

**Employability Delivered** 

# Parking Lot TDD Problem

#### **Emphasis** on

- TDD for Developing Parking Lot System
- 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

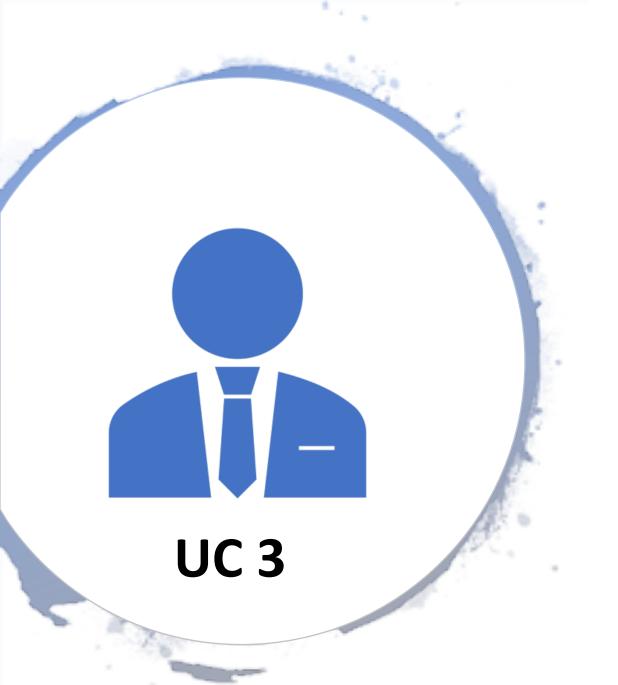
- 1. inform parking lot is full or open,
- 2. provide valet service for handicap drivers and others,
- 3. ability for driver to find car,
- 4. use parking strategy of even distribution between lots, or based on handicap drivers or based on large and small vehicles,
- 5. charge for parking based on time,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



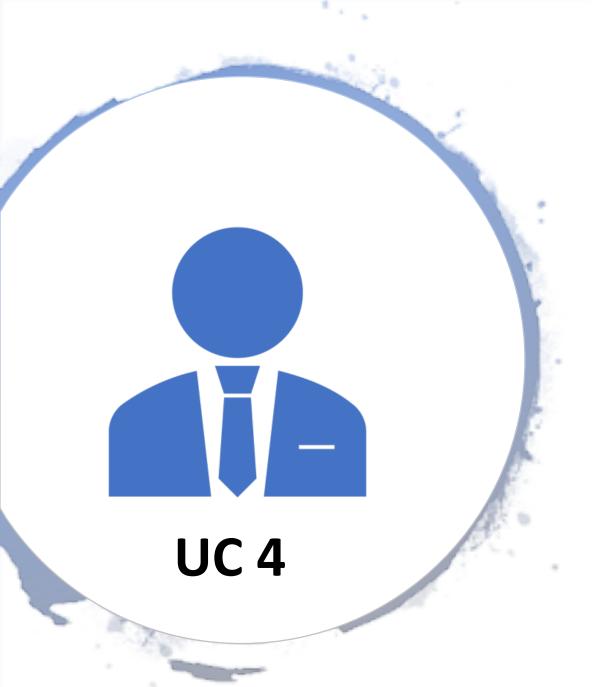
As a parking lot owner
I want driver to be
able to park their car
So that they can catch
their flight



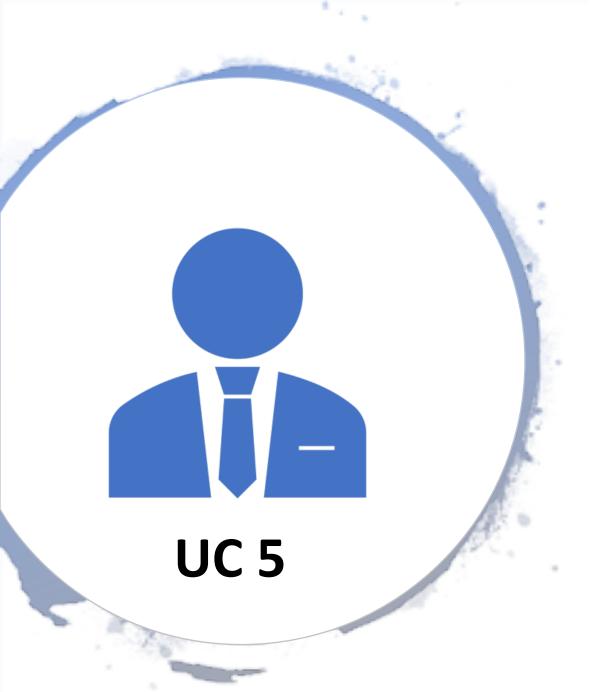
As a driver I want to unpark my car So that I can go home



