

# Final Report

## Underground Parking

DT TeamConstellar  
王锦瑞 邱源 章烨昊 陆启明 刘润

# Why it's hard to find the way??!

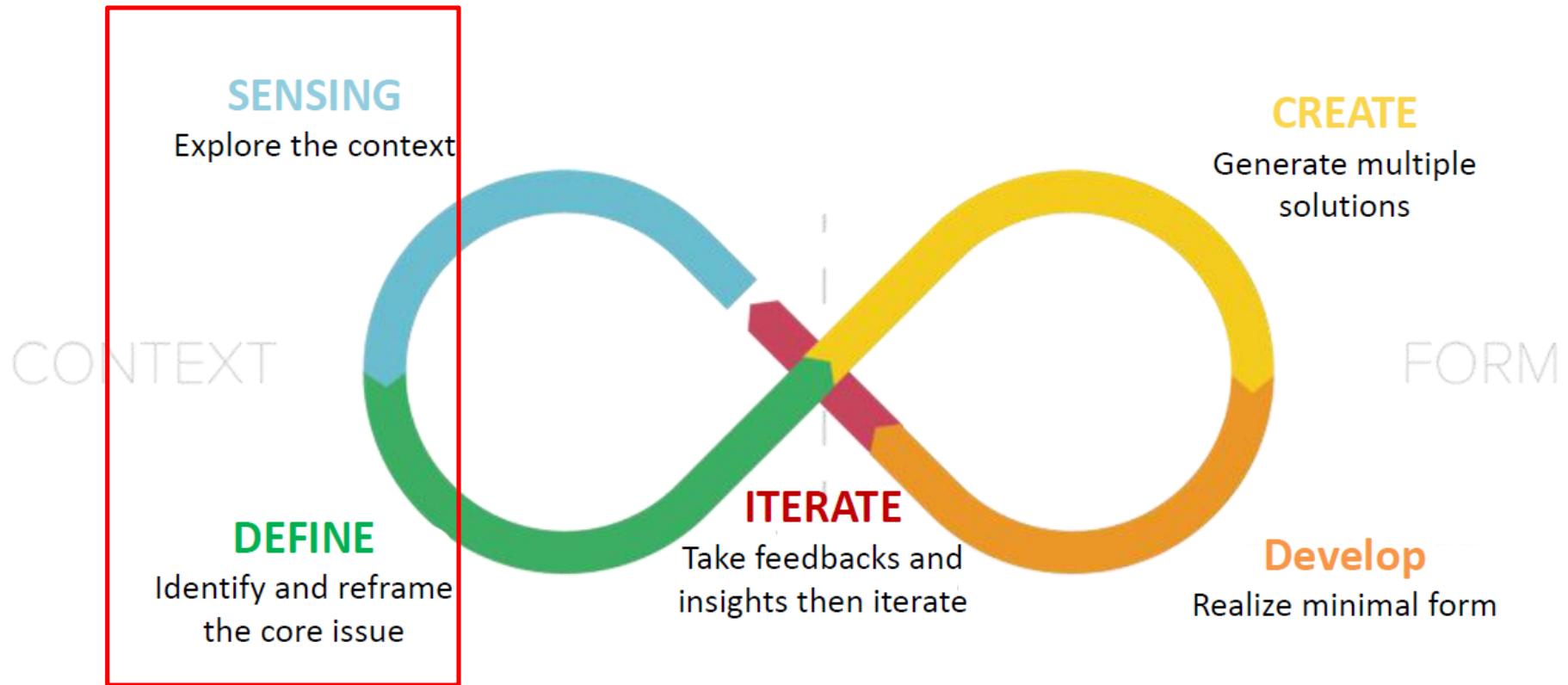


**Definition?**

**Assumptions?**

**Underground Parking Lots**

**Pain Points?**



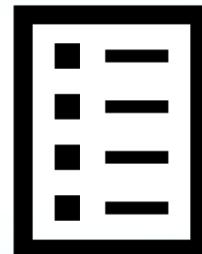


# Desk Research

Week 3

# Field Research

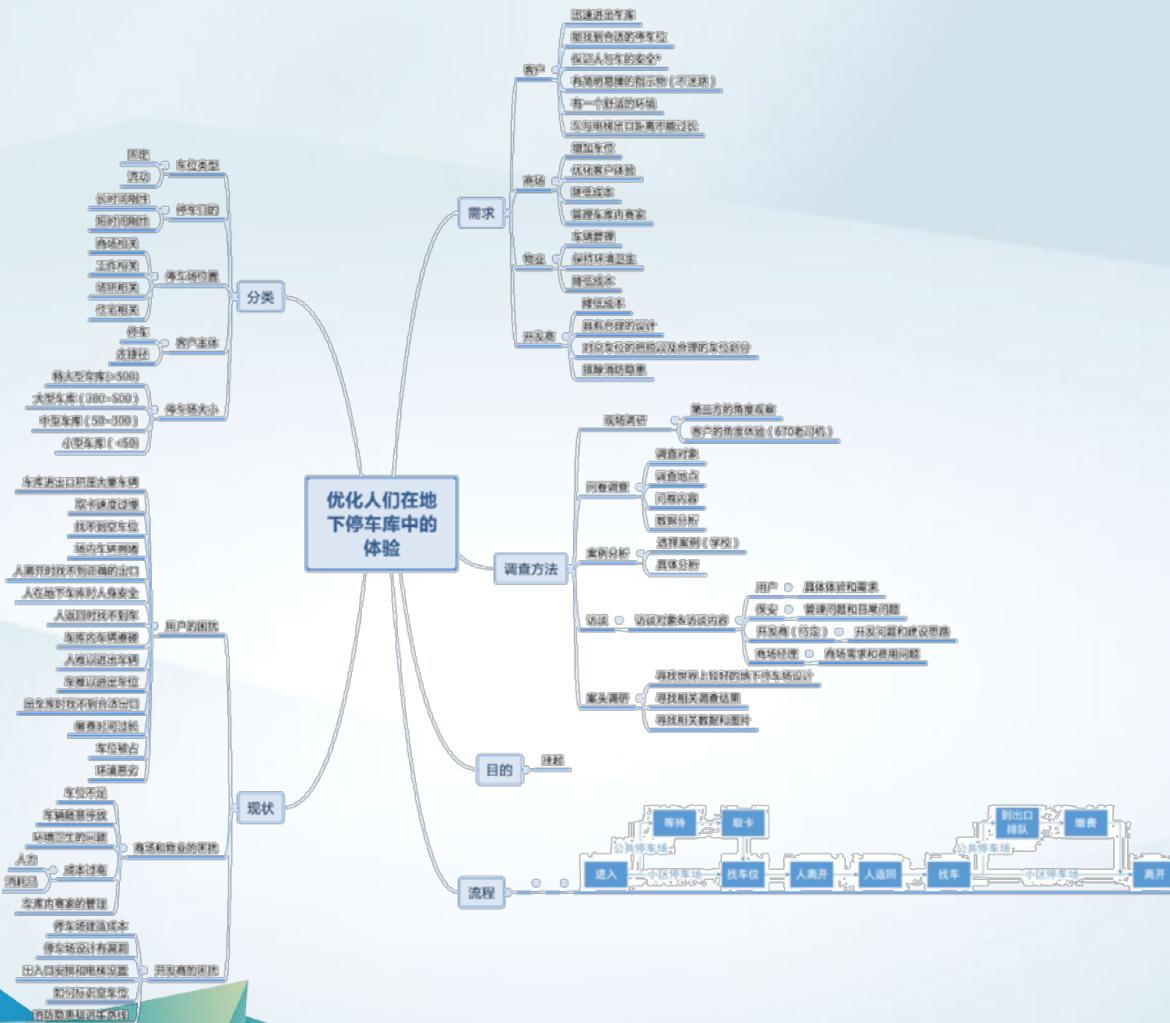
Week 4&5



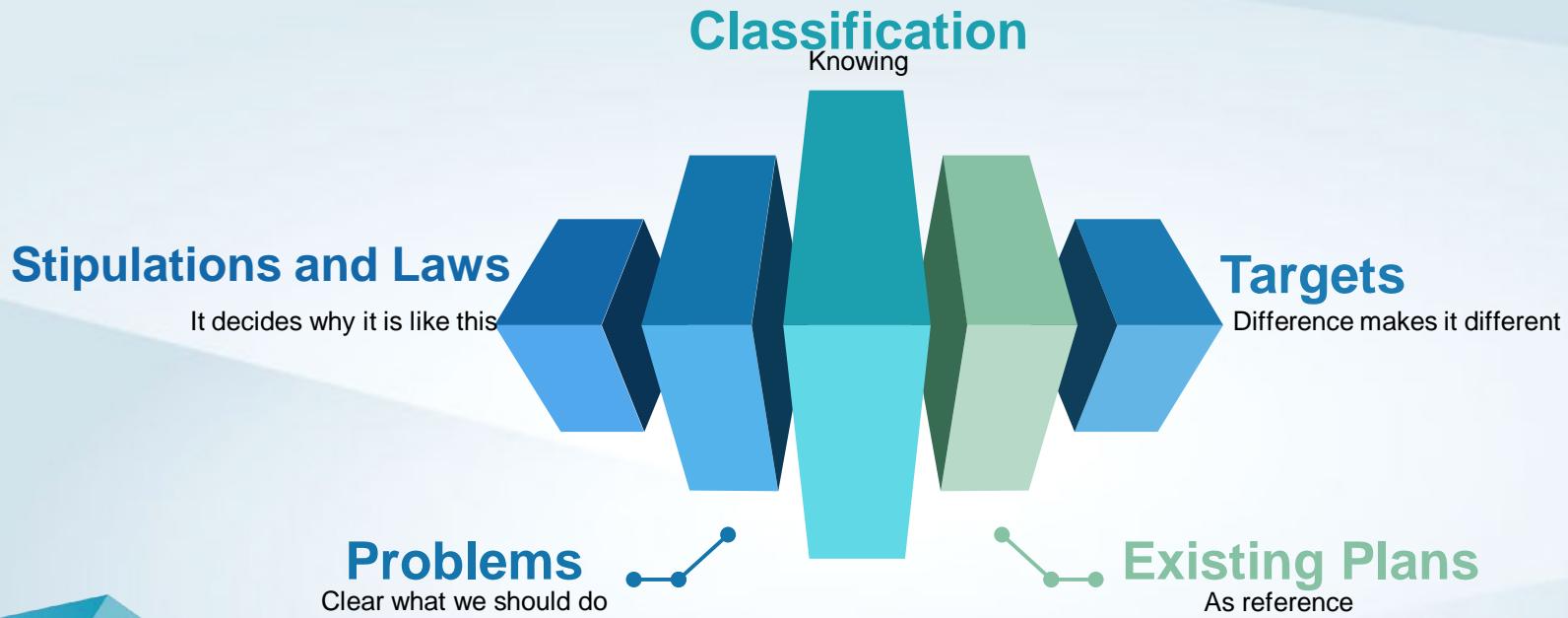
# Mind Map

Week 3

# Mind-Maps



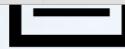
# Desk Research



# Field Research

1.您（作为司机或乘客）是否有过在地下停车库内找不到路标的情况？ [单选题]

选项	小计	比例
