

The project will consist of 2 parts.

(50%) Research component.

Research an operating system. The chosen operating system must NOT use a Linux kernel. The operating system choice must be approved by the instructor.

Outline the aspects of the operating system as covered in the course. This should include, running architecture(s), process scheduling, memory management, user interface and any other relevant aspects of the OS.

The discussion will include rationale for the choices made by the OS and include advantages and disadvantages specific to the chosen kernel. The discussion should include the evolution of the OS including changes and the decisions behind any changes that were made. The discussion should also include an opinion of the future direction of the OS.

The discussion should include where in the OS landscape this operating system fits. For example, Linux now fits squarely in the enterprise server space.

This component should be 2000-2500 words of text. All references must be cited correctly using APA style (built in to most word processors). No references to Wikipedia are allowed, find the source that Wikipedia used, read it, and cite that.

(50%) Simulation programming.

Write C code to simulate the researched operating system. This includes CPU scheduling and process management.

The code will read in a list of process details and simulate the running of the processes. The file of processes will contain:

Process Number	Arrival time (ms)	Priority	CPU Burst Time (ms)	Total bursts	Memory size (kb)
P1	0	2	8		
P2	30	8	13		
P3	47	3	10		
⋮	⋮	⋮	⋮		⋮

The file will be in comma-separated values (CSV) format, and will be named “project-processes.txt”