



# PROJECT GUIDELINE

DIPLOMA IN INFORMATION TECHNOLOGY ( DIGITAL TECHNOLOGY ) POLITEKNIK MALAYSIA

TRACK NETWORKING SYSTEM
TRACK SOFTWARE AND APPLICATION
DEVELOPMENT

TRACK INFORMATION SECURITY



Project Guideline Diploma in Information Technology (Digital Technology)
Politeknik Malaysia
1st Edition

@Percetakan Zainon Kassim Sdn Bhd

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### 1.0 INTRODUCTION

**PROJECT GUIDELINE** Diploma in Information Technology (Digital Technology) Politeknik Malaysia is to be used by student and lecturer of Jabatan Teknologi Maklumat Dan Komunikasi Politeknik Malaysia. This guideline is for Diploma in Information Technology (Digital Technology) track Networking System, track Software and Application Development and track Information Security only. The student project is a compulsory course to be taken for 5<sup>th</sup> semester students for the 3 years and 4<sup>th</sup> semester students for the 2.5 years diploma program. Each student will complete a project based on their field of study. The project guideline allows the students an opportunity to practice their theoretical knowledge and problem solving in the area of information technology. Students will be assessed on their skills in designing, problem solving, and performing technical management work.

#### 2.0 PROJECT SELECTION CRITERIA

- i. Projects must be developed in accordance to the requirements of industry, community or organization and can be commercialized if appropriate.
- ii. Projects should have future upgrade values, which can be made to improve the quality of the project.
- iii. All propose projects must be original. Students who plagiarized will be **STRICTLY** penalized and result will be failed.
- iv. Selection of project scope and topic can be done through discussion with the coordinator and supervisor. Student also can propose the topic themselves, and must be approved by the head of program, coordinator or supervisor.

### 3.0 PROJECT PROCEDURES

### i. Change project title

Students are allowed to change their project title within **ONE (1)** week with project coordinator or supervisor approval.

### ii. Task Summary

Each student should describe their task individually. The task should be different within team members.

#### iii. Attendance

Attendance must be at least 80%, if not students' coursework assessments marks will be disregarded.

#### iv. Copyright

The Polytechnic will be the owner of all findings, designs, patents and other intellectual property rights of the student projects.

### v. Plagiarism

Students may discuss with their supervisors if they are in doubt of plagiarism. If found committed plagiarism, strict action will be taken against the students.



# **4.0 PROJECT PLANNER**

WEEK	SHORT SEM	TASK	ASSESSMENT	MARK	REMARK
Week 1		1.0 PROJECT PROPOSAL.  1.1 Prepare project plan and project			STUDENT / SUPERVISOR
Week 2	Week 1	design	PROPOSAL PRESENTATION	CLO 1(10%)	STUDENT / SUPERVISOR / ACCESSOR
Week 3	Week 2				STUDENT / SUPERVISOR
Week 4	Week 2				STUDENT / SUPERVISOR
Week 5	Mark 2				STUDENT / SUPERVISOR
Week 6	Week 3	2.0 PROJECT DEVELOPMENT.	<u>DEMO #1</u>	CLO 2(20%)	STUDENT / SUPERVISOR
Week 7	Mark 4	2.1 Plan requirement and design specifications.			STUDENT / SUPERVISOR
Week 8	Week 4	2.2 Manage the hardware or software configuration.  2.3 Develop problem specification and			STUDENT / SUPERVISOR
Week 9	14/a - la F	design.			STUDENT / SUPERVISOR
Week 10	Week 5		DEMO #2	CLO 2(20%)	STUDENT / SUPERVISOR
Week 11	Week 6				STUDENT / SUPERVISOR
Week 12	week 6				STUDENT / SUPERVISOR
Week 13	Week 7	3.0 DELIVERABLES. 3.1 Present deliverables.			STUDENT / SUPERVISOR
Week 14	Week 7	<ul><li>3.2 Prepare project documentation.</li><li>3.3 Present final project.</li></ul>			STUDENT / SUPERVISOR
Week 15	Week 8	CAPSTONE PROJECT PRESENTATION.  Capstone project presentation Capstone Correction Re-Present Capstone Project Full Documents and Project Submitted	CAPSTONE PROJECT  1. Technical Report  2. End Product  3. Log Book	CLO 1(5 %) CLO 2(45 %) GSA (100%)	STUDENT / SUPERVISOR / ACCESSOR

<sup>\*</sup>This planner can be amendable accordance to polytechnic



# **5.0 PROJECT GANTT CHART**

WEEKS	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W	15
PLANNING	WE	K 1	WEI	K 2	WEE	EK 3	WEI	EK 4	WE	EK 5	WE	EK 6	WE	EK 7	WEI	EK 8
1.0 PROJECT PROPOSAL.																
Prepare project plan and project design																
PROPOSAL PRESENTATION																
<ul> <li>2.0 PROJECT DEVELOPMENT.</li> <li>2.1 Plan requirement and design specifications.</li> <li>2.2 Manage the hardware or software configuration.</li> <li>2.3 Develop problem specification and design.</li> </ul>																
DEMO 1 PRESENTATION																
<ul> <li>2.0 PROJECT DEVELOPMENT. (Continue)</li> <li>2.1 Plan requirement and design specifications.</li> <li>2.2 Manage the hardware or software configuration.</li> <li>2.3 Develop problem specification and design.</li> </ul>																
DEMO 2 PRESENTATION																
<ul> <li>2.0 PROJECT DEVELOPMENT. (Continue)</li> <li>2.1 Plan requirement and design specifications.</li> <li>2.2 Manage the hardware or software configuration.</li> <li>2.3 Develop problem specification and design.</li> </ul>																
<ul><li>3.0 DELIVERABLES.</li><li>3.1 Present deliverables.</li><li>3.2 Prepare project documentation.</li><li>3.3 Present final project.</li></ul>																
CAPSTONE PROJECT PRESENTATION																
<ul> <li>Capstone project presentation</li> <li>Project refining</li> <li>Re-Present Capstone Project</li> <li>Full Documents and Project Submission</li> </ul>																

<sup>\*</sup>This Gantt chart can be amendable accordance to polytechnic



# **6.0 DOCUMENTATION FORMAT**

Table 1.0 shows the documentation format for technical report.

