<CarParkSA Automated Entry>

Version <1.0>

Revision History

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| <29/08/2022> | <1.0> | Initial document setup | Andre Alexandrov |
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Use Case Specification: CarParkSA Automated Entry

# Use Case Name

## Brief Description

The use case allows for users to enter a parking lot without a paper ticket based of the cars numberplate and if they are a registered user.

# Flow of Events

## Basic Flow

1. The use case starts when a user arrives at the entry point of the car park at which point the system will scan the license plate.
2. The license plate is looked up in the database

If the user is not found the “User Not Found in database” sub flow is executed.

1. The user users registration status is then determined

If the user is not a monthly user the “User is not a monthly user” sub flow is executed

If the user is a monthly user the “User is a monthly user” sub flow is executed

1. The system checks if the car park is full. If car park is full the “Car Park is full” sub flow is executed
2. The system records the date and time of entry
3. Display “Availability, please drive in”
4. Add 1 to total number of cars in car park
5. Save CarInCarPark record to database

### User Not found in database.

The user’s car type is set to “C” in the to signify a casual user payment method. Then the use case resume step 4

### User is not a monthly User

The user’s car type is set to “RC” in the to signify a registered casual user payment method. Then the use case resume step 4

### User is a monthly user

The user’s car type is set to “RM” in the to signify a registered monthly user payment method. Then the use case resume step 5

### Car Park is full

the use case resumes at “Car park Full” alternative flow

## Alternative Flows

### Car park Full

If the car park is full the message “Full, please wait” will be displayed to the car at the entrance and the use case ends

### Driver decides to not enter

If the driver at any stage before the use case ends decides to leave the entrance the system detects the car leaving and ends the use case

# Special Requirements

The system will print reports within 3 minutes

The system should have the MTBF no more than 1 once per half year

The system need to respond with 3 seconds with any input data

The sytem will print reports within 3 minutes

# Preconditions

A user must have driven up to the car park entrance for this use case to begin.

# Post Conditions

If the use case is successful the user will be allowed to enter the parking lot

# Extension Points

NO