

Wolf 3D Assignment – Parking Lot

The application simulates a parking lot system. Every car registers two times: when it enters the parking and when it leaves. Times are registered with minute precision. The application analyses the data passed to it and identifies the busiest time on the parking lot, i.e. when the number of cars on the parking lot was at maximum. The task is to be implemented in C++ for one of two (or both, which is a plus) platforms: Windows or Linux. Please use one of the mainstream compilers for your platform so that we can easily check it (MS Build, GCC, Clang, etc.). If possible, use a git repository accessible to us for your task.

Basic Requirements

1. Data representing only one day of work is passed in a text file as a list in format:
12:01 13:17
03:04 11:56
...
Every row represents a single car's parking start and end times.
2. Please try to minimize the number of third-party components and libraries used, limiting yourself to the use of Standard Library where possible.

Advanced Requirements

1. Data is still passed in a file, but now represents an arbitrary period of days in JSON format:

```
[{
  "Id": 0,
  "ArrivalTime": "2016-05-01T06:36:00",
  "LeaveTime": "2016-05-01T13:28:00"
}, {
  "Id": 1,
  "ArrivalTime": "2016-05-01T14:17:00",
  "LeaveTime": "2016-05-02T01:35:00"
}, {
  "Id": 2,
  "ArrivalTime": "2016-05-04T00:15:00",
  "LeaveTime": "2016-05-04T06:55:00"
}]
```
2. Note that amount of data can be significant.

Bonus Requirements

1. Visualize a graph of busyness on the parking lot. Use a graphics library of your choice.