CST 238

Puzzle 4: Traffic Light

You’ve been hired as an intern for the City of Klamath Falls (your application to Intel didn’t work out, so this was the next best thing). The city is installing a traffic light near Pilot gas station and currently (surprise, surprise) it’s broken. All the lights are black and none are lighting up.

You have one job: get this to work (lights should light up based on a timer). In large cities (i.e. Paris, Moscow, San Francisco), lights are toggled based off how much traffic is waiting at a particular intersection. Unfortunately, the solution to that would require sensors and other hardware specific apparatus (the city can barely afford to fill the pot holes…good luck asking them to hire a hardware engineer).

Your solution will be what past software developers have been doing for the city. Hard code a wait time for the lights to toggle. To avoid complaints of waiting five (!) minutes for the light to change (despite no cars anywhere in sight), your boss Ellen Page thinks she has a solution. Just make the lights toggle every two seconds (you know this is a terrible solution, but you liked her in Juno…so you do what she says!).

The traffic light also runs out of power, temporally…so it occasionally dies. For debugging purposes, Carl -- a local custodian acting as lead hardware engineer (I told you the city’s budget was on ice) – wants the last known state of the lights to be saved just before it dies.

Cliffs:

* Get lights to toggle based off Timer
* Store state of traffic light when it dies (app closes) using some type of storage device

What you’ll use from lecture to solve puzzle:

* Timers
* Signal(s)
* Javascript embedded into markup language
* Storage

