

CSN4224 – Operating Systems Project

STATEMENT

In a group of 3-4 members, you are required to investigate, install, analyse, and document features of a various Operating System. Each group should select **TWO (2)** of the following operating systems (Mobile or Desktop):

1. Linux/Unix
2. Windows
3. Mac/iOS
4. Android Mobile Operating Systems
5. Any other Operating Systems (subject to approval from your lecturer)

You need to discuss the selection, identify the version, and get the approval from your subject lecturer before starting your research work.

This project is divided into **TWO (2)** assessment components which are:

1. Report – **(20%)**
2. Presentation – **(20%)**

PHASE 1: RESEARCH AND INVESTIGATION

You report should include the following:

1. Introduction to all the TWO (2) OS and the respective company.
2. Compare the System hardware requirements (Minimum and recommended both) for all the TWO (2) chosen operating systems. E.g. CPU, memory, and hard disk space.
3. Conclusion of hardware comparison.

PHASE 2: INSTALLATION

For all the TWO (2) chosen Operating Systems, do compare the installation process.

1. Choose any one way of installation (CD, image, or anything)
2. Discuss the steps involved and compare them.
3. Provide screenshot.

PHASE 3: ANALYSIS

Select any TWO (2) topics from the list below. Describe how this topic is handle in all the TWO (2) selected Operating Systems. Compare and evaluate the TWO (2) selected Operating Systems with respect to the chosen topic. Critically discuss the mechanisms and philosophies used by each OS to implement the concept of the selected topic.

1. CPU Scheduling
2. Deadlock
3. Memory Management
4. Virtual Memory

PHASE 4: CONCLUSION

Conclude your finding in the form of table.

REPORT GUIDELINES

Final report should meet the following requirements:

1. Table of Contents for every session
2. Gantt chart
3. Workload Matrix (breakdown of tasks among the members as per the agreement)
4. Introduction
5. Main discussion
6. Limitation to the case study
7. Conclusion
8. Reference (APA Style). **You MUST cite your reference accordingly.** You may refer to the YouTube for reference: <https://www.youtube.com/watch?v=opp259YvaoE>. **Any report submitted without proper citation and reference, will not be graded.**
9. Appendix

Students are required to print the table below on the cover sheet of the report.

No	Team Members Names	Student ID	Documentation (10)	Installation (10)	Research and Investigation (15)	Information and Comparison (15)	Case Analysis (20)	Engagement (15)	Referencing (5)	Peer - Review (10)	Total Mark (100)
1											
2											
3											
4											

REPORT FORMAT

1. Use a clear and legible font (**Times New Roman**) with appropriate font size (**12 pt**).
2. Set margins to **one inch** on all sides for printed reports.
3. Use **double-spacing** throughout the report, **EXCEPT** for tables, figures, and references.
4. **Number all pages sequentially**, excluding the cover page.
5. Make use of Appendix if there is any document / file / report and others, you would like to attach together with your report.

REPORT SUBMISSION

1. Submit the report electronically via the designated platform (to be defined by your subject lecturer). **Your subject lecturer has all the right to request submissions in the form of hardcopy.**
2. Ensure the file format is in PDF.
3. Name you file as
CSN4224_PROJECTREPORT_STUDENTID1_STUDENTID2_STUDENTID3_STUDENTID4

SUBMISSION DEADLINE

The deadline for submission is on **Week 13 (21 June 2024, Friday)** before **11:59PM**. Any late submission will be deducted 10% from the awarded mark for each day late.