**Table 1.0: Documentation Format** 

ITEMS	DESCRIPTION
Cover Page	The cover of technical project report must contain project title, authors name, registration number, department name, polytechnic name and session of study.  * Refers at Appendix 2.
Paper and Size	Use only high quality white A4 70-gram or A4 80-gram paper, size 210mm X 297mm.
Margin	For each page, the margin should be:  • Left: 40 mm  • Right, Top and Bottom: 25 mm  • Header and Footer: 15 mm
Format	<ul> <li>1.15 spacing should be used in preparing the technical project report including tables or charts. The format which acceptable is: <ul> <li>Font Type: Times New Roman, Font Size: 12 pt.</li> <li>Chapter Title: Uppercase, Bold, Centered (e.g: 1.0 PROJECT PLAN)</li> <li>Chapter Sub-section: Title Case, Bold, Align left (e.g: 1.1 Introduction)</li> <li>Paragraph: Justify</li> </ul> </li> </ul>
Figure and Table	All tables, charts, figures, and graphs should be numbered and titled. Both number and title should be centered either directly above tables label or directly below figure label. The numbering must be related to the Chapter.  (e.g: Figure 1.1: The Interface of System)
	Number of Chapter Number of Figure/Table  (e.g: Table 2.1: Hardware Requirement)
Technical Project Report	Report must be written minimum 30 pages length and not more than 50 pages <b>EXCLUDED</b> front page, appendix and references.
Paging	Bottom right.
References	Any material taken from another source must be cited and a brief reference to its source must be included in the text. Students must follow The American Psychological Association (APA) reference citations style for references in text.  * Refers at Appendix 6.
Binding	Report cover must be comb binding with plastic cover, blue color and 14 times New Roman font face.



# 7.0 TECHNICAL PROJECT REPORT

Table 2.0 shows the content of technical report.

Table 2.0 : Content of technical report

NO.	ITEMS	DESCRIPTION
	ABSTRACT	A brief summary of project to help user understand the project problems, purpose, methods and scope but <b>NOT</b> results, conclusions and recommendations. It must be below 100 words only in one paragraph.
	TABLE OF CONTENT	Table of content must have page number and sequence to the report items.
1.0	PROJECT PLAN	<b>1.1 Introduction</b> A brief description of the product to be produced.
		1.2 Problem Statement
		A concise description of an issue to be addressed or a condition to be improved.
		1.3 Objective of Project
		Purpose of the project should be in point form
		e.g: i. Objective 1 ii. Objective 2 iii. Objective 3
		The objectives must be specific, measurable, achievable, relevant and time oriented.
		1.4 Scope of Project
		State the user scope or project boundaries while doing this project. This scope will make sure that this project will be done correctly according to the stated scope. It is suggested to state scope by module of function.  *The details of the scope depend on supervisor or client needs.
		<b>1.5 Literature Review</b> Reference of previous studies that relevant to the project.
		<b>1.6 Methodology of Project</b> Briefly explain the project development model based on methodology that suitable with the project.
		<b>1.7 Project Gantt Chart</b> Create the timeline of the project progress to complete the project. Refer to page 3 (Project Gantt Chart).



NO.	ITEMS	DESCRIPTION
2.0	REQUIREMENT SPECIFICATION	<b>2.1 Functional Requirement</b> List of project main functions.
		2.2 Non Functional Requirement  Define system attributes such as security, reliability, performance, maintainability, scalability and usability.
		<b>2.3 Hardware and Software Requirement</b> List of hardware and software specification to be used in
		the project in a table form.
		<b>2.4 System Configuration</b> Explain how to configure the system.
		2.5 Security Requirement / Exceptional Handling Explain the security features / exceptional handling method implemented in the project.
3.0	FINAL DESIGN	<b>3.1 Logical Design</b> Explain and show the detailed of logical design project. It includes all system development diagrams such as data flow diagram, flowcharts, entity relationship diagram, contact diagram, schematic diagrams and network logical topology.
		<b>3.2 Physical Design</b> Explain and show the detailed of physical design project. It includes all user interface design network physical topology.
		or
		<b>3.2 Experimental Concept</b> Explain and show the detailed planning of studies to meet objective, collect data using suitable tools and executed experiment.



NO.	ITEMS	DESCRIPTION
4.0	TEST DESCRIPTION AND RESULTS	Students need to explain the development of process and result of the project. The testing processes also must be done to verify the functionality of the project.
		<b>4.1 Unit Testing Plan</b> Describe the unit testing scope and activities based on the given example.
1		<b>4.2 Integration Testing Plan</b> Describe the integration testing activities based on the given example.
		4.3 User Acceptance Test (if applicable)  Describe the user acceptance testing activities based on the given example.  *The example refers at Appendix 4.
5.0	DISCUSSIONS	<b>5.1 Advantage of the Project</b> List the advantage(s) of end product / final output that has been achieved.
		<b>5.2 Limitation of the Project</b> List the limitation(s) of end product / final output.
6.0	CONCLUSIONS AND RECOMMENDATIONS	Students should make conclusion about the project and discuss the importance of the project outcome. Students also have to make recommendation(s) or suggestion(s) in order to enhance the project for future works.
7.0	REFERENCE	List of works cited from published books, public document, journals, articles, thesis, magazines, films, videos, slides, maps, unpublished materials and electronic materials including websites. The way of written is follow the APA style format.  * Refers at Appendix 6.



