

Captain Park

Road Side Park Detect System

Chen xi; Pang Zhengqi; Su Zhaofan; Xu Mengru; Yang Liuqing



The background is a dark green chalkboard with faint, light green chalk drawings. On the left, a pink pencil with a white eraser and a black tip is shown. The chalkboard contains various faint sketches, including a cube, a lightning bolt, and some mathematical expressions like $a^2 + b^2$ and $1/b^2$.

01

What is the problem?

Quickly locate the specific locations of the free parking spaces near the destination



How cameras find available parking spaces



Underground
Car Park



Camera



Road Side
Park





The background is a dark green chalkboard with faint, light green chalk drawings. On the left, a pink pencil with a white eraser and a black tip is shown. The chalkboard contains various mathematical notations: a geometric diagram of a cube-like structure, a lightning bolt symbol, the Chinese characters '假设' (Assume) followed by $a^2 + b^2$, the letter 'b', the expression $1/b^2$, and the letters 'c' and 'd' at the bottom.

02

For car owners



CAPTAIN PARK



Hello, I'm Park,
May I help you ?



Find Parking

Hello, I'm Park,
May I help you ?

Tell me the parking
lot near tsinghua
university.



Find Parking

Hello, I'm Park,
May I help you ?

Tell me the parking
lot near tsinghua
university.