ASSESSMENT CRITERIA

- Documentation 10%
 - Gant chart
 - Workload matrix
- Installation 10%
- Research and Investigation 15%
- Information and Comparison 15%
- Case Analysis 20%
- Engagement 15%
- Referencing 5%
- Peer – Review 10%

REPORT EVALUATION RUBRIC

Criteria	1.0 – 2.0 Fail	3.0 – 4.0 Marginal Fail	5.0 – 6.0 Pass	7.0 – 8.0 Credit	9.0 – 10.0 Distinction	Score
Documentation (15%)	No table of content. No page numbering. Font size and type are not standardised. No Gantt Chart. No Workload Matrix	Table of content exist but without page numbers. Report structure not standardised (including alignment and spacing). Either Gantt Chart or Workload Matrix exist.	Table of content included with proper page numbering. Standardised report structure and headings. Conclusion has summary of the report. Both Gantt Chart and Workload Matrix exist.	Table of content included with proper page numbering. Good structure and flow of documentation with appropriate header and footer. Good conclusion of the report. Both Gantt Chart and Workload Matrix exist with explanation.	Very good structure and flow of documentation. Appropriate header, and footer with very good appearance. Conclusion of the report highlights the project strength, future improvement, and related area. Good discussion and justification for both Gantt Chart and Workload Matrix presented to support the project execution	
Installation (10%)	Installation process is missing or extremely poorly documented, making it nearly impossible to follow.	Installation process is unclear and poorly documented, making it difficult to follow. Steps lack detail, and visuals, if any, are inadequate.	Installation process is adequately explained, but some steps may be unclear or lack sufficient detail. Visuals, if included, may not be comprehensive.	Installation process is clear, well-documented, and easy to follow. Most steps are explained adequately with visuals provided as necessary.	Installation process is exceptionally clear, well-documented, and easy to follow. All steps are meticulously explained with accompanying visuals if needed.	
Research and Investigation (15%)	Incomplete assignment requirement. Objectives and scope are nor clear. No additional information for the	Assignment requirements are partially completed. Objectives and scope of the research are defined. Very	All assignment requirements are completed. Objective and scope of the research are clearly defined.	Relevant information provided. Good explanation on the objective, scope, and limitation of the	Up to date information provided. Very good explanation on the objective, scope, and limitation of	

	<p>Body of Knowledge.</p> <p>Incomplete investigation and findings of the Operating Systems Features.</p>	<p>limited information for the Body of Knowledge.</p> <p>Appropriate choices of investigation but finding are rather weak or irrelevant.</p>	<p>Provides sufficient information for the Body of Knowledge.</p> <p>Good Investigation technique demonstrated with relevant findings.</p>	<p>research. Provide detailed information for the Body of Knowledge.</p>	<p>the research. Provides detailed and challenging information for the Body of Knowledge.</p> <p>Very good investigation technique demonstrated, with detailed discussion on the finding.</p>	
Information and Comparison (15%)	<p>Almost no analysis for the Operating Systems.</p> <p>No details of information presented.</p>	<p>Limited analysis and evaluation on Operating Systems.</p> <p>Details proposed are minimal and has very less critical discussion.</p>	<p>Sufficient analysis, comparison and evaluation of facts related to the Operating Systems.</p> <p>Has minimal critical discussion.</p>	<p>Good analysis, comparison and evaluation of facts related to the Operating System.</p> <p>Sufficient critical discussion but lack of details.</p>	<p>Very good analysis, comparison, and evaluation of facts, related to the Operating Systems.</p> <p>Good critical discussion with supporting examples.</p>	
Case Analysis (20%)	<p>Fails to provide any meaningful analysis of the case, with no examination of underlying factors, root causes, or implications.</p>	<p>Provides limited or superficial analysis of the case, with little depth in examining underlying factors or root causes.</p> <p>Analysis may lack critical thinking and evidence to support conclusions.</p>	<p>Offers a basic analysis of the case but may lack depth in examining underlying factors or root causes.</p> <p>Some aspects of the analysis may be superficial or lack evidence.</p>	<p>Provides a detailed analysis of the case, identifying key factors, root causes, and implications.</p> <p>Analysis demonstrates critical thinking and is generally well-supported by evidence.</p>	<p>Offers insightful and comprehensive analysis of the case, with thorough examination of underlying factors, root causes, and implications.</p> <p>Analysis is supported by evidence and critical thinking.</p>	
Engagement (15%)	<p>The report fails to engage the reader, with poor presentation and insufficient analysis.</p> <p>It lacks relevance and fails to provide insights or recommendations.</p>	<p>The report minimally engages the reader, with unclear presentation or superficial analysis.</p> <p>It may lack relevance and fails to offer significant insights or recommendations.</p>	<p>The report adequately engages the reader but may lack clarity or depth in certain areas.</p> <p>It provides relevant information and some insights and recommendations.</p>	<p>The report engages the reader with clear presentation and relevant information, though some areas may lack depth.</p> <p>It provides valuable insights and recommendations.</p>	<p>The report effectively engages the reader, presenting clear, well-organized, and insightful information.</p> <p>It maintains the reader's interest and offers valuable insights and recommendations.</p>	
Referencing (5%)	<p>Sources are not properly cited, and many inconsistencies or errors are present.</p> <p>Relevant and credible sources are absent, severely</p>	<p>Few sources are cited accurately, with frequent inconsistencies or errors.</p> <p>Relevant and credible sources are lacking, affecting the report's credibility.</p>	<p>Some sources are cited, but there are notable inconsistencies or errors.</p> <p>Sources may lack relevance or credibility, impacting the report's validity.</p>	<p>Most sources are cited accurately, though minor inconsistencies may be present.</p> <p>Sources generally support the report's arguments.</p>	<p>The report consistently and accurately cites all sources, following the specified citation style.</p> <p>Sources are relevant, credible, and diverse, supporting the</p>	