# **8.0 ASSESSMENT RUBRIC**

# PROJECT SCORE RECORD (100%) <u>DFT6014 - INTEGRATED PROJECT</u>

STUDENT INFORMATION								
COURSE NAME	INTEGRATED PROJ	COURSE CODE	DFT60	DFT6014				
PROJECT TITLE				CLASS				
SUPERVISOR NAME				DATE				
	S1:	S1:			S1:			
STUDENT NAME	S2:			REGISTRATION NUMBER	<b>S</b> 2:			
	S3:				S3:			
	PROP	OSAL PRESE	ENTATION AND DEM	IONSTRATION				
	ITEM	CLO	ASSESSOR	PERCENT (%)	<b>S1</b>	S2	S3	
PROPOSAL PRES	ENTATION	CLO 1	SUPERVISOR AND ASSESSOR	10				
DEMONSTRATIO	DEMONSTRATION 1		SUPERVISOR	20				
DEMONSTRATIO	ON 2	CLO 2	SUPERVISOR	20				
			TOTA	AL 50				
		C	APSTONE PROJECT					
	ITEM	CLO	ASSESSOR	PERCENT (%)	<b>S1</b>	S2	<b>S3</b>	
TECHNICAL REP	ORT	CLO 2	SUPERVISOR	10				
END PRODUCT		CLO 2	SUPERVISOR AND ASSESSOR	35				
LOG BOOK		CLO 1	SUPERVISOR	5				
			TOTA	AL 50				
		A	ASSESSMENT TASK					
_	ITEM	CLO	ASSESSOR	PERCENT (%)	<b>S1</b>	S2	<b>S3</b>	
-	JNICATION SKILLS	CLO 3		10				
4·	L THINKING AND M SOLVING SKILLS	CLO 3		10				
1 11) 5. 1	SKILLS AND SIBILITIES	CLO 3	SUPERVISOR	10				
	EMENT AND RENEURIAL SKILLS	CLO 3		10				
D 9·	SHIP AND ORK SKILLS	CLO 3		10				
			TOTA	AL 50				



# FINAL PROPOSAL PRESENTATION SCORE (10%) <u>DFT6014 - INTEGRATED PROJECT</u>

	STUDENT INFORMATI	ON				
COURSE NAME	INTEGRATED PROJECT					
PROJECT TITLE		CLASS				
SUPERVISOR NAME		DATE				
	S1:		S1:			
STUDENT NAME	S2:	REGISTRATION NUMBER	S2:	S2:		
	S3:		S3:	S3:		
	PROPOSAL PRESENTATION	SCORE				
	TVDE OF ACCECCATAIT	STUDENT SCORE				
	TYPE OF ASSESSMENT	<b>S1</b>	<b>S2</b>	\$3		
SUPERVISOR (A)						
ACCESSOR (B)						
1	TOTAL PROPOSAL PRESENTATION SCORE (A + B )					
	TOTAL PROPOSAL PRESENTATION SCORE (10%) FORMULA ( (A+B) / 2 )					



# PROPOSAL PRESENTATION (10%) <u>DFT6014 - INTEGRATED PROJECT</u>

10	IACATSIA
	SUPERVISOR
	ASSESSOR

			STUDENT INFO	RMATION					
COURSE NAME	INTEGRATED PROJE	СТ	COURSE CODE	DFT6014	FT6014				
PROJECT TITLE					CLASS				
SUPERVISOR NAME					DATE				
	S1:					S1:			
STUDENT NAME	S2:				REGISTRATION NUMBER	S2:			
	S3:				NOMBER	S3:			
Agranta		Proposal Presentation Score							
Aspects	5	4	3	2	1	0	S1	S2	S3
1. Introduction [CLO 1]	Always clearly explains the project to be undertaken	Clearly explains the project to be undertaken most of the time	Sometimes clearly explains the project to be undertaken	Occasionally explains the projeto to be undertake	•	Vague about the project to be undertaken			
2. Problem Statement [CLO 1]	Always clearly explains the problems	Clearly explain the problems most of the time	Sometimes clearly explain the problems	Occasionally explains the problems faced	Vague explanation of the problems	No problem stated			
3. Objectives [CLO 1]	The main objective is very clear during first submission.	The main objective is clear during first submission.	The main objective needs to be improved	The main objecti is clear after revie		The main objective is not clear			
4. Scope [CLO 1]	Always clearly clarify system scope and user scope	Clearly clarify system scope and user scope most of the time	Most of the required system scope and user scope are included	Few of the requir system scope an user scope are included	between system	Do not clarify user between system scope and user scope			
5. Project Significance (cannot be measured) [CLO 1]	Excellent explanation of the project significance	Very Clear explanation of the project significance	Clear explanations of project significance	Less clear abou project significan	,	Do Not state the project significance			10



Aspects			Proposal Pres	entation Score			Stu	dent So	ore
Aspects	5	4	3	2	1	0	<b>S1</b>	S2	S3
6. Literature Review [CLO 1]	The study carried out very clearly describe related evidence	The study carried out clearly describe related evidence	The study carried out briefly describe related evidence	The study carried out less related evidence	The study carried out with unclear evidence	No evidence stated			
7. Methodology [CLO 1]	Methodology associated with building projects.	Most methodology associated with building projects.	Few of methodology associated with building projects.	Lack of methodology associated with building projects.	Methodology used was not appropriate.	No correlation with the methodology of project work.			
8. References [CLO 1]	References are significant to project and very organized with well-constructed using APA format.	References are organized and significant to project and follow APA format	References are significant to project and follow APA format.	Reference is not significant to the project but follow APA format.	Reference does not follow APA format.	No references			
9. Gantt Chart [CLO 1]	Gantt Chart is accurate based on project schedule.	Gantt Chart is accurate based on project schedule but less specific.	Gantt Chart is accurate based on project schedule but not specific.	Gantt Chart is less accurate based on project schedule.	Gantt Chart is not accurate based on project schedule.	No Gantt chart.			
10. Cost Planning [CLO 1]	The project is proposed with an excellent cost planning	The project is proposed with good cost planning	The project is proposed with satisfactory cost planning	The project is proposed with minimal clarity cost planning	The project is proposed with unclearly cost planning	No cost planning			
11. Conclusion [CLO 1]	Student concludes the presentation confidently	Student concludes the presentation	Student concludes the presentation with few points.	Conclusion is vague.	Inappropriate conclusion.	No conclusion.			
12. Presentation [CLO 1]	Present with a high degree of effectiveness and ideas.	Present with a moderate degree of effectiveness and ideas	Present with some effective ideas	Present with considerable ideas	Present with limited ideas	No presentation			
						Total Score ( 60 )			
					<u> </u>	sal Presentation Score Total Score / 60 * 10 )			