OK, we are checking
for you. Please wait
a moment

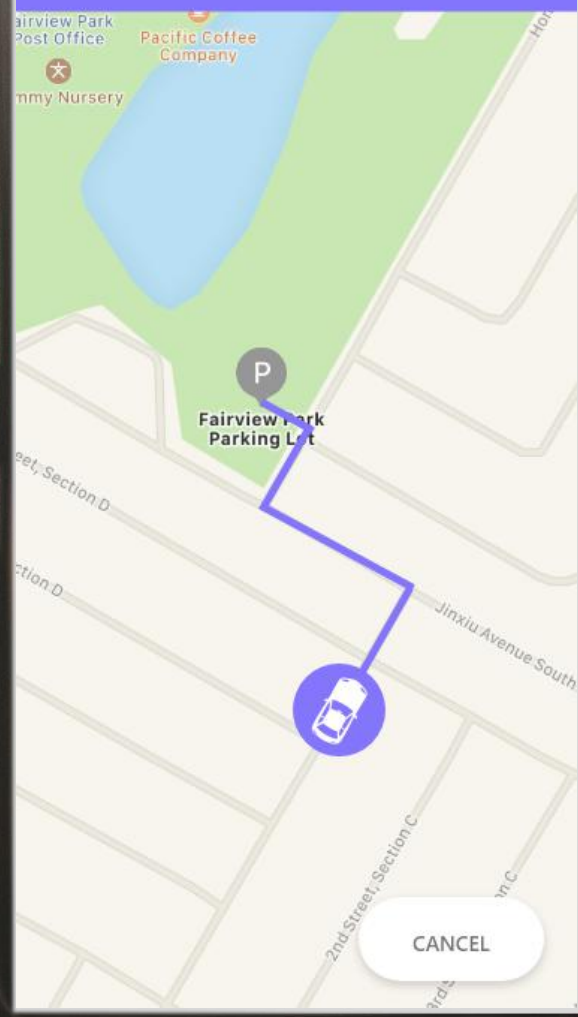


Find Parking

12: 17



Go straight and in 300m
turn right



CANCEL

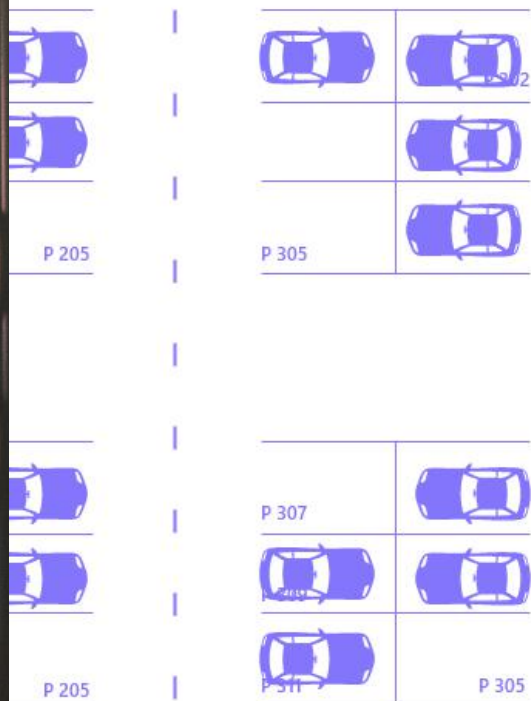
12: 17



Parking

Following is the bird view of the parking lot

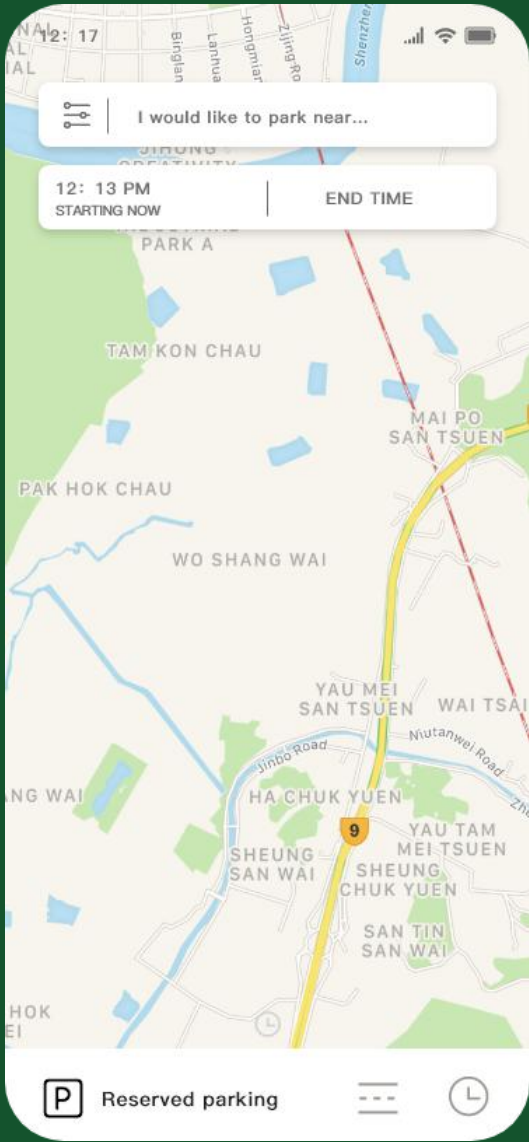
ENTRY



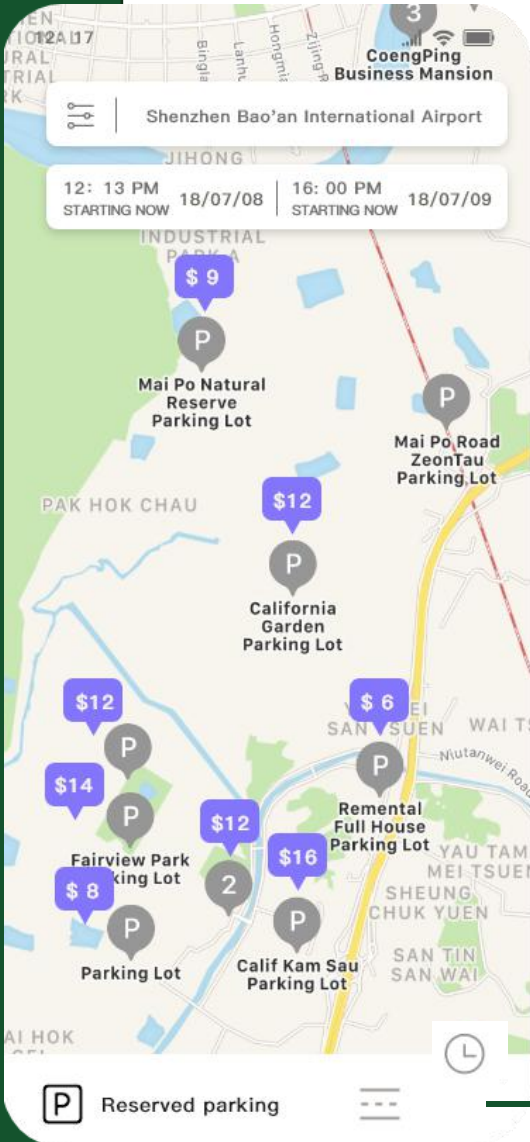
EXIT

When you want to check the parking space in advance

input destination
start time will be auto filled



Reserved parking



Search Result

Parking indicator with pricing. User can tap on it to view details or get directions or just follow her pass to reach there.