有过	465	<div style="width: 81.44%; background-color: #0070C0;"></div> 81.44%
没有	106	<div style="width: 18.56%; background-color: #BDBDBD;"></div> 18.56%
本题有效填写人次	571	



2.您（作为司机或乘客）是否曾经花费较长时间（10分钟以上）在停车场找到自己的车？ [单选题]

选项	小计	比例
没有	151	<div style="width: 26.44%; background-color: #0070C0;"></div> 26.44%
有	352	<div style="width: 61.65%; background-color: #0070C0;"></div> 61.65%
没有车	68	<div style="width: 11.91%; background-color: #BDBDBD;"></div> 11.91%
本题有效填写人次	571	



Interview

# Interviews



## Design

Based on the mind map and desk research results. Lu Qiming's is the primary designer of the questions.



## Interviewees

We choose interviewees from different area and different occupations. This variety results in the data collected from interviewees is extremely different, both on their reasoning and choices.



## Method

We carried out two face-to-face interview and two telephone interviews. An extra interview happened during one face-to-face interview, providing many useful facts.



## Interview

Liu Run acted as interviewer and Qiu Yuan took notes.

The method of interview has a great impact upon the quality of interviews. It is obvious that face-to-face one is better; however, there is still gaps between the interviewer and interviewees.

