Exam Question

Student Information

Integrity Policy: All university integrity and class syllabus policies have been followed. I have neither given, nor received, nor have I tolerated others' use of unauthorized aid.

I understand and followed these policies: Yes No

Name:

Date:

Submission Details

Submit one final exam question with answer.

Due Dates

- See Piazza for due date and time
- Submit program perforce in your student directory assignment supplied.
- Fill out your this **Submission Report** and commit to perforce
 - o **ONLY** use Adobe Reader to fill out form, all others will be rejected.
 - Fill out the form and discussion for full credit.

Goals

- Learn
 - o Final exam question
 - You will be graded on the quality of the question
 - o 5-6 questions will be selected for the final exam

Assignments

- 1. Submit one Final Exam question
 - a. Problem should take 5-15min to answer open notes is expected
 - b. Can be **Short Answer** or **Multiple Select**
 - c. Provide a solution
 - i. Make sure the solution is CORRECT
 - d. Place Question/Answer in Word format or PDF into this folder

2. Sample multiple select:

Thread Creation

Multiple-select clearly < CIRCLE > All that apply

What happens after creating a new thread, then calling join()?

- a) join() returns when the new thread execution has completed
- b) join() blocks the execution of the calling thread
- c) join() can be called on threads that are non-joinable
- d) after join() is called the new thread is now joinable
- e) join() can be called on the thread object after the new thread terminates
- f) join() can be call multiple times for the same thread object
- g) new thread is not joinable if it was default constructed
- h) join() can be called on its own active thread of execution
- i) join() can be called on a detached thread (different than creation thread)

3. Sample Short Answer

Describe each of the different locking issues using a real-world example

- a) Dead-Lock
- b) Live-Lock
- c) Spin-Lock