Task 1:

a)

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Process** | **Step** | **Use case** | **Remarks** |
| Renting a Car (BP1) | 1 | SubProcess Reserving a Car(BP1.1a) |  |
| Subprocess Picking-up a Car without  Reservation (BP1.1b) |  |
| 2 | Subprocess Moving Cars on Request  (BP1.2) |  |
| 3 | Picking-up a Reserved Cars (BP1.3) |  |
| 4 | Subprocess Recording the Returning  of a Car (BP1.4) |  |
| Reserving a Car  (BP1.1a) | 1 |  |  |
| 2 | UC1: Get the customer's information |  |
| 3 | UC2: Check if a car is available and  the cost |  |
| 4 | UC3: Fill out a paper form |  |
| 5 | UC4: Set a car status to "HELD" |  |
| Alter1: Release the hold on a car |  |
| 6 | UC5: Check the customer's driver license |  |
| 7 | UC6: Enter the new customer to the customer base |  |
| 8 | UC7: Create a rental and set status "RESERVED" |  |
| Picking-up a Car without Reservation (BP 1.1b) | 1 |  |  |
| 2 | Same as UC1 |  |
| 3 | Same as UC5 |  |
| 4 | UC8: Create a rental and set status to "PICKED-UP" |  |
| Alter2: UC6 |  |
| Moving a Cars on Request | 1 | UC9: Print the list of requested cars |  |
| 2 |  |  |
| Picking-up a Reserved  Car (BP1.3) | 1 | UC10: Replace a unavailable car by by another car |  |
| 2 | UC11: Arrange for a refund |  |
| 3 | UC12: Compare the driver license to the reservation one |  |
| 4 | UC13: Ask for the rest of the payment |  |
| 5 | UC14: Enter the pickup date and time |  |
| UC15: Record the car's mileage |  |
| 6 | Alter3: Cancel a reservation |  |
| Recoding the Returning of a Car (BP1.4) | 1 | Same as UC15 |  |
| 2 |  |  |
| 3 | UC 16: Change the status |  |
| Arranging for Car Maintenance (BP2) | 1 | UC 17: Print the List of Cars to be Inspected |  |
| 2 | UC18: Record that a Car needs to be Serviced |  |
| UC 19: Record that a Car is to be Removed |  |
| Adding a New Car to the Active Pool (BP3) | 1 | UC20: Enter model's details |  |
| 2 | UC21: Enter car's details |  |

b)

**BP1.1a:**

**Main Flow:**

1. Clerk gets the customer’s requirement.

2. Clerk checks if the appropriate car is available.

3. Clerk selects a car and set it status to “HELD”.

4. Clerk checks the customer’s driver license.

5. The new rental is created and its status is set to “RESERVED”

**Extension:**

2a. No car is available:

1. Clerk fills out a paper form.

3a. The deal does not go ahead as planned:

1. Clerk releases the hold on a car.

4a. The customer is new:

1. Clerk will enter the new customer to the customer base.

4b. The customer is blacklisted:

1. End the transaction.

**BP1.1b:**

**Main Flow:**

1. Clerks gets the customer’s requirement.

2. Clerks check if the appropriate car is available.

3. Clerks check the customer’s driver license.

4. Clerks asks for the rest of the payment.

5. The status of the rental and car are set to “PICKED-UP”.

6. The mileage of the car is recorded.

**Extension:**

3a. The customer is new:

1. Clerk will enter the new customer to the customer base.

3b. The customer is blacklisted:

1. End the transaction.

**BP1.2:**

**Main Flow:**

1. Supervisor prints out the list of cars at his/her branch.

2. Supervisor arranges for the cars to be transferred.

**BP1.3:**

**Main Flow:**

1. Clerk checks if the reserved car is available.

2. Clerk checks the driver license.

3. Clerk asks for the rest of the payment.

4. The status of the rental and the car are set to “PICKED-UP”.

5. The car’s mileage is recorded.

**Extension:**

1a. The car is not available and there is another car can be replaced:

1. Replace the old car by the new one.

2. Set the status of the old one to “EXCEPTIONAL” and the new one to “HELD”.

1b. The substitute cannot be made:

1. Clerk sets the status of the rental and the car to “EXCEPTIONAL”.

2. Supervisor arranges for a refund.

2a. Different driver license is used and the new driver is not blacklisted:

1. A change of driver can be made.

2b. The new driver is blacklisted:

1. End transaction.

**BP1.4:**

**Main Flow:**

1. Clerk records end mileage.

2. Clerk changes the status of the rental and the car to “RETURNED”.

3. Clerk updates the car’s residing branch.

**BP2:**

**Main Flow:**

1. Supervisor prints the list of cars to be inspected.

2. Supervisor inspects the cars.

3. Supervisor gets the cars’ status.

**BP3:**

**Main Flow:**

1. Clerk enters details of the car.

2. Clerk changes the car’s status to “RENT-READY”.

**Extension:**

1a. The model is new:

1. Clerk enters the model’s details.

2. Clerk specifies which group the model is classified into.