# Existing Problems

Puzzling  
Road Signs

Traffic Jams

Limited Space

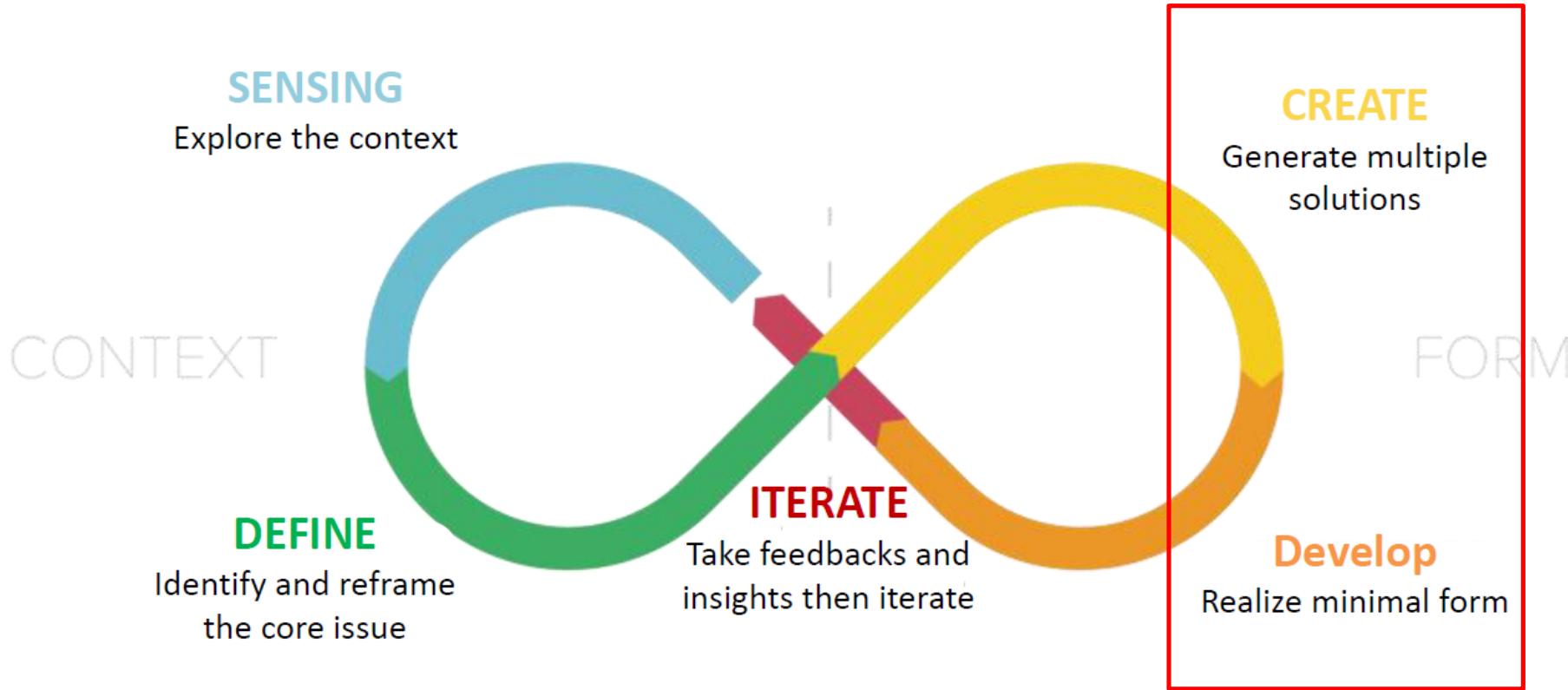
Upset  
Environment

Unclear  
Directions

Too Long Time

Possible  
Improvement

Culture?





