Assignment 2 Report

Introduction

In the assignment I will ensure the enforcement of mutual exclusion and that it will be deadlock and starvation free. Mutual exclusion is used to synchronize processes or threads which need access to shared resources in parallel programs. Ensuring mutual exclusion can unintentionally result in deadlock or starvation which needs to be considered. To prevent deadlock there needs to be conditions where hold and wait, no pre-emption or circular wait is eliminated.

Part 1

In part 1 of the assignment, the implementation was not hard and the output I managed to get matched the specifications. It was easy to enforce mutual exclusion since only one WAR was able to access the intersection at any one time.

Part 2

In part 2 of the assignment, the implementation was harder than part 1 but the output was still able to be matched to the specifications.

Part 3

In part 3 of the assignment, the implementation was a bit easier since the main part was from part 2 which was already done at this point, and I managed to match the specifications given.

Conclusion

This report shows how I managed to ensure the enforcement of mutual exclusion and then prevent deadlock and starvation of the program. Part 1 of the assignment managed to output correctly, and implementation was not hard. Part 2 of the assignment managed to output correctly, and implementation was harder than part 2. Whereas part 3 of the assignment also managed to output correctly but it was easier to implement since it was based off part 2 which was completed.