CS 5523: Operating Systems
Homework 0
!!!!! No late HW will be accepted !!!!!!
(Check <u>BlackBoard Learn</u> for due date and submission)

Objective

- Solve various problems from [SGG] ch1 to ch 3
- To learn how to submit assignments through BB (Black Board) Learn

Problems

----

1. (10pt) **1.30** Define the essential properties of the following types of operating systems:
a. Batch
b. Interactive
c. Time sharing
d. Real time
e. Network
f. Parallel
g. Distributed
h. Clustered
i. Handheld

----

2. (10pt) **2.21** What is the main advantage of the microkernel approach to system design? How do user programs and system services interact in a microkernel architecture? What are the disadvantages of using the microkernel approach?
----
3. (10pt) **3.6** Describe the differences among short-term, medium-term, and long term scheduling.
----
4. (10pt) **3.7** Describe the actions taken by a kernel to context-switch between processes.

Grading: This is a 40-point homework.

Submission

You must submit your work using Blackboard Learn and respect the following rules:

Please scan your solutions and submit ALL as a single pdf file **lastname_hw0.pdf** file....

Do not submit individual images files etc....

1) All assignments must be submitted as either a zip or tar archive file unless it is a single pdf file.
2) Assignments must include all source code.
3) Assignments must include an output.txt file which demonstrates the final test output run by the student.
4) If your assignment does not run/compile, the output.txt file should include an explanation of what was accomplished, what the error message was that prevented the student from finishing the assignment and what the student BELIEVES to be the underlying cause of the error.