



Marsden State High School

Business Education- 11ITS

Semester
2
Date Given
Week 5
Due Date
Week 7

Familiar Application
Problem Solving
Communication

WTC/ NYC/C
Date:

Name:	
Form:	
Teacher:	WATT/FOUKAS
Head of Department:	FURLAN
Assessment: 4 (Formative) Practical (Group)	
Authorship Declaration	
I _____ claim authorship of the attached works. The works acknowledge all sources and do not breach copyright and plagiarism policy.	
Date Submitted: _____	Date Submitted: _____
Students Signature: _____	Teacher Signature: _____
Task Conditions	
<ul style="list-style-type: none"> • Time: 3 Weeks class time provided • Words: No Word Count • This item must be submitted no later than 5 days after the week beginning date as teacher feedback (given as part of the learning process) will invalidate this assessment. Failure to do so will result in a Non-submission. • Failure to complete this item will result in automatic withdrawal of credit for this semester. i.e. The teacher will have insufficient evidence to make a valid judgment about coverage of this course of study. 	
Units of Competency	
<ul style="list-style-type: none"> • ICAU1128B- Operate a personal computer • ICAU2005B- Operate computer hardware • ICAU2231B- Use computer operating system • ICAP2001B- Work effectively in an IT environment • ICAP2002B- Communicate in the workplace • ICAS3234B- Care for computer hardware • ICAI3021B- Connect internal hardware components • ICAI3101B- Install and manage network protocols • BSBCM106B- Follow workplace safety procedures 	

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ELEMENTS	Date	Signature
<p>ICAU1128B Operate a personal computer</p> <p>Start the computer</p> <p>Check <i>peripheral device</i> connections for correct position</p> <p>Switch on power at both the power point and <i>computer</i></p> <p>Access basic system information</p> <p>Insert user name and password as prompted and note access, privacy, security and related conditions of use displayed on introductory screens</p> <p>Navigate through the <i>operating system</i> to access <i>system information</i> to identify system configuration and application versions in operation</p> <p>Use <i>on-line help functions</i> as required</p> <p>Navigate and manipulate desktop environment</p> <p>Create and customise desktop icons</p> <p>Select, open and close desktop icons to access <i>application programs</i></p> <p>Manipulate application windows and return desktop to original condition</p> <p>Organise basic directory/folder structure and files</p> <p>Create and name directories and subdirectories</p> <p>Identify <i>attributes</i> of directories</p> <p>Move subdirectories between directories</p> <p>Rename directories as required</p> <p>Access directories and subdirectories via different paths</p> <p>Organise files for user and/or organisation requirements</p> <p>Use <i>system browser</i> to search drives for specific files</p> <p>Access the most commonly used types of files in the <i>directories</i></p> <p>Select, open and rename groups of files as required</p> <p>Move files between directories</p> <p>Copy files to <i>disk</i></p> <p>Restore deleted files as necessary</p> <p>Erase and format <i>disks</i> as necessary</p> <p>Print information 6.1 Add a printer if required and ensure correct <i>printer settings</i></p> <p>Change the default printer if appropriate</p> <p>Print information from an installed printer</p> <p>View and delete progress of print jobs as required</p> <p>Shut down computer</p> <p>Save any work to be retained and close all open application programs correctly</p> <p>Shut down computer correctly</p>		
<p>ICAU2005B Operate computer hardware</p> <p>Identify computer hardware components</p> <p>Identify <i>external hardware components</i> and <i>peripherals</i></p> <p>Identify <i>internal hardware components</i></p> <p>Understand the inter-relationship between computer hardware and software</p> <p>Describe the functions of computer <i>hardware</i> and associated <i>OH&S standards</i> and <i>environmental considerations</i> around <i>hardware</i> use and disposal</p> <p>Describe the function of a computer operating system</p> <p>Describe the boot process</p> <p>State the relationship between an application program, the operating system and <i>hardware</i></p> <p>State the general differences between the different <i>computer platforms</i> and their respective operating systems</p> <p>Draw a simple block (schematic) diagram showing the interconnection of the various components of a computer</p> <p>Use computer input equipment</p> <p>Follow <i>OH&S standards</i> and <i>organisational policies</i> and procedures when using computer input equipment</p>		
<p>ICAU2231B- Use computer operating system</p> <p>Configure operating system</p> <p>Configure operating system to suit the working environment, including but not limited to setting variables</p> <p>Use operating system</p> <p>Install, upgrade and uninstall application software to suit the working environment</p> <p>Use both the graphical user interface and the command line interface to perform basic tasks</p> <p>Optimise operating system</p> <p>Use operating system and third-party utilities</p> <p>Customise the graphical user interface</p> <p>Use techniques unique to the command line interface</p> <p>Support input and output devices</p> <p>Set up input and output devices and check functionality</p> <p>Install drivers as appropriate and check functionality</p>		
<p>ICAW2001B- Work effectively in an IT environment</p> <p>Identify IT in an organisation and related relevant policies and procedures</p> <p>Identify IT roles in an organisation and briefly describe what services they perform</p> <p>Identify and describe key players from the IT service areas previously identified</p> <p>Identify IT policies and procedures and research whether they are used in practice</p> <p>Identify IT equipment, software and operating systems used by the organisation</p> <p>Identify IT equipment, operating systems and software used in the organisation and understand the importance and role within the organisation</p> <p>Establish that all of the equipment locations and service requirements are maintained according to organisational requirements and prevailing policies and procedures</p>		
<p>ICAW2002B- Communicate in the workplace</p> <p>Establish contact with clients</p> <p>Receive requests and enquiries from <i>clients</i> in a polite and appropriate manner</p> <p>Use verbal and non-verbal <i>communication</i> to respond to the <i>client</i> requests and enquiries effectively</p> <p>Use appropriate questioning and active listening techniques to understand <i>client</i> needs and determine support requirements</p> <p>Accommodate <i>cultural differences</i> in the workplace</p> <p>Process information</p> <p>Answer enquiries promptly and appropriately</p> <p>Record information or messages and refer <i>client</i> requests to the <i>appropriate person</i> in accordance with organisational procedures</p> <p>Inform <i>client</i> of the progress of their request or enquiry and advise them of the organisational process for answering their request or enquiry</p> <p>Investigate the organisational follow-up procedure or policy and record follow-up action taken in regard to the <i>client</i> request or enquiry</p>		