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



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



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



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



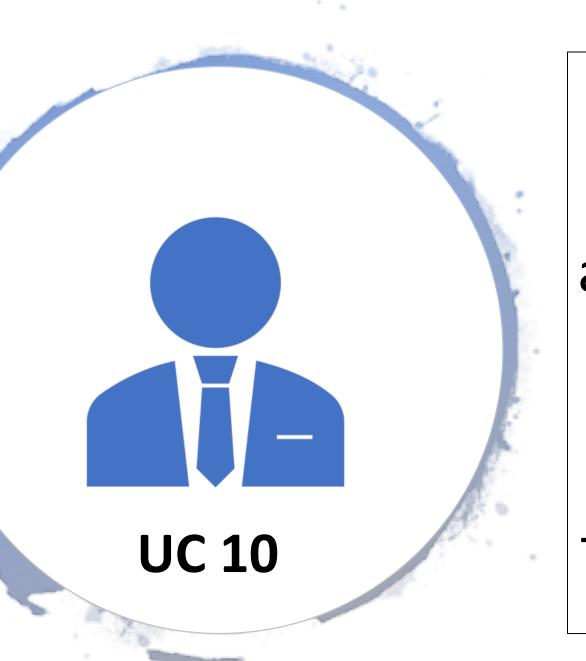
As a driver I want to find my car so that I can go home



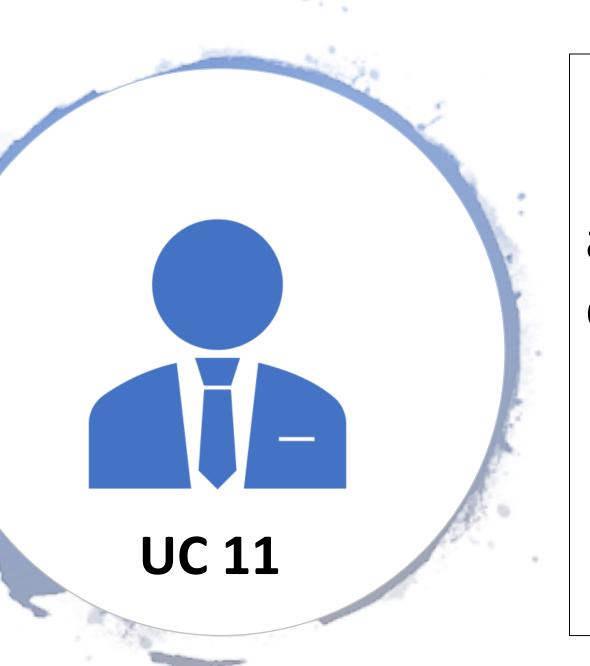
As a parking lot owner I want to know when a car was parked on my lot so that I charge the lot users



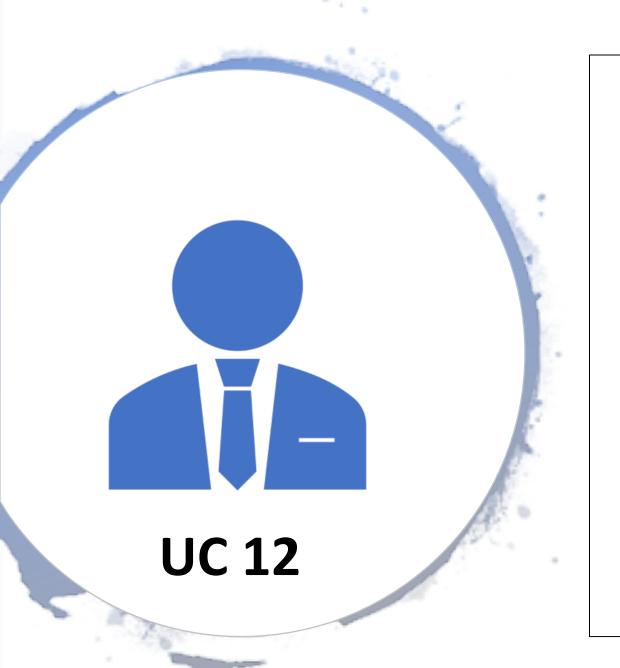
As a parking lot Owner I want a parking attendant to evenly direct cars to the lots So that the lots have an evenly distribution



