department and risk formal prosecution under the University's Disciplinary Regulations. You must acknowledge the sources of all material that you use in your presentation and report. All text should be in your own words. If you reproduce any diagrams, they should be clearly acknowledged. See http://academichonesty.unimelb.edu.au/advice.html for further information.

Good luck,

Udaya Parampalli

NOTE: The submission dates are tentative and may change if the situation demands.