Parking Timer

Street Parking

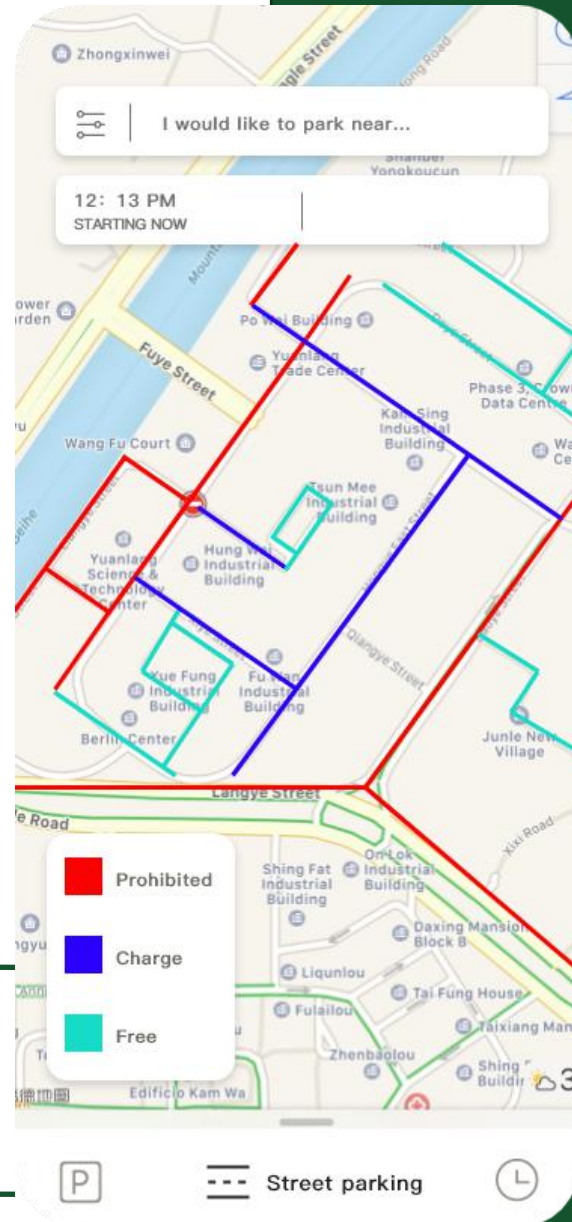
This is the most useful feature which helps the user find parking for short duration.

This highlighters will indicate meter, free or prohibited parkings in the nearby area of the destination.

I tried to keep the UI modern and simple. This was important because of the busy schedule of the user. They should be able to get the information and learn the system quickly. Entering any information shouldn't be overwhelming for them as they're already frustrated.