	undermining the report's validity.				report's arguments effectively.	
Total Score						

PEER-REVIEW EVALUATION RUBRIC

Student Name :
Student ID :

Criteria	Point				Score
	0	1	2	3	
Helping	The teammate never offered assistance to the team.	The teammate sometime offered assistance to the team.	The teammate offered assistance to the team most of the time.	The teammate always offered assistance to the team for all time.	
Listening	The teammate never worked from others' ideas.	The teammate sometimes worked from others' ideas.	The teammate worked from others' ideas most of the time.	The teammate always worked from others' ideas all the time.	
Participating	The teammate never contributed to the project.	The teammate sometimes contributed to the project.	The teammate contributed to the project most of the time.	The teammate always contributed to the project all the time.	
Persuading	The teammate never exchanged, defended, and rethought ideas.	The teammate sometimes exchanged, defended, and rethought ideas.	The teammate exchanged, defended, and rethought ideas most of the time.	The teammate always exchanged, defended, and rethought ideas all the time.	
Questioning	The teammate never interacted, discussed, or posed questions to other team members.	The teammate sometime interacted, discussed, or posed questions to other team members.	The teammate interacted, discussed or posed questions to other team members most of the time.	The teammate always interacted, discussed or posed questions to other team members all the time.	
Respecting	The teammate never encouraged and supported the ideas and efforts of others.	The teammate sometimes encouraged and supported the ideas and efforts of others.	The teammate encouraged and supported the ideas and efforts of others some of the time.	The teammate always encouraged and supported the ideas and efforts of others all the time.	
Sharing	The teammate never offered ideas or reported his/her finding to others.	The teammate sometime offered ideas and reported his/her finding to others.	The teammate sometimes offered ideas and reported his/her finding to others some of the time.	The teammate always offered ideas and reported his/her finding to others all the time.	
Total Score					

Confirmation

We hereby confirm our agreement on the mark provided in the Peer Review Evaluation. This mark is final and will be used as per the report requirements.

