Cassandra Macon
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Homework 4 design

The classes you intend to include in the project (20 points)

Data Structure: Queue, array

Classes:

Priorityqueue: check capacity, check if empty, public function

Arrayqueue: checks if empty, checks capacity, front back and count

Priorityarrayqueue: default capacity, #include “priorityqueue.h”, enqueue and dequeue

Event: check for arrival time, time of event, transaction time, event type

Queue: enqueue and dequeue, public function

Main driver design (15 points)

loaddata, processarrival, processdeparture, main

main(){

Parameters: none

Output: none

Functionality: checks arrival or departure, do/if/else statements, checks if teller is available, number of customers

loaddata() {

Parameters: priorityqueue, event pointer, “ifstream”, infile >> arrivaltime >> transactionlength){

Output: none

Functionality: loading data from the input files

processarrival(){

Parameters: if else statement, enqueue/dequeue,

Output: none

Functionality: if the line is empty or not, teller to new arrival

processdeparture(){

Parameters: if else statements, checking if empty, priority queue,

Output: none

Functionality: if there is a free bank teller and if not report the time of event

Who's doing what (15 points)

Sofia:

arrayqueue cpp and h files completed by 10/13

Priorityarrayqueue cpp and h files completed by 10/15

Driver and makefile completed together by 10/17

Running, testing, debugging, editing 10/17-18

Final test then submission 10/19 by midnight

Cassandra:

event cpp and h files completed by 10/13

Priorityqueue.h and queue.h due 10/15

Driver and makefile completed together by 10/17

Running, testing, debugging, editing 10/17-18

Final test then submission 10/19 by midnight