# DEMONSTRATION I (20%) <u>DFT6014 - INTEGRATED PROJECT</u>

			STUDENT INFO	RMATION						
COURSE NAME	INTEGRATED PROJEC	CT			col	URSE CODE	DFT6014			
PROJECT TITLE					CLA	ASS				
SUPERVISOR NAME					DAT	TE				
	S1:						S1:			
STUDENT NAME	S2:					GISTRATION MBER	S2:			
	S3: S3:									
Aspects	Demonstration I Score							Stu	dent Sc	ore
	5	4	3	2		1	0	<b>S1</b>	S2	S3
1. Progress of Project Development [CLO 2]	<b>50%</b> complete	More than <b>40%</b> complete	More than <b>30%</b> complete	More than <b>20%</b> complete	6	Less than <b>10%</b> complete	No progress of project development			
2. Interface/ Structure Design [CLO 2]	Clearly explain the design of project structure in details.	Able to explain the project structure design briefly.	Explain the project structure design in general only.	Show the project structure design without explanation	n	Project structure design is missing some elements.	No structure design.			
3. Content and Concept of Project [CLO 2]	The project does offer <b>100%</b> solution to the problem.	The project does offer <b>80%</b> solution to the problem.	The project does offer <b>60%</b> solution to the problem.	The project does o  40% solution to t  problem.	offer	The project does offer <b>20%</b> solution to the problem.	No solution to a problem.			
4. System Security and Features/ Exceptional Handling [CLO 2]	Implement a very clearly system security/Exceptional Handling	Implement a clearly system security/Exceptional Handling	Implement a moderately system security/Exceptional Handling	Implement a fair system security/Exceptio Handling		Implement a poorly system security/Exceptional Handling	system			
5. Testing [CLO 2]	Test cases are very clearly tested with expected output and actual output	Test cases are clearly tested with expected output and actual output	Test cases are moderately tested with expected output and actual output	Test cases are fai tested with expect output and actu- output	cted	Test cases are poorly tested with expected output and actual output	No testing			
							Total Score ( 25 )			
							stration I Score ( 20% ) ( Total Score / 25 * 20 )			



# DEMONSTRATION II (20%) DFT6014 - INTEGRATED PROJECT

			STUDENT INFO	RMATION						
COURSE NAME	INTEGRATED PROJE	СТ			cou	JRSE CODE	DFT6014			
PROJECT TITLE					CLA	SS				
SUPERVISOR NAME					DAT	TE .				A
	S1:						S1:			
STUDENT NAME	S2:				REGISTRATION S2:					
	S3:				S3:					
Aspects			Demonstra	tion II Score				Stu	ıdent So	core
Aspects	5	4	3	2		1 0		<b>S1</b>	S2	S3
1. Content and Concept of Project [CLO 2]	The project does offer <b>100%</b> solution to the problem.	The project does offer <b>80%</b> solution to the problem.	The project does offer <b>60%</b> solution to the problem.	The project does of 40% solution to problem.		The project does offer <b>20%</b> solution to the problem.	No project solution to a problem.			
2. Interface/ Structure Design [CLO 2]	Clearly explain the design of project structure in details.	Able to explain the project structure design briefly.	Explain the project structure design in general only.	Show the proje structure desig without explanati	gn	Project structure design is missing some elements.	No project structure design.			
3. Progress of Project Development [CLO 2]	80% complete	More than <b>65%</b> complete	More than <b>50%</b> complete	More than <b>35</b> % complete		Less than <b>25%</b> complete	No project development			
4. System Security and Features/ Exceptional Handling [CLO 2]	Implement a very clearly system security/Exceptional Handling	Implement a clearly system security/Exceptiona I Handling	Implement a moderately system security/Exceptional Handling	Implement a fai system security/Exception Handling	onal	Implement a poorly system security/Exceptional I Handling	of system security/Exceptional Handling			
5. Testing [CLO 2]	Test cases are very clearly tested with expected output and actual output	Test cases are clearly tested with expected output and actual output	Test cases are moderately tested with expected output and actual output	Test cases are fa tested with expect output and actu output	cted	Test cases are poorly tested with expected output and actual output	No testing			
Total Score (25 )										
							stration II Score ( 20% ) ( Total Score / 25 * 20 )			



# FINAL CAPSTONE PROJECT SCORE (50%) <u>DFT6014 - INTEGRATED PROJECT</u>

		:	STUDENT INFORMATIO	N				
COURSE NAME	INTEGRAT	ED PROJECT		COURSE CODE	DFT6014			
PROJECT TITLE				CLASS			A	
SUPERVISOR NAME				DATE				
	S1:				S1:			
STUDENT NAME	S2:			REGISTRATIO N NUMBER	S2:			
	S3:				S3:			
		C	APSTONE PROJECT SCO	RE				
TYPE OF ASSE	SSMENIT	CLO	ASSESSOR	S <sup>-</sup>	E			
TIPE OF ASSE.	SSIVILIVI	CLO		S1	S2		S3	
TECHNICAL REP	PORT (TR)	CLO 2	SUPERVISOR					
			SUPERVISOR					
END PRODUCT	(EP)	CLO 2	ACCESSOR					
			AVERAGE (A)					
LOG BOOK (LB)		CLO 1	SUPERVISOR					
	TOTAL CAPSTONE PROJECT SCORE (TR + EP + LB)							



