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Data Structures and Algorithms II

Project 2

User’s Manual

**Setup and Compilation**

1. Download and unzip the submission file on a Linux machine or in the multi-platform lab.

2. The submission should include:

* driver.c / driver.h
* customer.c / customer.h
* functions.c / functions.h
* priorityQueue.c / priorityQueue.h
* simulation.c / simulation.h
* User’s Manual
* Makefile

3. Environment: This program has been tested on both, a Linux machine and on the UWF Linux environment.

4. Compilation: The submission includes a Makefile, to compile type “make” on the terminal. To clean up the object compiled files, one can use “make clean” safely.

**Running the Program**

Issue the command ./Project to initialize the program. No command line arguments are required.

//Note: Some inputs for n can cause segmentation faults at the end of program...

*User Input*: The program will ask of a user four number based inputs:

*n*: An integer number input used to calculate the amount of customers for the simulation part of the program.

*Lambda*: A floating point number that represents the average number of arrivals on a predetermined time period t.

*Mu*: A floating point number that represents the average number of departures on a predetermined time period t.

*M*: The number of servers that will serve the customers from a queue, used in several calculations as well as the simulation.

**Output**

The output of this program will go directly to the console.

Similar to this:

Set n: 4

Set lambda: 2

Set mu: 3

Set M: 2

Po = 0.500000

L = 0.750000

W = 0.375000

Lavg = 0.083333

Wavg = 0.041667

Rho = 0.333333 Etc...