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**FACULTY OF SCIENCE AND TECHNOLOGY**

**COURSEWORK FOR THE BSC (HONS) INFORMATION TECHNOLOGY; BSC (HONS) COMPUTER SCIENCE; YEAR 2**

**ACADEMIC SESSION 2017; SEMESTER 3**

**NET3204: Distributed System**

**Project (Part 1) DEADLINE: Week 8**

**INSTRUCTIONS TO CANDIDATES**

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# This assignment will contribute 10% to your final grade.

* This is a individual assignment.

**IMPORTANT**

# The University requires students to adhere to submission deadlines for any form of assessment. Penalties are applied in relation to unauthorized late submission of work.

# Coursework submitted after the deadline but within 1 week will be accepted for a maximum mark of 8%.

# Work handed in following the extension of 1 week after the original deadline will be regarded as a non-submission and marked zero.

**Lecturer’s Remark** (Use additional sheet if required)

I.....................pooja vijayakumar......... (Name) .........15025646..........std. ID received the assignment and read the comments..............pooja......................... (Signature/date)

**Academic Honesty Acknowledgement**

“I ....................pooja vijayakumar.....................(student name). verify that this paper contains entirely my own work. I have not consulted with any outside person or materials other than what was specified (an interviewee, for example) in the assignment or the syllabus requirements. Further, I have not copied or inadvertently copied ideas, sentences, or paragraphs from another student. I realize the penalties *(refer to page 16, 5.5, Appendix 2, page 44 of the student handbook diploma and undergraduate programme)* for any kind of copying or collaboration on any assignment.”

pooja

….................................. (Student’s signature / Date)

Overview

The aim of this project is to achieve the learning outcomes of [d] of this subject as mentioned in the syllabus, your role is to develop a distributed software application using basic TCP/ UDP socket. This overall assignment mark will contribute 10% of your final grade.

**assignment SPECIFICATION**

|  |  |
| --- | --- |
| **Learning Outcome Being Assessed** | 1. Develop simple distributed systems with application of principles and protocols of distributed computing |
| **Submission Deadline**  **eLearn Submission** | **Monday, (Week 7) by 4.00p.m.**  Late submission will be capped to 50% (unless a concrete reason is provided).  Put your project folder into this submission folder. Zip it and submit this zipped file into the eLearn. |
| **Outline of Problem** | This assignment requires student to develop a distributed system using TCP or UDP protocol.  Students are required to demonstrate the ability to use TCP/UDP solution to develop a simple distributed application.  This assignment is to enhance understanding of Socket Programming and Multi-Threading  Gain experience in implementing a simple distributed, client server application.  “Using a client-server architecture, design and implement a multi-threaded server that returns the meaning of a word as stored in a remote dictionary.” |
| **Detail Question** | Design and Implementation of a Simple Multi-Threaded Distributed System Supporting Access to a Remote Dictionary.  The |
| **What you should hand in** | The following items are to be handed in:   * The project/solution files, including the source code for the Item class, all pre-compiled classes, test driver program and application program. – in **softcopy (submitted to elearn)**   NOTE: Submitting the coursework means you have agreed that your work is original and comply with the rules and regulations (refer to Academic Impropriety) |
| **Academic Impropriety** | You may only work with the students in your team to produce your deliverables for this assignment.  Sunway University takes a strong stand on plagiarism. Any students found to have copied work, colluded or presented work that is not their own will be punished under the terms stated in the rules and regulations booklet. Students are permitted to use 3rd party components, however all such code must be well described and credit awarded to the respective owner. Students must also ensure that the majority of source code is their own, and that the core algorithms are their own work. The use of copyright materials is forbidden.  \*subject to change anytime without prior notification  **The work that you submit must conform to those regulations.** |
| **Assessment:** | Contributes 10% to the overall coursework mark. |

**ASSESSMENT CRITERIA FOR Project**

|  |  |  |
| --- | --- | --- |
| **Mark /**  **General Impression** | **Area / Assessment Criteria** | |
| **Distributed System Design** | **Application Program** |
| **Fulfillment of Design** | **Fulfilment of requirements** |
| 5  Excellent | Correct and complete   * Correct Design with TCP or UDP with Multi Threading. * Implemented high level persistent storage | The following are provided   * Program able to send messages across the network. * Task are carry out correctly with Multi Threading. * Menu is provided * Codes are well written and following standard |
| 4  Very Good | Correct and complete   * TCP or UDP is implemented but with Threading but not completely correct design. * Implemented normal persistent storage | The following are provided   * Program able to send messages across the network. * Task are carry out with some errors. * Menu is partially implemented * Codes are well written but no standard. |
| 3  Average | Partially Correct and partially complete   * Only TCP or UDP are implemented * Not Threading | The following are provided   * Program able to send messages across the network. * Task are carry out correctly. * No menu or ease of use interface design * Code are partially formatted |
| 2  Poor | Incorrect and not complete   * Partially correct implementation of TCP/UDP. | The following are provided   * Program able to send messages across the network. * Task is not carry correctly. * No menu * Code are barely formatted |
| 1  Very Poor | Very major errors or more than 1 incomplete. | Grossly incomplete application program.  Very major errors. |