

## **Assessment Rubrics for Group Project**

<b>Criteria</b>	<b>A<sup>+</sup> / A / A<sup>-</sup></b>	<b>B<sup>+</sup> / B / B<sup>-</sup></b>	<b>C<sup>+</sup> / C / C<sup>-</sup></b>	<b>D<sup>+</sup> / D</b>	<b>F</b>
<b>Identify the services provided by operating systems</b>	The student was able to: * Identify most services provided by operating systems and explain and apply them properly and precisely in the project scope.	The student was able to: * Identify most services provided by operating systems and link them to the project scope.	The student was able to: * Identify some services provided by operating systems as applied in the project scope.	The student was able to: * Identify some services provided by operating system.	The student <u>failed</u> to: * Identify services provided by operating systems.
<b>Understand the internal structure of an operating system and be able to write programs using system calls</b>	There is evidence that the student was able to: • Show their good understanding of the internal structure of an OS through the implementation of the required application. • Write a program that applies the system calls of an OS properly and precisely.	There is evidence that the student was able to: • Show their understanding of most of the internal structure of an OS through the implementation of the required application. • Write a program that applies most of the system calls of an OS correctly.	There is evidence that the student was able to: • Show their understanding of some of the internal structure of an OS through the implementation of the required application. • Write a program that applies some of the system calls of an OS correctly.	There is evidence that the student was able to: • Show their marginal understanding of some of the internal structure of an OS through the implementation of the required application. • Write a program that applies a limited number of the system calls of an OS.	The student <u>failed</u> to: • Show their understanding of some of the internal structure of an OS through the implementation of the required application. • Write a program that applies the system calls of an OS.
<b>Understand and solve problems involving process control, mutual exclusion, deadlock and synchronization</b>	There is evidence that the student was able to: * Show their good understanding of the problem domain in the project related to the relevant topics properly and precisely.	There is evidence that the student was able to: * Show their understanding of the problem domain in the project related to most of the relevant topics correctly.	There is evidence that the student was able to: * Show their understanding of the problem domain in the project related to some of the relevant topics correctly.	There is evidence that the student was able to: * Show their marginal understanding of the problem domain in the project related to a few parts of the relevant topics.	The student <u>failed</u> to: * Show their understanding of the problem domain in the project related to the relevant topics.

Criteria	A <sup>+</sup> / A / A <sup>-</sup>	B <sup>+</sup> / B / B <sup>-</sup>	C <sup>+</sup> / C / C <sup>-</sup>	D <sup>+</sup> / D	F
<b>Develop skills in problem solving using systematic approaches</b>	<p>There is evidence that the student was able to:</p> <ul style="list-style-type: none"> <li>* Demonstrate their problem solving skill by using proper algorithms (learned in class) to solve the problems in the problem and show all of these steps by steps properly and logically.</li> </ul>	<p>There is evidence that the student was able to:</p> <ul style="list-style-type: none"> <li>* Demonstrate their problem solving skill by using related algorithms (learned in class) to solve the problems in the problem and show most of these steps by steps correctly.</li> </ul>	<p>There is evidence that the student was able to:</p> <ul style="list-style-type: none"> <li>* Demonstrate their problem solving skill by using related algorithms (learned in class) to solve the problems in the problem and possibly to show some of these steps by steps correctly.</li> </ul>	<p>There is evidence that the student was able to:</p> <ul style="list-style-type: none"> <li>* Demonstrate their problem solving skill by using algorithms (learned in class) to solve the problems in the problem and possibly to show some of the steps properly.</li> </ul>	<p>The student <u>failed</u> to:</p> <ul style="list-style-type: none"> <li>* Demonstrate their problem solving skill by using algorithms.</li> </ul>
<b>Solve complex problems in groups and develop group work</b>	<p>There is evidence that shows:</p> <ul style="list-style-type: none"> <li>• The team worked well together to achieve the objectives.</li> <li>• Workload was evenly distributed to each member.</li> <li>• Members were supportive and encouraging each other in discussions, offering ideas, suggestions, etc.</li> <li>• Different members took charge in different stages.</li> </ul>	<p>There is evidence that shows :</p> <ul style="list-style-type: none"> <li>• The team worked well together most of time to achieve the objectives.</li> <li>• Workload was distributed to members properly.</li> <li>• Some members might take charge of the project.</li> </ul>	<p>There is evidence that shows:</p> <ul style="list-style-type: none"> <li>• The team worked well together some of time to achieve the objectives.</li> <li>• All members received some reasonable workload.</li> <li>• Just 1 or 2 members took charge of the project.</li> </ul>	<p>There is evidence that shows:</p> <ul style="list-style-type: none"> <li>• The team seldom worked together to achieve the objectives.</li> <li>• Some members received little workload.</li> <li>• Only 1 or 2 members made most contributions.</li> </ul>	<p>The group <u>failed</u> to:</p> <ul style="list-style-type: none"> <li>• Collaborate or communicate.</li> <li>• Define and allocate workload to certain extent.</li> <li>• Have members work together towards the objectives.</li> </ul>

## **Assessment Weightings**

ILO #	Item	Assessment Method(s) and Indicative %	
		Application / Implementation	Report + Demo
1	Identify the services provided by operating systems	5	5
2	Understand the internal structure of an operating system and be able to write programs using system calls	10	5
3	Understand and solve problems involving process control, mutual exclusion, deadlock and synchronization	20	15
4	Develop skills in problem solving using systematic approaches	15	5
5	Solve complex problems in groups and develop group work	10	10
	<b>Total</b>	<b>60%</b>	<b>40%</b>