Signed:

Member 1	Member 2	Member 3	Evaluated Members

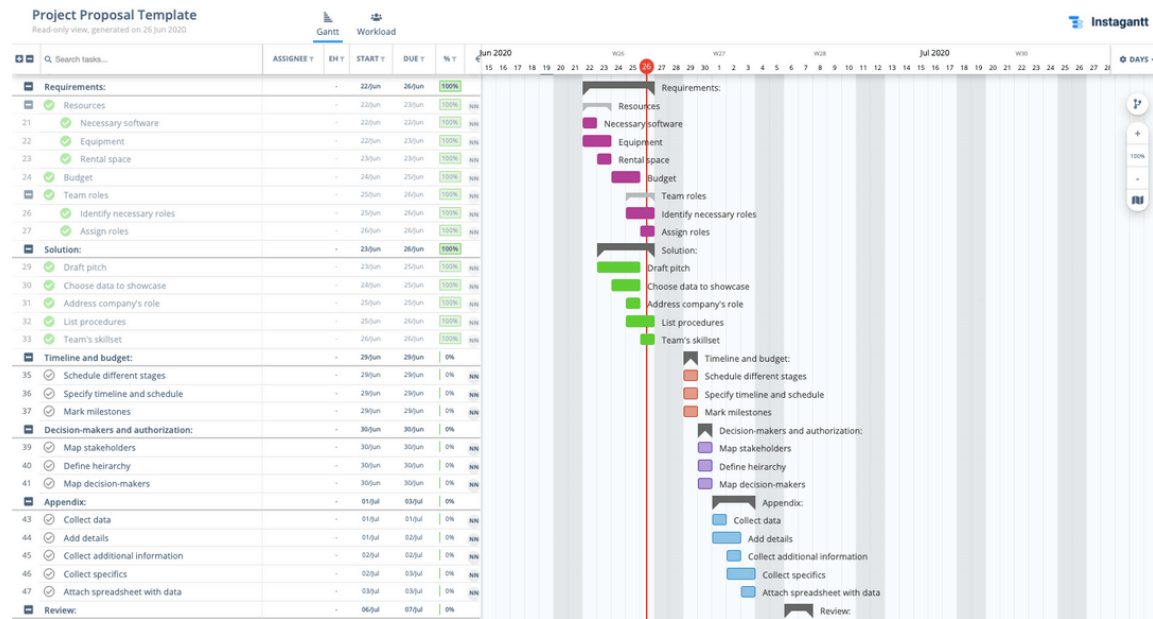
Name:	Name:	Name:	Name:
Date:	Date:	Date:	Date:

PRESENTATION RUBRIC

Criteria	5 - Excellent	4 - Good	3 - Satisfactory	2 - Fair	1 - Poor	Score
Content Understanding (30%)	Demonstrates exceptional understanding of the topic, presenting thorough and insightful information.	Shows a solid understanding of the topic, with clear and relevant explanations.	Demonstrates a basic understanding of the topic but may lack depth or clarity in some areas.	Shows limited understanding of the topic, with significant gaps in knowledge or understanding.	Fails to demonstrate understanding of the topic.	
Organization and Structure (10%)	Presentation is well-organized and structured, with seamless transitions between ideas.	Information is presented in a logical sequence, with clear sections and transitions.	Presentation is adequately organised but may lack coherence or flow in some areas.	Structure of the presentation is unclear or disjointed, with inconsistent transitions between ideas.	Presentation lacks any discernible organization or structure.	
Delivery and Engagement (30%)	Delivery is confident, engaging, and dynamic, capturing the audience's attention throughout.	Delivery is clear and engaging, maintaining the audience's interest effectively.	Delivery is adequate but may lack enthusiasm or engagement at times.	Delivery is monotonous or hesitant, failing to fully engage the audience.	Delivery is disengaged or ineffective, leading to audience disinterest.	
Visual Aids and Support (20%)	Visual aids are used effectively to enhance understanding and engagement, with clear and relevant visuals.	Visual aids support the presentation effectively, though some may be less impactful or relevant.	Visual aids are used but may lack clarity, relevance, or consistency.	Visual aids are present but do not effectively enhance understanding or engagement.	Visual aids are absent or detract from the presentation, hindering understanding.	
Time Management (10%)	Presentation is well-timed, with appropriate pacing and adherence to the allotted time.	Presentation stays within the allotted time, with minor deviations in pacing.	Presentation may go slightly over or under the allotted time, with noticeable deviations in pacing.	Presentation significantly exceeds or falls short of the allotted time, impacting coherence.	Presentation greatly exceeds or falls short of the allotted time, severely affecting coherence and engagement.	
Total Score						