on street legend

Street Parking

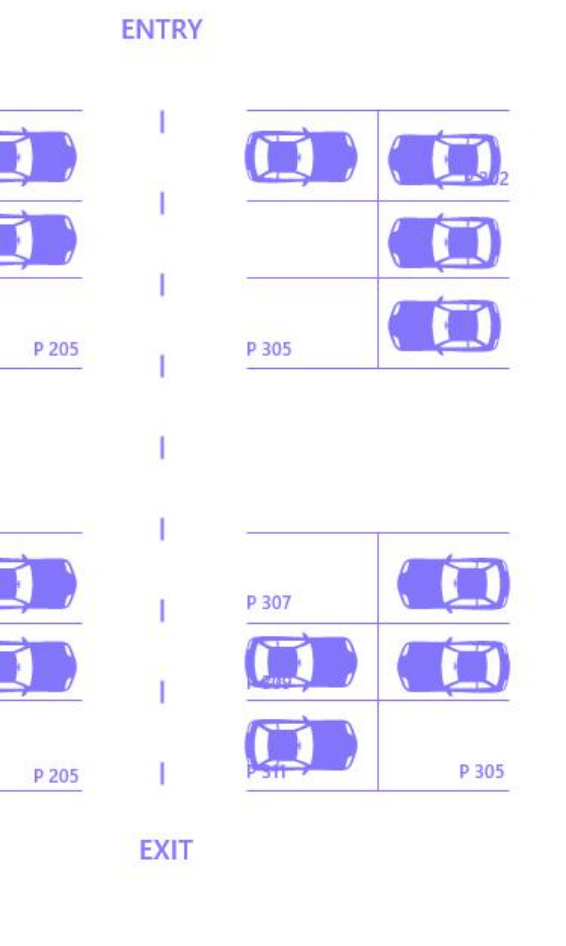


Highlights

12: 17

Parking

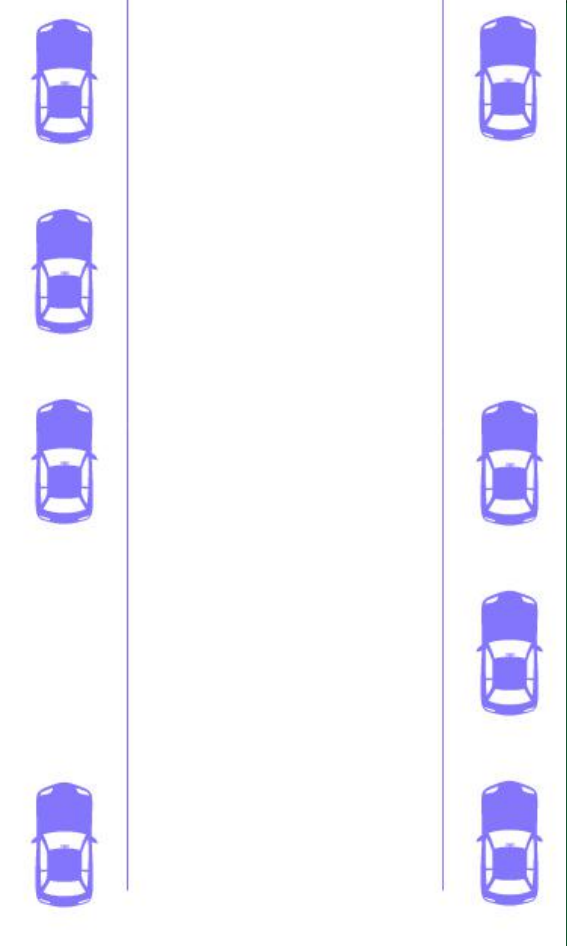
Following is the bird view of the parking lot



12: 17

Parking

Following is the bird view of the road parking spot





03

For government

Monitoring

BY GOVERNMENT



For the government:

- **Data Sources**

Real-time image data and video data

- **Algorithms**

Decision trees, PCA, ARIMA and so on

- **Effects**

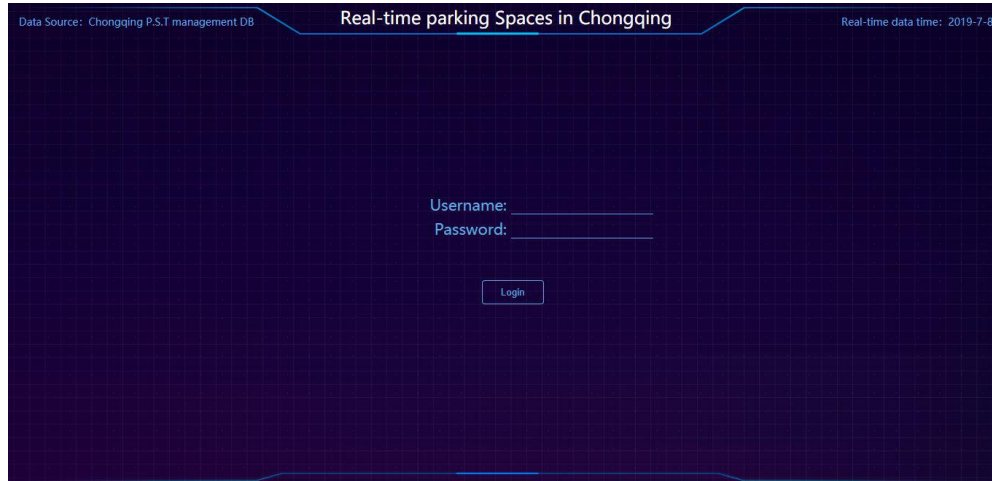
Increase the urban management efficiency