# FINAL CAPSTONE PROJECT SCORE TECHNICAL REPORT (10%)

			STUDENT INFO	RMATION						
COURSE NAME	INTEGRATED PROJE	СТ			col	URSE CODE	DFT6014			
PROJECT TITLE					CLA	ASS				
SUPERVISOR NAME					DA <sup>-</sup>	TE				
	S1:						S1:			
STUDENT NAME	S2:					GISTRATION IMBER	S2:			
	S3:						S3:			
Aspects			Technical R	eport Score				Stu	ıdent S	core
Aspects	5	4	3	2		1	0	<b>S1</b>	S2	S3
1. Abstract [CLO 2]	Describe excellent and specific abstract sentence for project problems, purpose, scope and method, without grammatical errors. Very good explanations of the project	Describe good abstract sentence for project problems, purpose, scope and method, without grammatical errors. Clear explanations of the project	Describe clear abstract sentence for project problems, purpose, scope and method, without grammatical errors. Moderate explanations of the project	Describe modera abstract sentend for project problems, purpos scope and metho with moderate grammatical erro Not clear explanations of t project	se, od, e ors.	Describe poor abstract sentence for project problems, purpose, scope and method, with many grammatical errors. Vague explanations of the project.	Abstract sentence for project problems, purpose, scope and method, with many grammatical errors. No explanation of the project.			
2. Project Plan [CLO 2]	Describe excellent and specific sentence for introduction, problem statement, objective, scope, literature review, methodology and Gantt chart.	Describe good sentence for introduction, problem statement, objective, scope, literature review, methodology and Gantt chart.	Describe clear sentence for introduction, problem statement, objective, scope, literature review, methodology and Gantt chart.	Describe modera sentence for introduction, problem stateme objective, scope literature review methodology an Gantt chart.	ent, e, w,	Describe poor sentence for introduction, problem statement, objective, scope, literature review, methodology and Gantt chart.	Not describe the introduction, problem statement, objective, scope, literature review, methodology and Gantt chart.			



Aspects			Technical R	eport Score			Student Scor		
Aspects	5	4	3	2	1	0	<b>S1</b>	S2	S3
3. Requirement	All requirements are	Only 4 requirements	Only 3 requirements	Only 2 requirements	Only 1 requirement	No requirement.			
Specification	excellently describe.	are clearly describe.	are clearly describe.	are clearly describe.	is clearly describe.				
[CLO 2]									
4. Final Design	Excellently defines	Very well defines	Clearly shows and	Moderately shows	Not clearly shows	Not shown and			9
[CLO 2]	and shows process	and shows process	elaborates the	and elaborates the	and elaborate the	elaborate design			
	in design	in design	design process.	design process.	design process.	process.			
5. Test Description and	Use good testing	Use good testing	Use suitable testing	Use suitable testing	Use unsuitable	No testing	1		
Results	technique and	technique and show	technique and show	technique but not	testing technique.	technique.			
[CLO 2]	suitable data. Good	clear result after	clear result after	show clear result				A	
	result elaboration.	testing.	testing.	after testing.					
6. Major Findings and	Excellently list	Very well list the	Clearly list the	Moderately list the	Not clearly list the	Do not list the			
Discussions	the advantages and	advantages and	advantages and	advantages and	advantages and	advantages and			
[CLO 2]	disadvantages	disadvantages	disadvantages	disadvantages	disadvantages	disadvantages			
7. Conclusions and	Excellent	Good elaboration of	Clear elaboration of	Moderate	Poor elaboration of	No conclusion and			
Recommendations	elaboration of the	the conclusion and	the conclusion and	elaboration of the	the conclusion and	recommendations			
[CLO 2]	conclusion and	recommendations	recommendations	conclusion and	recommendations				
	recommendations			recommendations					
8. References	References are	References are	References are	Reference is not	Reference does not	No references			
[CLO 2]	significant to project	organized and	significant to project	significant to the	follow APA format.				
	and very organized	significant to project	and follow APA	project but follow					
	with well-	and follow APA	format.	APA format.					
	constructed using	format.							
	APA format.								
	•								
						Total Score ( 40 )			
						echnical Report Score Total Score / 40*10)			

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# FINAL CAPSTONE PROJECT SCORE END PRODUCT/ FINAL OUTPUT (35%)

			STUDENT INFO	RMATION					
COURSE NAME	INTEGRATED PROJE	СТ			COURSE CODE	DFT6014			
PROJECT TITLE					CLASS				
SUPERVISOR NAME					DATE				
	S1:					S1:			
STUDENT NAME	S2:	REGISTRATION S2:							
	S3:					S3:			
Aspects			End Product/ Fi	nal Output Score			Stu	ident S	core
, is peeds	5	4	3	2	1	0	<b>S1</b>	S2	<b>S3</b>
1. Project achievement and objective [CLO 2]	Project is <b>100%</b> complete and achieve all objectives and exceed expectation.	Project is <b>90%</b> complete and achieve all objectives.	Project is <b>80%</b> complete and achieve most objectives.	Project is <b>70%</b> complete and achieve a few objectives.	Project is less than 50% complete and achieves only one objective.	No objective achieves.			
2. User Requirements [CLO 2]	All user requirements have been met and exceeded.	All requirements were met.	Several requirements were met.	Not more than on requirement was not met.		No requirements were met.			
3. Construction and functionality [CLO 2]	Always describes effectively how the system was constructed and how it functions.	Most of the time describes how the system was constructed and how it functions.	Sometimes describes how the system was constructed and how it functions.	Occasionally describes how the system was constructed and how it functions.	Least attempts are made to describe how the system was constructed and how it functions.	No attempt is made to describe construction or functionally.			
4. Feasibility [CLO 2]	Always clearly communicated feasibility of construction and implementation. No errors with notification.	Clearly communicated feasibility of construction and implementation most of the time. Minor error.	Sometimes communicated feasibility of construction and implementation. Minor error.	Occasionally communicated feasibility of construction and implementation. Minor error.	Least communicated feasibility of construction and implementation.  Major error.	No meaningful attempt was made to develop a solution. Major error.			

