**COMP 304 Project 2: Spacecraft Control with Pthreads**

**Yakup Enes Güven**

**Part I**

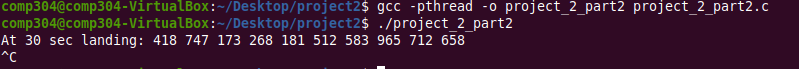
In this part, I created 2 different fields for the launch pads with the help of threads and mutexes. I did this thanks to mutex, thereads, and queues. I aimed to make it easier by adding only duration and limit in the queue.c file. I first created a log file to store all the data. In main I initialize all mutex, threads and queues first. I then used them in appropriate functions. I used the same pseudo code given in ps for the job parts. In the controlTower section, I first made the controls, and then I locked and unlocked the threds accordingly. Again, I used the given pseudocode for PadA and PadB. I used PrintQueue to write the desired queue to the log file. I used 'WriteLog' to write the desired evolutions to the log file. I used QueuePrinter to write all transactions to terminal.

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

**Part II**

In this part, I used the same code of the first part, but I made some changes so that there would be no starvation. Since a task that is thrown to the end according to the task load causes starvation, I tried to deal with it by giving priority to controlTower if anyone is in this situation.



**Part III**

In this part, I used a code like the first batch code. However, I have prioritized 2 different situations here. For the A and B pads, I adjusted and created them according to my emergency situation. The working style is almost like part1, but it only considers the emergency situation.

metin içeren bir resim

Açıklama otomatik olarak oluşturuldu

Git link : <https://github.com/yguven17/project2>