The case study is an airport parking lot, and we are going to develop the Parking Lot class.

First Version

There will be a stub object of Ticket. Ticket will have three attributes: days, hours and minutes. There will be a Ticket array containing the three values.

The first requirement is to calculate the amount owed by calculate the amount of time parked and applying the rules to calculate the fee.

Parking Lot Fee rules

* The first 30 minutes of the first day are free. (This is in case you pull into the lot and can’t find a space!)
* Time is billed at $2 per hour over that, with a daily max of $15
* Every 7th day is free
* Lost ticket gets charged $75
* We always round up.

The second requirement is to print out an report at the end of the week that lists how much money was collected.

The third requirement is to calculate the number of parking spots available. If a car enters the lot, one spot is taken, when a car leaves one spot becomes available. Assume 4 spots (it’s a small airport). If the parking lot is full, turn on a lot full sign, once a car leaves turn off the lot full sign.