Mostafa Vahidi

CS 4310 Project 3

Prof. Diaz

CS4310 Project 3 Answers, Key Data Structures, and Block Diagram

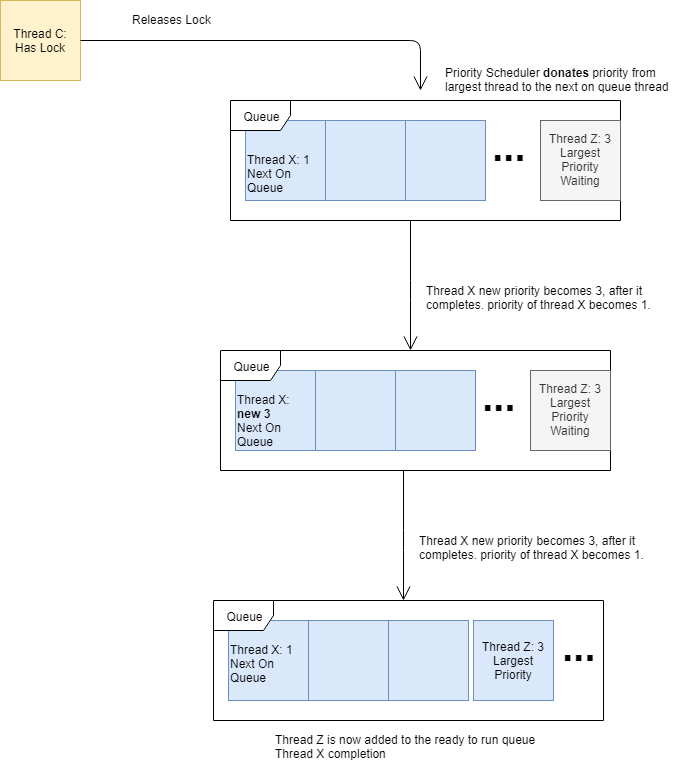
**Answers:**

1. A) When a thread A needs to access the resource currently held by thread B and thread A has a higher priority than B
2. C) When it releases the resource it previously held.

**Key Data Structures:**

* Implemented a ‘waitingQueue’ priority queue for keeping track of the ThreadStates that would be going through this scheduler. For this implementation, I used a LinkedList data structure.
* For the resources, I implemented a resrouce holding queue and a resource waiting queue, both of which are created using LinkedLists to implement a Priority Queue.
* For getting the nextThread in the available threads on the PriorityQueues, I used an Iterator data structure to iterate through the object elements.

**Block Diagram:**

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