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<p>ICAS3234B- Care for computer hardware Establish safe work practices Determine, record and apply relevant legal requirements and OH&S standards to the installation and maintenance of computer hardware Determine, record and apply requirements specified by hardware manufacturers Determine, record and apply safe work practices, taking into account legal and manufacturer requirements Establish location requirements for hardware and peripherals Determine and apply suitable environmental conditions for hardware and peripherals Determine and apply system protection devices Determine and apply requirements when moving hardware Determine and apply suitable storage principles for hardware and associated peripherals and media Establish maintenance practices Determine maintenance requirements specified by the equipment manufacturer Produce maintenance schedules, including removal of dust and grease build-up Perform diagnostic functions, including replacing suspect components with other serviceable components and reloading of associated software Determine whether unserviceable components are replaceable through warranty, replacement or upgrade Perform diagnostic functions using the operating system and third-party diagnostic tools Determine appropriate hardware quality standards Consider and apply business requirements in respect of hardware matters Determine and apply quality standards to the selection of appropriate hardware and associated peripherals</p>		
<p>ICAI3021B- Connect internal hardware components Determine new components required Identify and clarify user component requirements according to organisation guidelines Organise and record user component requirements, pass onto appropriate person for evaluation and vendor selection Obtain components Contact vendors to obtain technical specifications for the proposed components Assess the options and provide recommendations to the appropriate person for final analysis Obtain components in preparation for installation Install components Develop plans, with prioritised tasks and contingency arrangements, for the installation of selected components with minimum disruption to clients Liaise with appropriate person to obtain approval for the plans Install and configure components according to plan, in accordance with installation procedures and organisational requirements Test components for error-free performance, utilising available technology Identify and resolve identified problems Test and enhance system performance, using knowledge of the system, to meet organisational benchmarks Document the installation and configuration process according to organisation guidelines Provide instruction on use of modified system Undertake one-to-one instruction on use of modified system with client or user in a manner that is appropriate to the audience Evaluate modified system Collect client or user feedback and analyse against client requirements Correct identified shortcomings in the system and record actions</p>		
<p>ICAI3101B- Install and manage network protocols Install and manage network protocols Select, test and validate appropriate network protocol services Design a network addressing system, with subnet and host IDs, including appropriate devices Configure hosts and workstations to use IP addresses either manually or through automatic allocation of addresses, such as found with dynamic host configuration protocol (DHCP) Identify network protocol applications Identify a range of well-known network protocol applications Evaluate client user requirement and recommend network protocol services Apply IP addressing scheme according to approved policies and procedures</p>		
<p>BSBCMN106B- Follow workplace safety procedures Follow workplace safety procedures Contribute to occupational health and safety in the workplace</p>		

