Gebze Technical University

Computer Engineering

CSE 222 - 2018 Spring

HOMEWORK X REPORT

Erkan Yılmaz

161044044

Course Assistant:

INTRODUCTION

Problem Definition

We have a png file and we want to store its Pixels in our ram and sort them three different way ;

One of them is standard lexicographical comparison from discrete math.

Another Compare way is whichever vector has the greater L2 norm is considered greate

Another way is Bit Mix Comparation.

We will use 4 thread in this Project and syncronize them.I implement a Priority queue and

SyncoridedPriorityQueue.

System Requirements

This program needs at least 400 kb memory.

It needs a png file .

METHOD

Class Diagrams

Use Case Diagrams

This program has comment line argument that is path of a png file.

Enter a png file in comment line and wait program show you outputs.

Problem Solution Approach

I ımplement PixelPriortyQueue and by using it create a SyncronidezPriortyQueue class.

I create a thread and adding elements in this 3 syncronized priortyQueue that use different

Comparator .

When size of this queue become 100 I create another 3 thread .They poll their own queues.

And print this Pİxels in terminal.

RESULT

Test Cases

I write test metods in every class to test them