PROJECT GUIDELINE



Aspects			End Product/ Fir	nal Output Score			Stu	dent S	core
Aspects	5	4	3	2	1	0	<b>S1</b>	Student S	S3
5. Originality [CLO 2]	Product shows an excellent original thought.	Product shows a good original thought.	Product shows a moderate amount of original thought.	Uses other people's ideas but there is little reference of original thinking.	Uses other people's ideas.	No originality and plagiarism.			
6. Marketability [CLO 2] 7. Creativity	Project marketability is clearly communicated as to how this design is different, better, set apart from what already exists.  Excellent ideas,	Attempt is made to communicate the device's marketability most of the time as to, how this design is different, better, set apart from what already exists.  Good ideas, creative	Moderate attempt is made to communicate the device's marketability as to how this design is different, better, set apart from what already exists.  Moderate ideas,	Slight attempt is made to communicate the device's marketability, how this design is different, better, set apart from what already exists.  Fairly creative ideas	Least attempt is made to communicate the device's marketability, how this design is different, better, set apart from what already exists.  Lack of ideas,	No meaningful attempt is made to communicate the project's marketability, how this design is different, better, set apart from what already exists.  No creativity			
[CLO 2]	creative and inventive.	and inventive.	creative and inventive.	and inventive	creativity and invention.				
8. System Security, Features and Testing [CLO 2]	Excellent implementation of user controls and validation controls	Good implementation of user controls and validation controls	Moderate implementation of user controls and validation controls	Fair implementation of user controls and validation controls	Poor implementation of user controls and validation controls	No implementation of user controls and validation controls			
						Total Score ( 40 )			
	End Product/ Final Output Score Formula = ( Total Score / 40 * 35 )								

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# FINAL CAPSTONE PROJECT SCORE LOG BOOK (5%)

			STUDENT INFO	RMATION						
COURSE NAME	INTEGRATED PROJE	СТ			со	URSE CODE	DFT6014			
PROJECT TITLE					CLA	ASS				
SUPERVISOR' NAME					DA	TE				
	S1:						S1:			
STUDENT NAME	S2:					GISTRATION IMBER	S2:			
	S3:						S3:			
Aspects			Log Boo	ok Score					ident S	core
	5	4	3	2		1	0	S1	S2	S3
1. Weekly activities [CLO 1]	All 14 weeks of activities are recorded in the log book.	More than 12 weeks of activities are recorded in the log book.	More than 8 weeks of activities are recorded in the log book.	More than 5 wee of activities are recorded in the I book.	9	Less than 5 weeks of activities are recorded in the log book.	No activity is recorded in log book.			
	All 7 weeks of activities are recorded in the log book.	More than 6 weeks of activities are recorded in the log book.	More than 5 weeks of activities are recorded in the log book.	More than 4 wee of activities are recorded in the I book.	9	Less than 3 weeks of activities are recorded in the log book.	No activity is recorded in log book.			
2. Supervisor signatures [CLO 1]	Supervisor's signature of verification is shown for all 14 weeks.	Supervisor's signature of verification is shown for more than 12 weeks.	Supervisor's signature of verification is shown for more than 8 weeks.	Supervisor's signature of verification is sho for more than ! weeks.		Supervisor's signature of verification is shown for less than 5 weeks.	No signature of verification of the supervisor.			
	Supervisor's signature of verification is shown for all 7 weeks.	Supervisor's signature of verification is shown for more than 6 weeks.	Supervisor's signature of verification is shown for more than 5 weeks.	Supervisor's signature of verification is sho for more than a weeks.		Supervisor's signature of verification is shown for less than 3 weeks.	No signature of verification of the supervisor.			



Aspects			Log Boo	ok Score			Stu	dent So	core
Aspects	5	4	3	2	1	Ils are missing o not illustrate oject activities done.  The log book is in unsatisfactory condition. It is in virtually unreadable condition. Handwriting is ole. Less effort been made to to the logbook presentable	<b>S1</b>	S2	S3
3. Details [CLO 1]	Log book is exceptionally detailed, provide an in-depth look into the project activities, and reflects the student's commitment	Log book is exceptionally detailed; provide an in-depth look into the project activities.	An appropriate amount of detail is used to explain the project activities done.	Details are missing, insufficient illustration of the project activities are done.	Details are missing and do not illustrate the project activities done.	•			
4. Neatness [CLO 1]	The log book is exceptionally neat. The pages are in very good condition, handwriting is neat and an obvious effort has been made to keep the log book presentable	The log book is neat. The pages are in good condition, handwriting is neat and some effort has been made to keep the log book presentable	The log book is averagely neat. The pages are in satisfactory, readable condition, handwriting is legible and some effort has been made to keep the logbook presentable	The log book is relatively neat. The pages are in unsatisfactory but still in readable condition, handwriting is legible and less effort has been made to keep the logbook presentable	The log book is unkempt. The pages are in unsatisfactory condition. It is in virtually unreadable condition. Handwriting is illegible. Less effort has been made to keep the logbook presentable	unsatisfactory condition. It is in virtually unreadable condition. Handwriting is illegible. No effort has been made to keep the logbook			



# OTHER ASSESSMENT TASK (100%) <u>DFT6014 - INTEGRATED PROJECT</u>

	STUDENT INFORMATION											
COURSE NAME	INTEGRATED PROJECT	COURSE CODE	DFT6014									
PROJECT TITLE		CLASS										
SUPERVISOR NAME		DATE										
	S1:		S1:									
STUDENT NAME	S2:	REGISTRATION NUMBER	S2:									
	S3:		S3:									

### **LD 3: COMMUNICATION SKILLS**

Asmanta			Score			Stu	dent S	core
Aspects	5	4	3	2	1	S1	<b>S2</b>	S3
1. Kejelasan Idea [CLO 3]	Boleh menyampaikan idea dengan sangat jelas.	Boleh menyampaikan idea dengan jelas	Boleh menyampaikan idea dengan jelas namun memerlukan sedikit penambahbaikan.	Boleh menyampaikan idea dan memerlukan penambahbaikan lanjut.	Tidak boleh menyampaikan idea dan memerlukan banyak penambahbaikan.			
2. Kefahaman dan menjawab soalan [CLO 3]	Boleh memahami dan menjawab soalan dengan cemerlang.	Boleh memahami dan menjawab soalan dengan baik	Boleh memahami dan menjawab soalan dengan memuaskan.	Boleh memahami dan menjawab soalan tetapi kurang bertepatan dengan kehendak soalan.	Tidak memahami dan tidak dapat menjawab soalan.			
					Total Score ( 10 )			