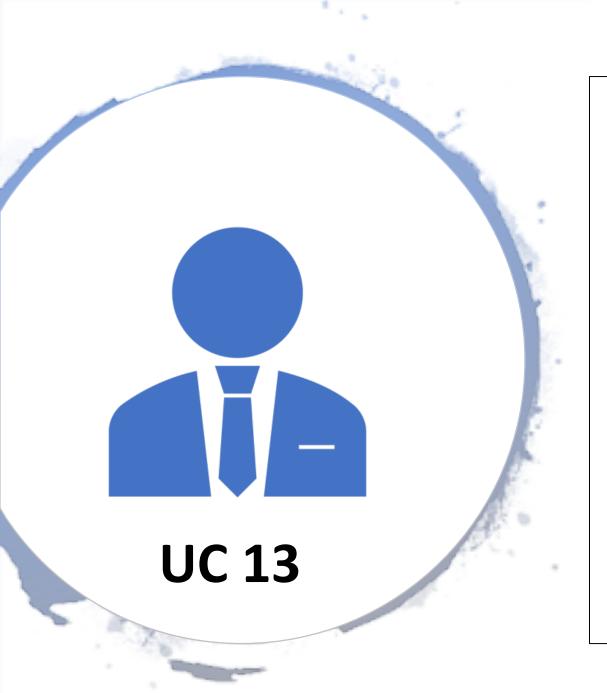
As a handicap driver I want the parking attendant to park my car to a lot which has the nearest free space So that I don't have to go far for unparking my car



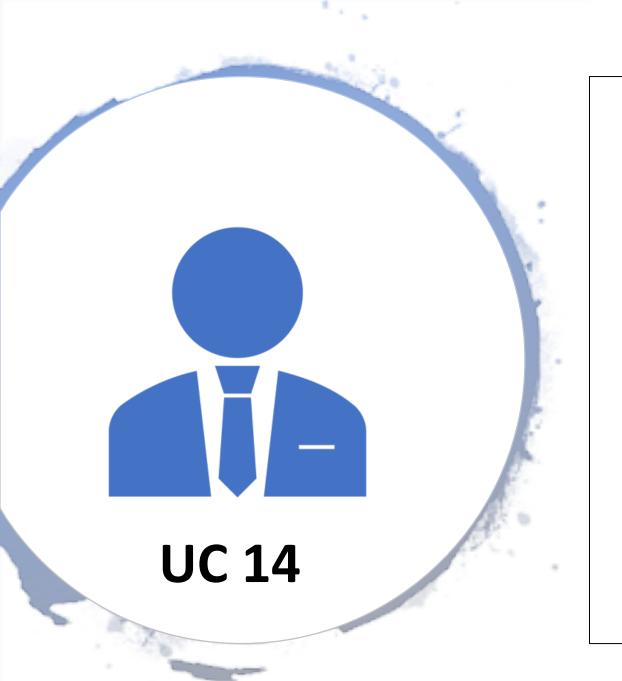
As a parking lot Owner I want a parking attendant to direct large cars to the lot which has the highest number of free space So that it is easier to manoeuvre large cars



