



BridgeLabz

Employability Delivered

Parking Lot TDD Problem

Emphasis on

1. TDD for Developing Parking Lot System
2. Applying OO Concepts and Design Principles
3. Using Mockito to Mock Dependent Objects



Rules

- Start with Welcome message in the Main Branch
- Every Use case should have its own commit
- Every Test Case should have its own Commit
- Every Refactor also should have its own commit
- Follow Follow Programming Hygiene with proper and consistent naming and indentation convention
- Apply OO Concepts using Design Principles and Refactor Code

Parking Lot User Story

Sanjay is owner of couple of parking lots. Each Parking Lot has capacity of 100. This parking lots are next to the Airport. Sanjay wants to create a Parking Lot System that will allow the driver to quickly park the car so can easily catch flights as well as un-park to get home quickly. For this to happen he wants the system to do many things like

1. inform parking lot is full or open,
2. provide valet service for handicap drivers and others,
3. ability for driver to find car,
4. use parking strategy of even distribution between lots, or based on handicap drivers or based on large and small vehicles,
5. charge for parking based on time,
6. be compliant to police laws to easily locate vehicles based on number plate, make, colour, time when car was parked, etc



UC 1

As a parking lot owner
I want driver to be
able to park their car
So that they can catch
their flight



UC 2

As a driver I want to
unpark my car So that
I can go home



UC 3

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



UC 4

As a airport security
personal I want to
know when the lot is
full So that I can
redirect my security
staff



UC 5

As a parking lot Owner
I want to know when
the parking lot has
space again So that I
can take in the full
sign



UC 6

As a parking lot Owner
I want a parking
attendant to park cars
so that I can make
decisions on where to
park the cars



UC 7

As a driver I want to
find my car so that I
can go home



UC 8

As a parking lot owner
I want to know when a
car was parked on my
lot so that I charge the
lot users



UC 9

As a parking lot Owner
I want a parking
attendant to evenly
direct cars to the lots
So that the lots
have an evenly
distribution



UC 10

As a handicap driver I want the parking attendant to park my car to a lot which has the nearest free space So that I don't have to go far for unparking my car



UC 11

As a parking lot Owner I
want a parking
attendant to direct large
cars to the lot which has
the highest number of
free space So that it is
easier to manoeuvre
large cars



UC 12

As the Police
Department I want to
know the location of all
parked white cars So
that I can investigate a
bomb threat.



UC 13

As the Police
Department I want to
know the location, plate
number and parking
attendant name of all
parked blue Toyota cars
So that I can investigate
a robbery case.



UC 14

As the Police
Department I want to
know all parked BMW
So that I can increase
security accordingly.



UC 15

As the Police
Department I want to
know all cars that have
been parked in the last
30 minutes So that I can
investigate a bomb
threat.



UC 16

As the Police Department I want to know the location and information of all small handicap cars parked on rows B or D So that I can investigate a handicap permit fraud.



UC 17

As the Police
Department I want to
know all cars parked on
a parking lot, So that I
can investigate
fraudulent plate
numbers.



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Thank
You