OOBootcamp

As a Traveller
I want to park my car
so that I can go flying out to the client site

As a Returning Traveller
I want to retrieve my car
so that I can drive home

As a Parking Lot Owner
I want to know when the garage is full
So that I can put out the full sign

As a Parking Lot Owner
I want to know when the garage has space again
So that I can take in the full sign

As an FBI agent
I want to know when the garage is 80% full
For national security reasons

As an FBI agent
I want to know when the
garage is no longer 80% full
For national security reasons

As the Police Department
I want to know when a car is not found
So that I can send out an APB

As an FBI Agent
I want to know when a car is not found
So that I can start filling out the paperwork

Observer

Define a one-to-many dependency between objects so that when one object changes state, all its dependents are notified and updated automatically.

Adapter

Convert the interface of a class into another interface clients expect. Adapter lets classes work together that couldn't otherwise because of incompatible interfaces.

Factory Method

Define an interface for creating an object, but let subclasses decide which class to instantiate. Factory Method lets a class defer instantiation to subclasses.

As a Garage Owner
I want a Parking Attendant
to direct cars to a Lot which has space
so that cars can park in multiple Lots

As a Garage Owner
I want the parking attendant
to direct cars to lots evenly
So that garage owners are
treated fairly

As a Parking Attendant
I want to direct large cars to the lot with the most free space
So that they can maneuver more easily

As a Parking Attendant
I want to direct handicapped cars in the first available lot
So that I do not have far to walk

Strategy

Define a family of Algorithms, encapsulate each one, and make them interchangeable. Strategy lets the algorithm vary independently from clients that use it.

Chain of Responsibility

Avoid coupling the sender of a request to its receiver by giving more than one object a chance to handle the request. Chain the receiving objects and pass the request along the chain until an object handles it.

As a Car Owner
I want the ticket to show
the name of the Lot where I parked
so that I can find my car

As a Car Owner
I want the ticket to show
the time that I parked
so that I can verify the cost

As a Lot Owner
I want the ticket to show
the Id of the Attendant that
parked the car
so that I can pay their bonus

As a Lot Owner
I want the ticket to show
the license plate number of
the car
so that I can verify that the
correct car is taken

As the Police Department
I want to be able to find all
cars of a particular colour
that have been parked
so that I can catch evil-doers

As the Police Department
I want to be able to find all cars by partial license plate number
so that I can catch evil-doers

As the Police Department
I want to be able to find all
cars parked in a certain
period of time
so that I can catch evil-doers

As the Police Department
I want to be able to find cars
by size and colour(s) parked
in a certain period of time
so that I can catch evil-doers

Visitor

Represent an operation to be performed on the elements of an object structure. Visitor lets you define a new operation without changing the classes on the elements on which it operates.