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Criteria	Standard A	Standard B	Standard C	Standard D	Standard E
Familiar application <ul style="list-style-type: none"> knowledge simple application 	The student: <ul style="list-style-type: none"> recalls a wide range of facts, terminology, methods and procedures, concepts, processes and principles relating to Networking effectively selected and applied knowledge to produce a quality working operational network. 	The student: <ul style="list-style-type: none"> recalls a range of facts, terminology, methods and procedures, concepts, processes and principles relating to Networking consistently applied related knowledge to produce an operational network. 	The student: <ul style="list-style-type: none"> recalls facts and terminology and some related methods and procedures, concepts, processes and principles relating to Networking applied related knowledge to produce valid operational network. 	The student: <ul style="list-style-type: none"> recalls facts, terminology, and related concepts relating to Networking applied knowledge to produce an operational network. 	<ul style="list-style-type: none"> The student recalls some facts and terminology relating to Networking
Problem solving <ul style="list-style-type: none"> analysis synthesis evaluation 	The student: <ul style="list-style-type: none"> provided comprehensive analysis to a unrehearsed and complex problem developed an effective and efficient solution to an unrehearsed and complex problem evaluated contexts, inputs, processes and products, with detailed justification and against appropriate criteria. 	The student: <ul style="list-style-type: none"> provided detailed analysis of unrehearsed and complex problem developed an effective solution to unrehearsed and complex problem evaluated contexts, inputs, processes and products, with justification and against appropriate criteria. 	The student: <ul style="list-style-type: none"> identifies, classifies and describes an unrehearsed problem developed a solution to unrehearsed problems evaluated contexts, inputs, processes and products against appropriate criteria. 	The student: <ul style="list-style-type: none"> identified and classified a simple problem produced a simple or partial solution to the problem evaluated superficially. 	The student identified a simple problem but was unable to provide a solution
Communication <ul style="list-style-type: none"> representing information using language 	The student: <ul style="list-style-type: none"> constructed and presented a report to accompany the practical task which effectively integrated design principles used a wide vocabulary with discrimination and applied conventions of language to convey meaning appropriate to the minor project. 	The student: <ul style="list-style-type: none"> constructed and presented a report to accompany the practical task which effectively integrated design principles used a wide vocabulary with discrimination and applied conventions of language to convey meaning appropriate to the minor project. 	The student: <ul style="list-style-type: none"> constructed and presented a report to accompany the practical task which used some design principles used vocabulary and conventions of language to convey meaning appropriate to theminor project. 	The student: <ul style="list-style-type: none"> constructed and presented a report to accompany the practical task used language to convey meaning, although the meaning conveyed is not always appropriate to the minor project 	The student: <ul style="list-style-type: none"> presented a report used language, although meaning is sometimes unclear or inappropriate.

Background

You work for a network gaming company named Gamezone. Gamezone has decided to expand its operations to Marsden State High School Campus. As the IT technical advisor; you are required to plan the architecture for the new gaming lab including the room aesthetics. The small lab will have 8 networked computers, without internet access. Recycled Acer computers will be utilised for the build and non violent games will be preloaded for users.

Task

Making use of the recycled computers, hubs, switches, cabling located in the IT storeroom; you are to work in teams of 5-6 students to plan, implement and test a new gaming lab. In developing the lab you need to consider network configuration options, hardware, operating system, software, security and systems management requirements. School approved games will need to be preloaded. There must be strict adherence to copyright legislation and freeware agreements must be printed and submitted as appendices in your assessment.

Roll Out Strategy

You will be allowed two weeks to plan, document and prepare for the task. In week three your team will be allocated two sessions to assemble the network. You are more than welcome to access the lab during lunch times or PDT to do extra work.

Submission Requirements

(Work collectively on task, one print out per team member)

1. Title Page
2. Index Page
3. Task Description
4. Task Breakdown
5. Hardware Requirements
6. Networking Configuration & Justification
7. Diagram of System
8. Operating System
9. Software Requirements
10. Configuration Considerations
11. Security and Login Access
12. Lab Aesthetics
13. Implementation Strategy
14. Photos of Assembly in Progress
15. Screen Shots of Settings, Configuration and Software
16. Photos of Finished Lab
17. Testing and Evaluation Strategy
18. Evaluation Results
19. System Improvements
20. Appendices- Licensing Agreements