LD 4: CRITICAL	L THINKING AND	<b>PROBLEM</b>	<b>SOLVING SKILLS</b>
----------------	----------------	----------------	-----------------------

Aspests	Score							Student Score		
Aspects	5	4	3	2	1	<b>S1</b>	S2	S3		
3. Penjanaan Penyelesaian [CLO 3]	Boleh menyelesaikan masalah atau menawar penyelesaian alternatif dengan sangat tepat, terperinci dan jelas.	Boleh menyelesaikan masalah atau menawar penyelesaian alternatif dengan tepat dan jelas tanpa bantuan.	Boleh menyelesaikan masalah atau menawar penyelesaian alternatif dengan sedikit bantuan.	Boleh menyelesaikan masalah atau menawar penyelesaian alternatif dengan bantuan yang maksimum.	Tidak boleh menyelesaikan masalah atau menawar penyelesaian alternatif.					
4. Integrasi [CLO 3]	Boleh menyatukan idea-idea sedia ada dan boleh menghasilkan penyelesaian baharu dengan sangat jelas.	Boleh menyatukan idea- idea sedia ada dan boleh menghasilkan penyelesaian baharu dengan jelas.	Boleh menyatukan idea-idea sedia ada dan boleh menghasilkan penyelesaian baharu dengan bantuan.	Boleh menyatukan idea-idea sedia ada tetapi tidak boleh menghasilkan penyelesaian baharu.	Tidak boleh menyatukan idea- idea sedia ada.					

### LD 5: SOCIAL SKILLS AND RESPONSIBILITIES

san rasa hormat dan n yang tinggi kepada keperluan individu ertanggungjawab dan	4 Menunjukkan rasa hormat dan penghargaan kepada hak dan keperluan individu lain  1. Bertanggungjawab dan	Menunjukkan sensitiviti terhadap hak dan keperluan individu lain. Bertanggungjawa	Kurang sensitiviti terhadap hak dan keperluan individu lain. Mengambil	Tiada sensitiviti terhadap hak dan keperluan individu lain.	S1	<b>S2</b>	S3
n yang tinggi kepada keperluan individu ertanggungjawab dan	penghargaan kepada hak dan keperluan individu lain	sensitiviti terhadap hak dan keperluan individu lain.	sensitiviti terhadap hak dan keperluan individu lain.	terhadap hak dan keperluan individu lain.			
	1. Bertanggungjawab dan	Bertanggungjawa	Mengambil	Kurang inisiatif			
ngambil inisiatif untuk diri dalam komuniti. u berperanan aktif n perubahan (seperti a, memperbaiki, kan nilai moral dan dalam komuniti.	sentiasa mengambil inisiatif untuk melibatkan diri dalam komuniti. 2. Mampu berperanan sebagai agen perubahan (seperti menjaga, memperbaiki, menstabilkan nilai moral dan norma) dalam komuniti.	b dan mengambil inisiatif untuk melibatkan diri dalam komuniti pada tahap yang memuaskan.	inisiatif untuk melibatkan diri dalam komuniti apabila diminta	dan tidak berminat untuk melibatkan diri dalam komuniti.			
n k	perubahan (seperti a, memperbaiki, an nilai moral dan	perubahan (seperti agen perubahan (seperti menjaga, memperbaiki, an nilai moral dan menstabilkan nilai moral dan	perubahan (seperti agen perubahan (seperti dalam komuniti pada tahap yang an nilai moral dan memuaskan.	perubahan (seperti agen perubahan (seperti dalam komuniti komuniti n, memperbaiki, menjaga, memperbaiki, pada tahap yang apabila an nilai moral dan memuaskan. diminta	perubahan (seperti agen perubahan (seperti dalam komuniti komuniti dalam komuniti, memperbaiki, menjaga, memperbaiki, pada tahap yang apabila komuniti. an nilai moral dan memuaskan. diminta	perubahan (seperti agen perubahan (seperti dalam komuniti komuniti dalam nilai moral dan menstabilkan nilai moral dan dalam komuniti komuniti dalam apabila komuniti.	perubahan (seperti agen perubahan (seperti dalam komuniti komuniti dalam komuniti, memperbaiki, menjaga, memperbaiki, pada tahap yang apabila komuniti. an nilai moral dan memuaskan. diminta



LD 7: MANAGEMENT AND ENTREPRENEURIAL SKILLS											
A 4			Score			Stu	dent So	core			
Aspects	5 4 3 2				1	<b>S1</b>	S2	S3			
7. Organisasi Idea [CLO 3]	Menyampaikan idea dengan cara yang amat jelas, padu dan teratur.	Menyampaikan idea dengan cara yang jelas, padu dan teratur.	Menyampaikan idea dengan cara yang sederhana jelas, padu dan teratur.	Menyampaikan idea dengan cara yang kurang jelas, padu dan teratur.	Menyampaikan idea dengan cara yang tidak jelas, padu dan teratur.						
8. Peluang keusahawanan [CLO 3]	Mengupayakan idea menjadi peluang mengikut strategi perniagaan dan memenuhi kehendak / keperluan pelanggan.	Idea perniagaan adalah jelas dan memenuhi kehendak / keperluan pelanggan.	Idea perniagaan adalah jelas tetapi tidak memenuhi kehendak / keperluan pelanggan.	Mempunyai idea penambahan nilai / penyelesaian masalah yang tidak jelas dan tidak relevan dengan kehendak / keperluan pelanggan.	Tiada idea untuk penambahan nilai / penyelesaian masalah / kehendak / keperluan pelanggan.						

