**Project 2**  
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**Project Overview**

This individual project aims to implement a distributed mutual exclusion service using Roucairol and Carvalho’s algorithm, providing cs-enter() and cs-leave() functions for process synchronization. Developed in **Java (Version 22.0.2)**, the project emphasizes socket programming and distributed communication, running exclusively on the dcXX.utdallas.edu machines.

**Evaluation Summary**

In this experiment, I will fix the number of nodes n to 10 and set the inter-request delay d to 20. The value of c will vary within the range of 500 to 750, with increments of 50 (i.e., 500, 550, 600, 650, 700, 750). For each value of ccc, I will measure key metrics such as mean message complexity, response time, and system throughput (i.e., the number of requests satisfied per unit time). Each data point will be averaged over at least 5 runs, and each node will generate a minimum of 500 critical section requests.

**Evaluation Results**

1. < n, e, d, c > = < 10, 10, 20, 500 >
2. < n, e, d, c > = < 10, 10, 20, 550 >
3. < n, e, d, c > = < 10, 10, 20, 600 >
4. < n, e, d, c > = < 10, 10, 20, 650 >
5. < n, e, d, c > = < 10, 10, 20, 700 >
6. < n, e, d, c > = < 10, 10, 20, 750 >