APPENDIX

SAMPLE OF GANTT CHART



Source: <https://www.instantntt.com/project-proposal-template-using-gantt-charts>

SAMPLE OF WORKLOAD MATRIC

Task Description	Member 1	Member 2	Member 3	Member 4
Research and gather information	✓	✓		
Outline and structure the report	✓	✓		
Write introduction and background	✓			
Review literature and provide citations	✓			
Draft methodology section		✓		
Collect and analyze data		✓	✓	
Write results and findings section			✓	
Draft discussion and conclusion section			✓	✓
Compile and format the final report	✓		✓	✓
Proofread and edit the report				✓
Design and create visual aids (charts, graphs, etc.)				✓

ASSIGNMENT COVER PAGE



FACULTY OF COMPUTING AND INFORMATICS

OPERATING SYSTEMS

**PROJECT REPORT
TERM: 2410**

Group Members:

No	Team Members Names	Student ID	Documentation (10)	Installation (10)	Research and Investigation (15)	Information and Comparison (15)	Case Analysis (20)	Engagement (15)	Referencing (5)	Peer - Review (10)	Total Mark (100)
1											
2											
3											
4											

Submission Declaration:

We, hereby declare that the assignment submitted herewith is entirely our own work. Any external sources used have been duly acknowledged and referenced in accordance with the requirements outlined by the University.

We further declare that:

1. This assignment has not been previously submitted for assessment in any other course or academic program.
2. All information presented in this assignment is accurate and truthful to the best of my knowledge.
3. We have not engaged in any form of plagiarism or academic misconduct in the completion of this assignment.
4. We understand that any violation of academic integrity may result in disciplinary action in accordance with the policies of the University.
5. We acknowledge that by submitting this assignment, we are bound by the regulations and guidelines set forth by the University.


Signed and Date:

PRESENTATION RULES

While designing your presentation deck, consider the following presentations rules.

The 10/20/30 Rule

by Soufyan Hamid



Venture capitalist **Guy Kawasaki** came up with this handy presentation rule in 2005.

Kawasaki sat through many, many bad presentations and figured out this rule to make sure presentations stop being so repetitive and boring.

10

Slides

The rule is applicable to reach any agreement

- 01 — Problem
- 02 — Your Solution
- 03 — Business Model (How)
- 04 — Underlying Technology
- 05 — Marketing
- 06 — Competition (benchmark)
- 07 — Team (Who)
- 08 — Projections and milestones (Planning)
- 09 — Status and timeline
- 10 — Summary and Call to Action

Use this structure for specific projects and keep the rule in mind for any other presentation

20

Minutes

Limit your presentation time to 20 minutes

Why would you do that?


To be prepared for:

- Technical issues
- Delays
- Unfocused audience

All of these happen all the time!

Setting the limit to 20 minutes presents advantages:


- You'll plan and structure your talk
- You'll focus on the relevant points
- You'll have time for valuable discussion



30

Font Size

People can't read your slides because of small font?



It only means 3 things

1. You don't know your material enough
2. You want everybody to know all details
3. You think text is more convincing

STOP doing that! **YOU** are the center.

No effort needed.


Your key points are already **short and focused** thanks to the 10 and 20 rules.

Setting the limit to 30 font points will lead to positive outcome.

- ✓ Final check for key points relevance
- ✳ Audience will focus on what you say
- ✳ Playing with sizes shows levels

Most important for **Finance Professionals** is to remember the mindset behind those rules, not to respect each one religiously: **LESS IS MORE**

I help you improve in **Financial Storytelling** - Follow me for more



Source: https://www.linkedin.com/posts/davidsymsmith_the-10-20-30-rule-activity-7128013697335119872-j_pC