SSW 555 Agile Methods for Software Development Homework 2

1. Identify three features relevant to the driver-free parking feature.

    I.   Automatic brake system
    II. Detect the Object
    III. Parking Space.

2. Describe each of the three features as a use case.

   Feature I:

   I.   Name: - Automatic brake system

   II. Brief description: - In this feature, when any object or person around the car then this feature activated and stop the car.

   III. Actor: - System

   IV. Basic Flow: - When self-driving car parking activated on that time if any object or person identify car will automatically stopped.

   V.   Alternative Flow: - if brake system is not working on that time its occur accident. So that driven have to stopped their own car.

   Feature II:

   I.   Name: - Detect the Object

   II. Brief description: -This feature help for identify object is there any person behind the car. Moreover, it will automatically activate the detect object feature when any object is around the car.

   III. Actor: - System

   IV. Basic Flow: - Firstly, it will see that is there any person or object around the car. Then, if any object detect it will not allow to park the car.

V.   Alternative Flow: - If any object or person not detect on that time it will occur accident.

Feature III:

I.   Name: - Parking Space

II.   Brief description: - In this parking space feature activate when car is ready to park in parking area.

III.   Actor: -System

IV.   Basic Flow: - Firstly it will check is their any car or any object is already their in parking space. Then, if any car or object is not in that space then it will check there enough space for vehicle. Then it will park the car.

V.   Alternative Flow: - If there is no enough space available in parking area then driver have to park the car by themselves.

3.Describe each of the same features as user stories

Feature I:

I.   Title: - Automatic brake syesem

II.   Acceptance Test: -check brake the system is working or not.

III.   Priority: - 2

IV.   Story Point: - 2

V.   Description: - As a customer I want that brake system is working on time when I need that feature it has to work properly as I required.

Feature II:

I.   Title: -Detect Object

II.   Acceptance Test: - Check that its detect object or person properly when park the vehicle

III. Priority: - 3

IV.   Story Point: -2

V.   Description: - As a customer I want that in any time this system has to check is any object or person around the car or not.

Feature III:

I.   Title: - Parking Space

II.   Acceptance Test: - Check the proper parking space is available.

III. Priority: -1

IV.   Story Point: -2

V.   Description: - As a customer I want this system check is proper parking space available for vehicle or not in any time when on the parking mode.

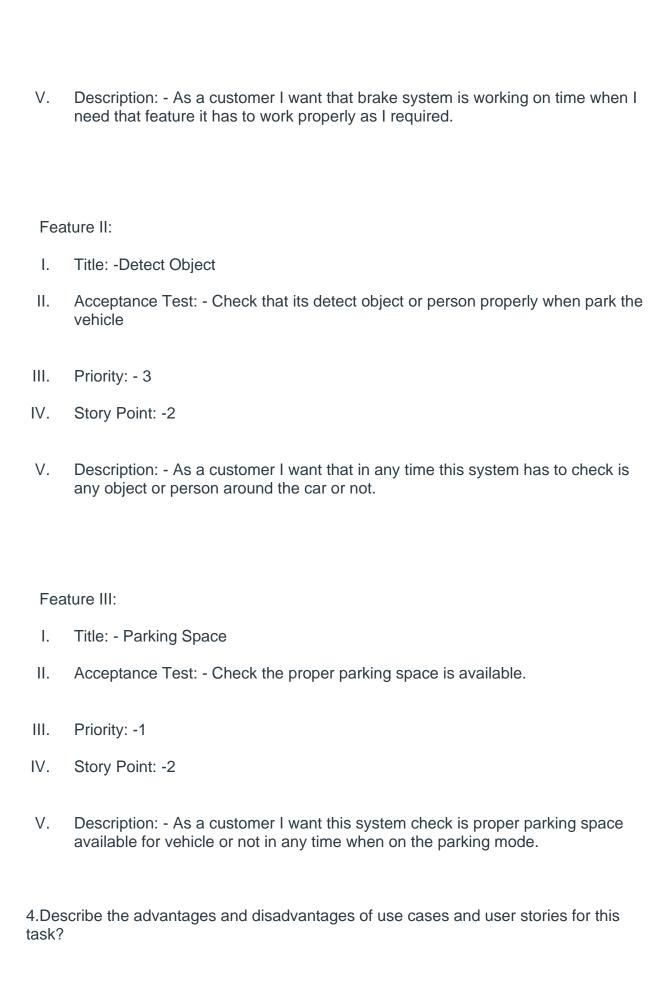4.Describe the advantages and disadvantages of use cases and user stories for this task?

Use Cases:

Advantages:

- Use cases driven is more helpful for manage the complexity as it is only focus on one feature at a time so it is beneficial for self-driving car parking.
- Also, this method first start from very simple format in the automated car parking method
- In the automated car parking system build on that time if any problem occur on that time use case driven first design the problem and then solve then apply to real word. Because of that the system will become more securable.

Disadvantage:

- In this automated car parking system, there no systematic way to handle non-functional requirement. So it become more problem.
- To build the self-driving car parking it will required more time to build the use case diagram for whole system. Then it will not complete on time.

User Stories:

Advantage:

- In this system customer can also write user story and as per their requirement developer can give suggestion to customer and fulfill their requirement.
- Self-driving car parking system , each user story have to small enough so that they can completed per iteration.
- Developer can closely work with customer and ask the question about the driving less car parking.
- Each and every story tested where it is functional or non-functional.

Disadvantage:

- It is very difficult to handle the large and complex area in driving less car parking by using user stories.
- It may happen that the requirement written unclean so that it will not fulfil the actual requirement of automated car parking system.