Save the human resources

Reduce the traffic congestion

Monitoring

BY GOVERNMENT



B/S Architecture

Used by governmental agents

Security and Accuracy

TOP 10 districts with the highest parking occupancy rate

Real-time road images and vedios

Main streets parking spaces utilization rate

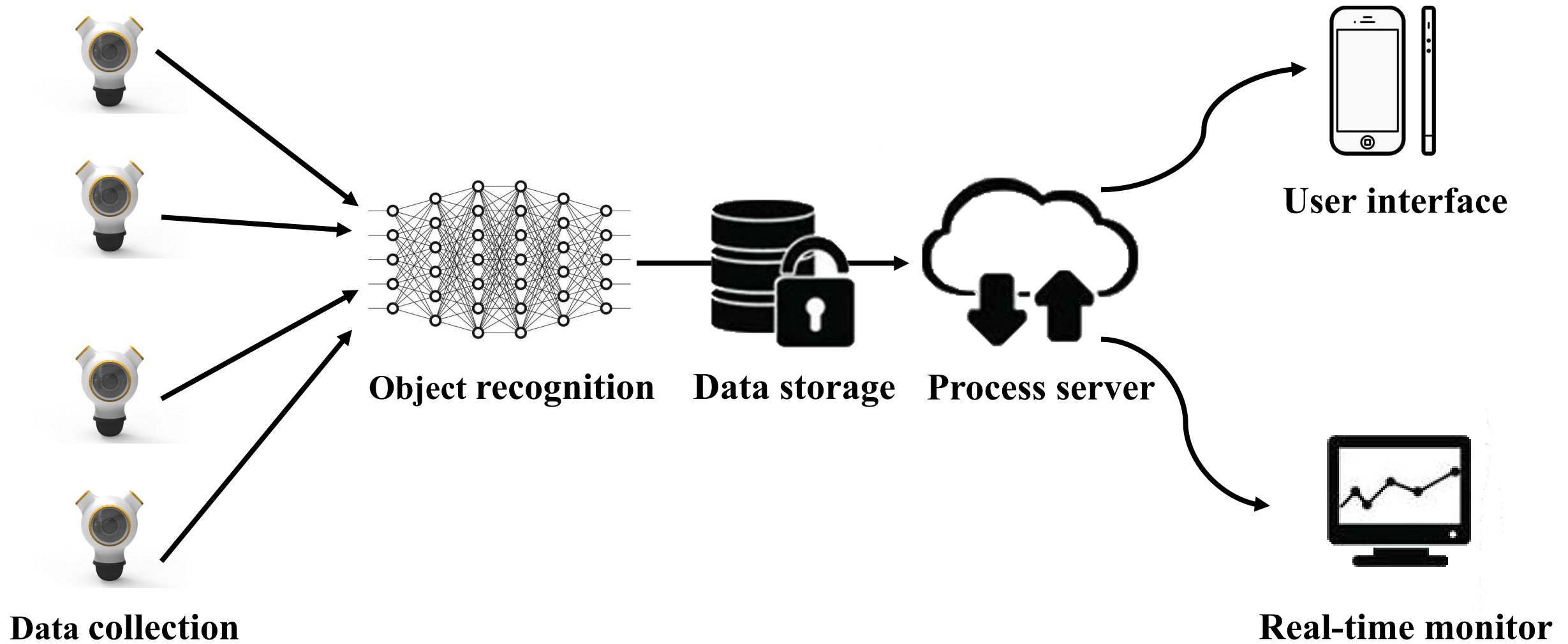
Parking spaces usage condition recording throughout the day