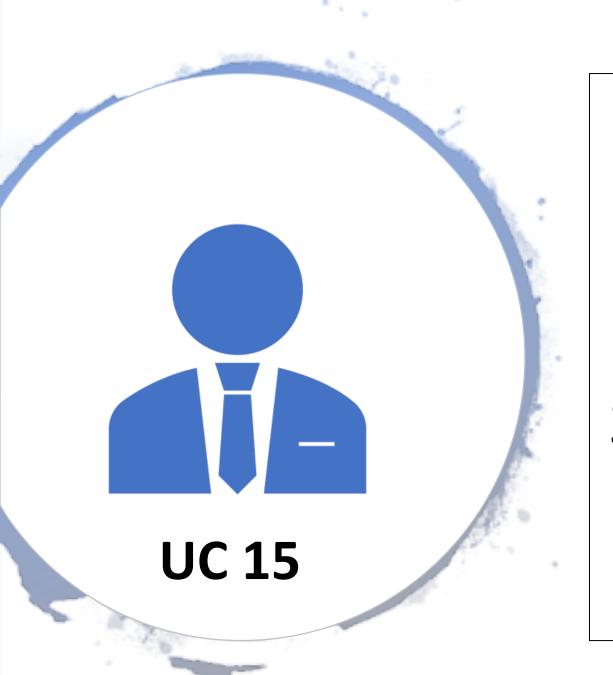
As the Police Department I want to know the location of all parked white cars So that I can investigate a bomb threat.



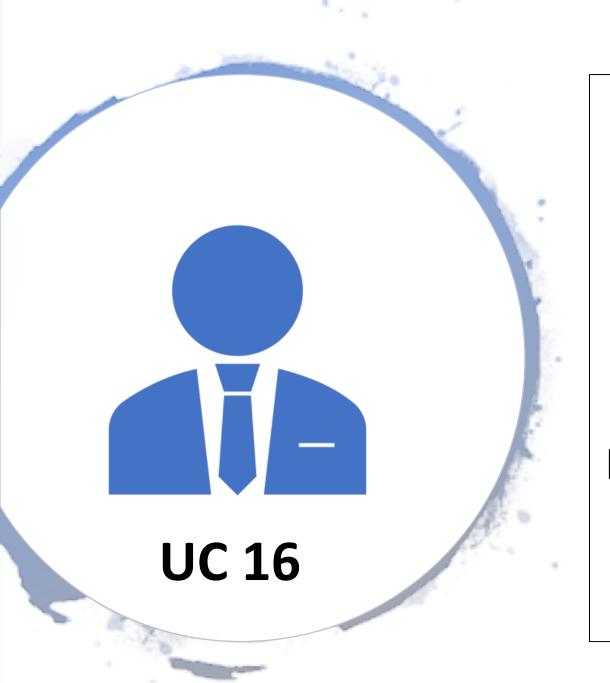
As the Police Department I want to know the location, plate number and parking attendant name of all parked blue Toyota cars So that I can investigate a robbery case.



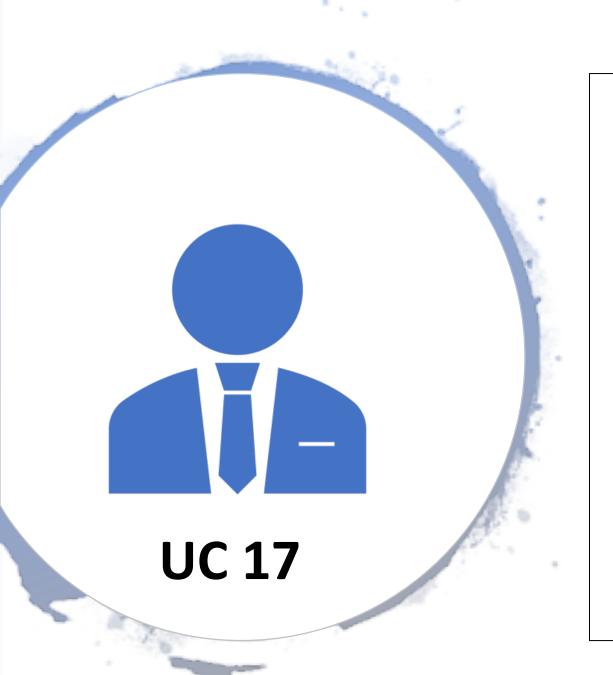
As the Police
Department I want to know all parked BMW
So that I can increase security accordingly.



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.



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.



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