Case study Shopping centres



Requirements

Parking in garages of a shopping centre with a parking guidance system, statistics and statements on parking and parking fees, advertisements printed on parking tickets, discount vouchers, parking fee discounts for cinema visitors, prepaid night parking.

Solution

Entries/Exits

The entry to the car park paid zone is set with the entry terminal (the entry terminal is equipped with a printer of bar code or magnetic stripe parking cards, a contactless card reader for night parking and HW for the print of advertisements on parking tickets).

There are two information displays at the entry showing occupancy situations on different storeys (guiding arrows, information on available parking spaces, etc.).

The exit terminal is placed at the car park exit. The terminal is equipped with a bar code scanner and a contactless card reader for night parking.

Individual terminals control automatic barriers in accordance with the system setting.

Terminals can be additionally equipped with intercoms to ensure the communication with the car park attending staff.

Parking

Each parking space is set with a sensor and a coloured signalling light (red/green/blue). There is a guidance panel placed at every intersection (an arrow, a cross, a number of vacant parking spaces in the particular alley – the "disabled person" or the "pram" symbols indicating places for the disabled or for mothers and children; if some of the reserved spaces is vacant in the defined area, the sign is illuminated; if it is occupied, the sign switches off).

The whole parking guidance system is connected to the car park visualization SW which allows to regulate the occupancy process, change routes, reserve spaces or perform statistics.

Payment

There are automatic pay stations placed in the car park area. Here, customers can pay their parking fees via parking cards (issued by the entry terminal) or discount vouchers that are scanned at the automatic pay station. The automatic pay station accepts coins and banknotes and returns any surplus in both coins and banknotes. The automatic pay station can be additionally equipped with a credit card module for credit card payments (which is conditioned by a relevant contract with a bank and the internet connection). Payment via SMS (a contract with the operator).

A discount terminal for the addition of discounts is placed at the cinema manual pay station.

Sever

The server operates the system, provides information to the attending staff on the state of individual devices

The server allows the car park remote control or to provide repair and maintenace services via the internet or the telephone.

The system is capable of sending sms to phones of authorized persons reporting on the equipment condition. The authorized persons can control the system on the basis of coded sms.

The server is equipped with the same equipment as the manual pay station so the payments can be made and complaints can be solved there.

The server controls SW module designed for the creation of reports (statistics, book closing, etc.)