Prediction data





Framework of our system

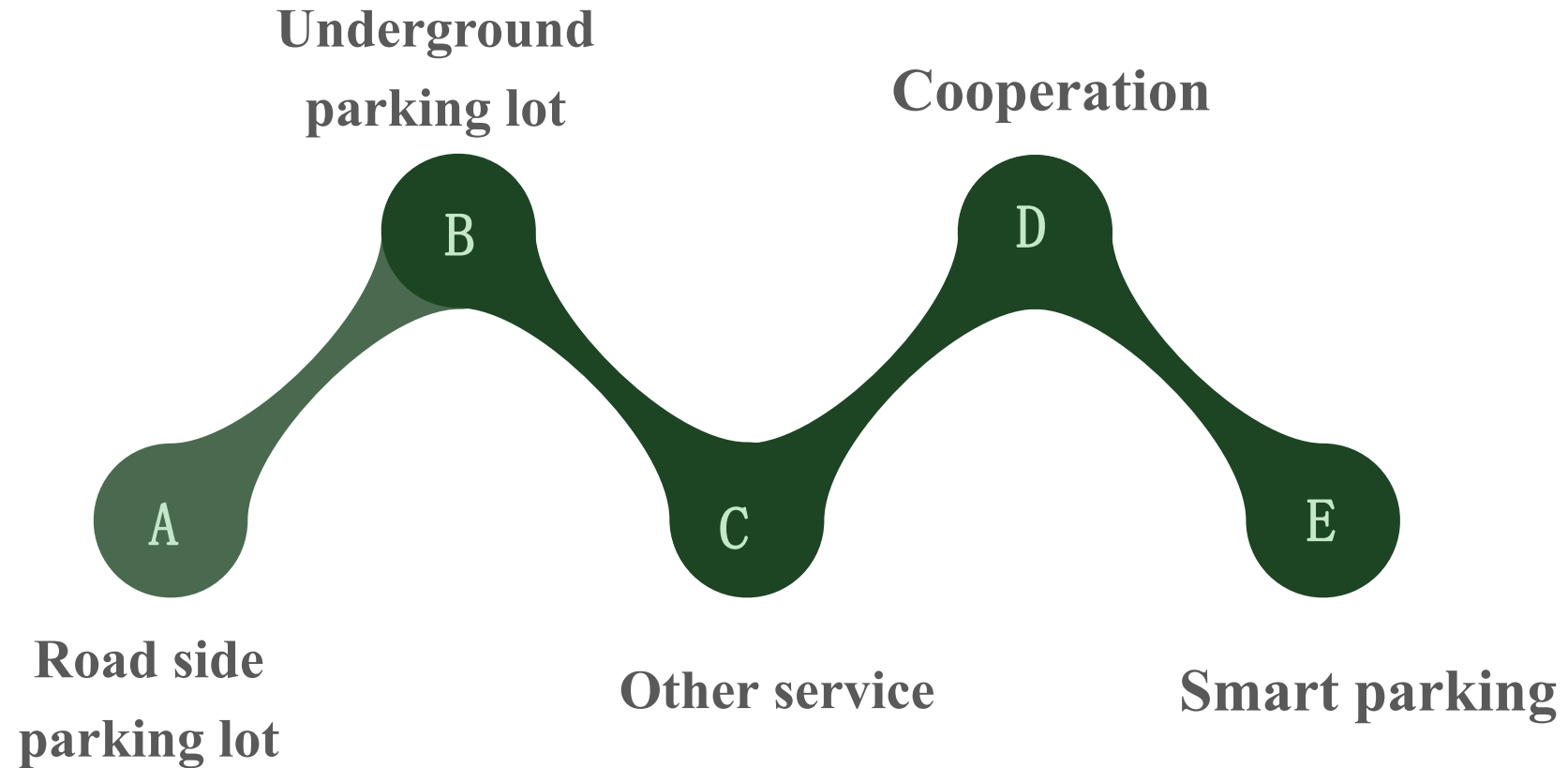


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04

For Value-added
service

Value-added service in the future



T h a n k s

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