FIT3165 – S1 2018 Assignment 2

A wireless network design report – Marking Guide

The following is a suggested report structure:

1. Letter of response to RFP (transmittal)
2. Title page*
3. Table of contents
4. List of figures
5. List of tables
6. List of abbreviations and/or glossary
7. Executive summary/abstract
8. Introduction*
9. Body*
   - **Perform requirements analysis**: When completed, state how the wireless network will be used, and what features are required for a wireless solution.
   - **Sizing:** Estimate the number of switching devices, Access Points (Aps) building routers, needed based on user population and Applications required.
   - **Placement**: Construct just one typical floor plan, which are identical to other floors of all buildings and identify possible AP locations for optimum coverage, and desktop layout of all users in each floor. The floor office can be office rooms or cubical office space. Placement of each floor switches and floor switch connection to building routers should be shown in a separate network layout plan.
   - **Power budget:** Create simple power budget for one typical wireless link related to your floor plan (E.g. AP to mobile station. Use reasonable assumptions for specifications that are not available. Show all workings). Use this to justify maximum AP separation and placement.
   - WLAN Channel/Sector assignment. Assign channels for optimum reuse with minimum co-channel interference, AP.
   - Identify method of connecting APs to backbone LAN and rest of the network connectivity.
   - **WAN**: show a detailed diagram of backbone WAN connectivity of new buildings and to the main office building in Melbourne.
   - **Configuration**: Create network plan that includes required configurations and network settings. This could be a diagram with annotations or a table of configurations for each device.
   - **Staging and Preparation:** create a procedure that will allow supplier to pre-configure and update switch, AP & other network components firmware (if required) before shipment to site(s).
   - Installation and Testing Plan
10. Conclusion*
11. Recommendations
12. Bibliography
13. Appendices.

(* Essential Items)

Note: Turnitin will be used to check for Plagiarism; disciplinary action will be taken within the School law.

Allocation of Marks

Student ID	Name

1.Requirements analysis	**10**	
2.Cable selection and justification	**10**	
3.Floor plan showing LAN design & device placement	**10**	
4.Building backbone connection and correctness	**10**	
5.WLAN design, AP location & Channel assignment	**10**	
6.Method of connecting devices	**10**	
7.Device Configuration plan	**10**	
8.Staging and Preparation	**10**	
9.Installation and testing plan	**10**	
10.Report structure and presentation	**10**	
	100	

General Assessment Rubric

	Exceptional (10)	Admirable (8–9)	Acceptable (5-7)	Unsatisfactory (1-4)
Presentation	Extremely well organized report; logical format that was easy to follow; flowed smoothly from one idea to another and cleverly conveyed; the organization enhanced effectiveness of the report	Presented in a thoughtful manner; there were signs of organization and most transitions were easy to follow, but at times ideas were unclear	Somewhat organized; ideas were not presented coherently and transitions were not always smooth, which at times distracted the reader	Choppy and confusing; format was difficult to follow; transitions of ideas were abrupt and seriously distracted the reader
Completeness	Totally accurate and complete; all relevant information was precise and explicit	Mostly accurate and complete; a few inconsistencies, errors or lack of information	Somewhat accurate and complete; more than a few inconsistencies, errors or lack of information	Completely inaccurate and incomplete; many inconsistencies, errors or lack of information
Correctness/ Understanding	Showed detail understanding of topic. Went above and beyond to research information; solicited material in addition to what was provided; brought in personal ideas and information to enhance report; and utilized more than 8 additional resources to support report	Showed above average understanding of topic. Did a very good job of researching; utilized materials provided to their full potential; solicited more than 6 types of research to enhance report; at times took the initiative to find additional information	Showed only a basic understanding of topic. Used the material provided in an acceptable manner, but did not consult any additional resources	Exhibited little or no understanding of topic. Did not utilize resources effectively; did little or no fact gathering on the topic
Interview	Exhibited detailed knowledge and understanding of all report contents during interview. Was extremely clever and interviewed with originality; including a unique approach that truly enhanced the report	Exhibited knowledge and understanding of most of the report contents. Was clever at times during interview; thoughtfully and unique interview	Exhibited some knowledge and understanding of most report contents. Mentioned a few original touches to enhance the report	Had little or no knowledge and understanding of report contents. Little creative energy and interest exhibited during this interview.

(End)