ICT501 – Foundations of IT
Assessment 2 – Group Assignment

Overview

The purpose of this assignment is to develop the student's skills in designing an IT system.
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Timelines and important information

Percentage value of Task: 30%

Group Submission (4 Students) – Check the Moodle to find your group members

Due: Week 7

Submitting your work late will attract a 10% reduction of mark for each day beyond the due date. A delay of more than 5 days will result in being granted a **0**.

Assessment Details

IT network is the backbone of any business as many services are provided over the network infrastructure. This infrastructure connects all its computers and related devices together, allowing staff to work more efficiently across within the organization. Network design is the planning phase a company's IT infrastructure must go through before it is implemented. It involves evaluating and understanding how all the elements of the network link together (from routers, switches, APs and servers to desktops, and laptops) to achieve a high-performance network.

Wireless communication technology can have a significant impact on business allowing senders and recipients to access information while on the move. Because of raising growth of wireless technologies, allow access to the networks for the workplace community. So that customers, clients and employees want network and service from different places of the company. There has been considerable interest lately for all businesses to set up mobile computing workplaces for their employees and also mobile computing for other functions of the business from distributors, suppliers and service providers.

The assessment requires the students to design an enterprise wireless LAN using Packet Tracer for a large organization.
The students are required to submit a report, which address the following criteria:

1.   Analyse the requirements i.e., network hardware/software and QoS to make sure the following criteria is met:

a)   Confidentiality
b)   Integrity
c)   Availability
d)   Authentication
e)   Authorization

2.   Explore the architecture of the wireless network based on the requirements.

3.   Discuss and analyse the security issues and the countermeasure that you have designed.

Marking criteria:

Section to be included in the report	Description of the section	Marks
Abstract	Summarize the project and the outcome	2
Introduction	Introduction to enterprise wireless network and the challenges	2
Requirement analysis	Analyse the requirements i.e., network hardware/software and QoS to make sure the following criteria is met: a. Confidentiality b. Integrity c. Availability d. Authentication e. Authorization	8
Network Architecture	Design, Analysis, justification of an enterprise WLAN	8
Security Issues	Discuss and analyse the security issues and the countermeasure that you have designed	4
Testing	Test and prove a successful of connectivity between users and the associated security.	3
Conclusion	Write summary of the report highlighting the positive and negative points	2
Reference style	Follow IEEE reference style and format	2
Appendix	You need to upload the packet tracer file (.pka)	3
Report Layout	Report layout, style and writing	2
Demonstration	Each student demonstrations in Week 13 during the Lab time.	4
	Total	40

General Assessment Requirement

Incomprehensible submissions - Assessments provide the opportunity for students to demonstrate their knowledge and skills to achieve the required standard. To do this, assessment responses need to be both clear and easy to understand. If not, SISTC cannot determine that students have demonstrated their knowledge and skills. Assessments will, therefore, be marked accordingly including the potential for 0 (zero) marks where relevant.

Check with marking rubric: Before submitting your assessment, you should check it against the assessment criteria and the marking rubric included in this specification to ensure that you have satisfactorily addressed all the criteria that will be used to mark your submission.

Feedback

Feedback will be supplied through Moodle.

Authoritative results will be published on Moodle.

Academic Misconduct

To submit your assessment task, you must indicate that you have read and understood, and comply with, the Sydney International School of Technology and Commerce Academic Integrity and Student Plagiarism policies and procedures.

You must also agree that your work has not been outsourced and is entirely your own except where work quoted is duly acknowledged. Additionally, you must agree that your work has not been submitted for assessment in any other course or program.