

# Parking system management app

Hackathon / 2023



DEUTSCHE TELEKOM IT SOLUTIONS



# Challenge summary

We challenge participants of Hackathon to create platform/application for car parking booking management system to be used in our campus at Business Center Tesla Košice.

Such an application will help us to more efficiently manage our parking spots and keep them utilized to highest level.

This app should have intuitive and easy-to-use interface providing access to all main features at one place with real-time interactive map.



# Key features

- Real-time booking and confirmation
- Intuitive and easy-to-use interface
- Registration and login
- Interactive map
- Hourly booking
- Notifications
- Waiting list



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## Detailed requirements for app

### Registration and login:

Every employee must register in order to receive log in details. Registration information: Name, Surname, mobile number, company email, Personal ID(company card) , licence plate number (editable option).

### Interactive map:

Interactive map of car park with parking spots. When hover with cursor over parking spot on the layout the information should pop up: Free/Occupied (with color difference), Assigned number of parking space, Current date, If occupied – email of current user and licence plate number.

### Real-time booking and confirmation:

The single field for: Location (BCT east), Date, Time (from – till), Licence plate number,

Single button for: My bookings(to see current bookings and manage them in case of cancellation or changing of time), Profile information(editable), Preferences, Notifications(employee to be notified about their upcoming bookings and they should be able to confirm or release the spot.

Once the booking is placed the confirmation will be sent to employee by email or sms. Booking to be possible only for 1 day at the time and max 2 days in advance

If employee who made a booking won't arrive to parking lot within 1 hour of official start of reservation the booking should be automatically cancelled. The entry to parking lot will be authorized by RFID card reader compatible with company access card. If the booking will be automatically cancelled 3 times for same employee due to fail to attend and cancel booking the employee will lose the entitlement to create booking for period of 2 weeks

### Waiting list:

If the parking lot is full, employees can join a waiting list. If spots become available, they will be assigned automatically to people in the waiting list with notification sent by email or sms.



# BCT Campus Layout

