Barchester City Council Car Park

: End-goal

# Brief Description

When a customer

Wants to enter the car park

They interact with the entrance control pillar

So that they can get into the car park and park their car

# Trigger

A car arrives at the entry control pillar

# Actors

## Customer

An ad-hoc customer without a season ticket who wants to park their car

## Season Ticket Holder

A customer with a season ticket who wants to park their car

# Stakeholders

## Customers

Ad-hoc users of the carpark who want to park their cars

## Season Ticket Holders

Regular users of the carpark who want to park their cars, and need their season tickets recognized.

## Council

Owners and operators of the carparks who want easy-to-use reliable entry control systems that facilitate maximum usage of and reliable payment for car parking.

# Related Use Cases

Exit carpark – if the car park is full, preventing entry of ad-hoc customers, a car leaving the car park will allow one waiting car to enter.

# 

# Pre-conditions

## The car park is open for business

## Someone wants to park their car in it

# Post-conditions

## Main success scenario (ad-hoc customer, successful entry)

A ticket has been issued to the customer.

A record of the ticket has been stored.

The customer has been allowed entry.

The number of available spaces in the car park is decremented by one.

## Season ticket holder with valid ticket

A record of that the season ticket is in use has been stored.

The season ticket holder has been allowed entry.

## Season ticket holder with invalid ticket

An invalid season ticket message has been displayed.

The season ticket holder has not been allowed entry.

## Ad-hoc customer, carpark full

A carpark full message has been displayed.

The customer has not been allowed entry.

# Normal Flow

The use case begins when a customer arrives at the entry pillar.

|  |  |
| --- | --- |
| Actor | System |
|  | 1. System detects that a car has arrived. |
|  | 1. System displays ‘Push Button’ message. |
| 1. Customer pushes button | 1. System ensures spaces available |
|  | 1. System issues ticket |
|  | 1. System displays ‘Take Ticket’ message |
| 1. Customer takes ticket | 1. System raises entry barrier. |
| 1. Customer enters car park | 1. System detects that car has entered |
|  | 1. System lowers entry barrier |
|  | 1. System records ticket usage |
|  | 1. System decrements available spaces |

The use case ends.

# Alternate Flows

## Season ticket inserted

If at step 3 of the normal flow the customer inserts a season ticket, then

|  |  |
| --- | --- |
| Actor | System |
|  | 3.1 System ensures season ticket valid |
|  | 3.2 System ejects the season ticket |

The normal flow is resumed at Step 6.

## Invalid season ticket or season ticket used outside working hours

If at step 3.1 of alternate flow 9.1 the season ticket is not valid, then

|  |  |
| --- | --- |
| Actor | System |
|  | 4.1 System displays ‘Invalid ticket’ message |
|  | 4.2 System displays ‘Remove Invalid Ticket’ message |
| 4.3 Customer removes ticket |  |

The normal flow is resumed at Step 2.

## Car park full, ad-hoc customer waits

If at step 4 of the normal flow no spaces are available, then

|  |  |
| --- | --- |
| Actor | System |
|  | 4.1 System displays ‘Carpark Full’ message |
| 4.2 Ad-hoc customer waits |  |
| 4.3 Another ad-hoc customer exits the carpark | 4.3 System ensures current gate is first waiting |

The normal flow is resumed at Step 2.

## Car park full, ad-hoc customer leaves

If at step 4.2 of the alternate flow 9.3 the ad-hoc customer leaves, then

|  |  |
| --- | --- |
| Actor | System |
|  | 4.2.2 System detects that a car has left without entering |

The use case ends.