	LD 9: LEADERSHIP AND TEAMWORK SKILLS											
Acrosto			Score			Stu	dent So	ore				
Aspects	5	4	3	2	1	S1	S2	S3				
9. Kepimpinan Berkesan [CLO 3]	Mempamerkan bukti jelas kebolehan memimpin anggota kumpulan dengan berkesan dalam mencapai objektif.	Boleh memimpin anggota kumpulan sehingga projek mencapai objektif dengan berkesan	Boleh memimpin anggota kumpulan sehingga projek mencapai objektif dengan berkesan yang baik dan memerlukan sedikit penambahbaikan.	Boleh memimpin anggota kumpulan sehingga projek mencapai objektif tetapi dengan kesan yang terhad dan memerlukan penambahbaikan.	Tiada bukti jelas kebolehan memimpin anggota kumpulan secara berkesan dalam mencapai objektif.							
10. Menghormati dan Menerima Pendapat [CLO 3]	Menghormati dan menerima dengan sangat baik pendapat ahli kumpulan bagi mencapai objektif.	Menghormati dan menerima dengan baik pendapat ahli kumpulan bagi mencapai objektif.	Menghormati dan menerima pendapat ahli kumpulan bagi mencapai objektif.	Kurang menghormati dan menerima pendapat ahli kumpulan alam mencapai objektif kumpulan.	Tidak menunjukkan rasa hormat dan tidak menerima pendapat anggota kumpulan sehingga menimbulkan konflik.							
					Total Score ( 10 )							



# Appendix i

# i. Proposal Guidelines

**Table 3.0 : Proposal Guidelines** 

No	Topic / Chapter	Description				
1.0	Introduction	Always clearly explains the project to be undertaken.				
2.0	Problem Statement	Always clearly explains the problems.				
3.0	Objectives	The main objective is very clear during first submission.				
4.0	Scope	Always clearly clarify system scope and user scope.				
5.0	Project Significance (cannot be measured)	Excellent explanation of the project significance.				
6.0	Literature Review	The study carried out very clearly describes related evidence.				
7.0	Methodology	Methodology associated with building projects.				
8.0	References	References are significant to project and very organized with well-constructed using APA format.				
9.0	Gantt Chart	Chart is accurate based on project schedule.				
10.0	Cost Planning	The project is proposed with an excellent cost planning.				
11.0	Conclusion	Student concludes the presentation confidently				





# KEMENTERIAN DEPARTMENT OF INFORMATION & **COMMUNICATION TECHNOLOGY**



# **DIPLOMA IN INFORMATION TECHNOLOGY** (DIGITAL TECHNOLOGY)

# AN IMPLEMENTATION OF IPV6 IN WIRELESS NETWORK **ENVIRONMENT**

### **GROUP MEMBERS**

**NORADILAH BINTI SUKOR** 25DDT16F1001

MAS AYU BINTI MOHD ARIFF 25DDT16F1002

**RUZANNA BINTI ABU BAKAR** 25DDT16F1003

**SUPERVISOR** 

**ZALEHA BINTI SALAMON** 

**SESSION: DECEMBER 2018** 



# Appendix iii

# iii. Task Summaries

**Table 4.0: Task Summaries** 

	TASK								
No	Person In Charge	Task Description							
1.	Student 1	- State all the tasks has been in charged by Student 1							
2.	Student 2	<ul> <li>State all the tasks has been in charged by Student 2</li> </ul>							
3.	Student 3	- State all the tasks has been in charged by Student 3							

<sup>\*\*</sup> Task summaries are based on allocating project scopes among group members.

Verified by :	
( SUPERVISOR NAME )	



# iv. Testing

Table 5.0: Unit Testing Plan (UTP)

	UNIT TESTING PLAN (UTP)									
No.	Test Case Name	Test Procedure	Pre- condition	Expected Result	Tester	Result (Pass / Failure)				
1.	Login	User is required to fill the username and password field before access the system	User need to register or sign up before login.	+ case Prompt notification successful login!	Adriana	Pass				
2.										

<sup>\*</sup>Expected result will be based on the test name procedure.

**Table 6.0: Integration Testing Plan (ITP)** 

	INTEGRATION TESTING PLAN (ITP)										
No.	Test Case Name	Test Procedure	Pre- condition	Expected Result	Tester	Result (Pass / Failure)					
1.	Login	User is required to click submit button.	None	User will directly go to homepage system after login.	Adriana	Pass					
2.											

<sup>\*</sup>Expected result will be based on the test name procedure.

**Table 7.0: User Acceptance Testing (UAT)** 

	USER ACCEPTANCE TESTING (UAT)									
No.	Test Case	Acceptance Requirement	Test F	Result	Tester	Comments				
140.	Name	Acceptance Requirement	Pass	Fail	rester	Comments				
1.	Login	User is required to fill in the username and password before access the system	Pass		Fifdil	(Comments are given by a client)				
2.										

<sup>\*</sup>Expected result will be based on the test name procedure.



# Appendix v

# v. Compliance and Auditing / Checklist Form

Table 8.0: Server Vulnerability & Handling

	SERVER VULNERABILITY & HANDLING						
No	Remarks	Yes	No				
1.	Do you used automated tools to assess system vulnerabilities	٧					
2.							

<sup>\*</sup> Subtitle and remarks are depends on type of project.





#### vi. References

#### **Book**

Barnard, R., de Luca, R., & Li, J. (2015). First-year undergraduate students' perceptions of lecturer and peer feedback: A New Zealand action research project. *Studies In Higher Education*, *40*(5), 933-944. https://doi.org/10.1080/03075079.2014.881343

#### **Ebook**

Miller, L. (2008). *Careers for nature lovers & other outdoor types*. Retrieve from http://www.ebscohost.com

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### Magazine

Jackson, P. (2011, March 1). Navy Yard Hill and the founding of Washington City. *Capitol Hill Historian*, 2, 5-9. https://doi.org/10.1068/20113

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Dumais, S. A., Rizzuto, T. E., Cleary, J., & Dowden, L. (2013). Stressors and supports for adult online learners: Cmparing first- and continuing-generation college students. *American Journal of Distance Education*, *27*(2), 100-110. https://doi.org/10.1080/08923647.2013.783265

### **Streaming Video**

Heffernan, M. (2015, May). Margaret Heffernan: Why it's time to forget the pecking order at work [video file]. Retrieved from https://www.ted.com/talks/margaret\_heffernan\_why\_it\_s\_time\_to\_forget\_the\_pecking order at work

### Interview

Cloyd, A. (2018, July 29). Personal Interview.