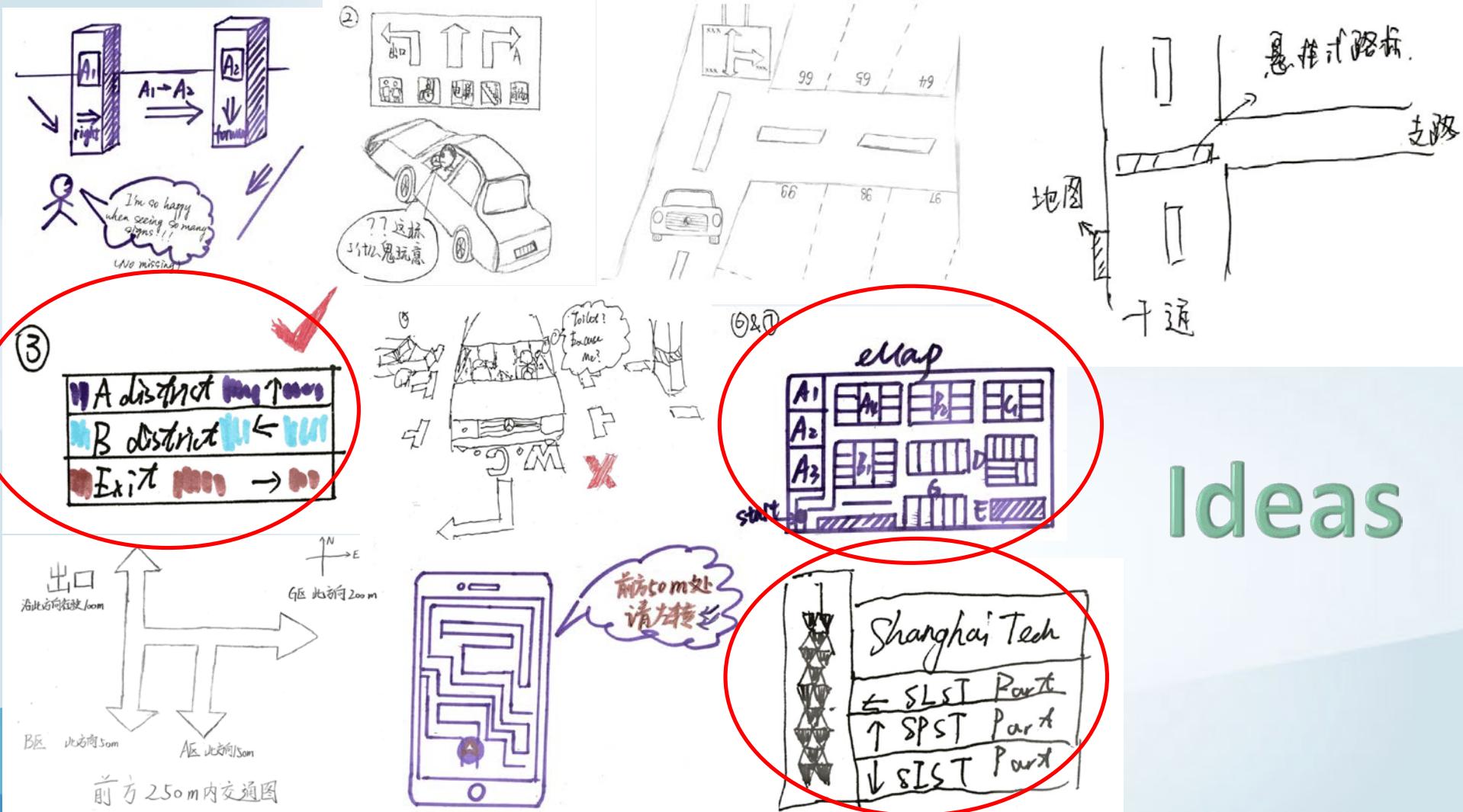
# Ideation

Week 8

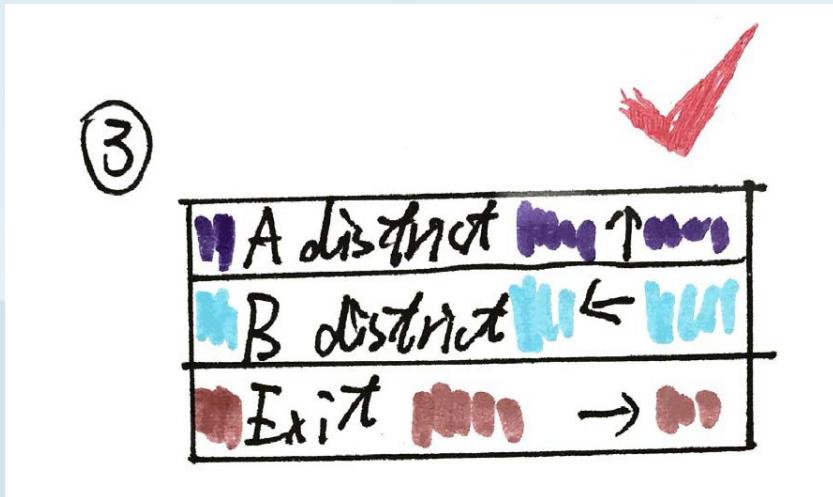


# Modeling

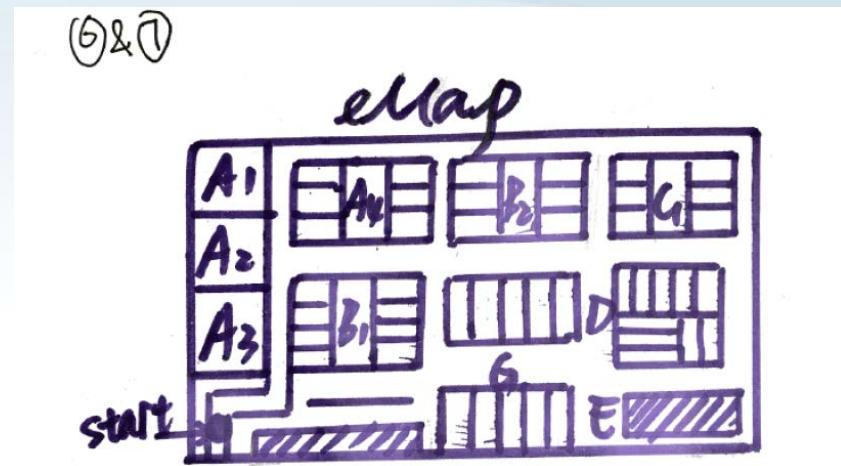
Week 9



## Road Signs



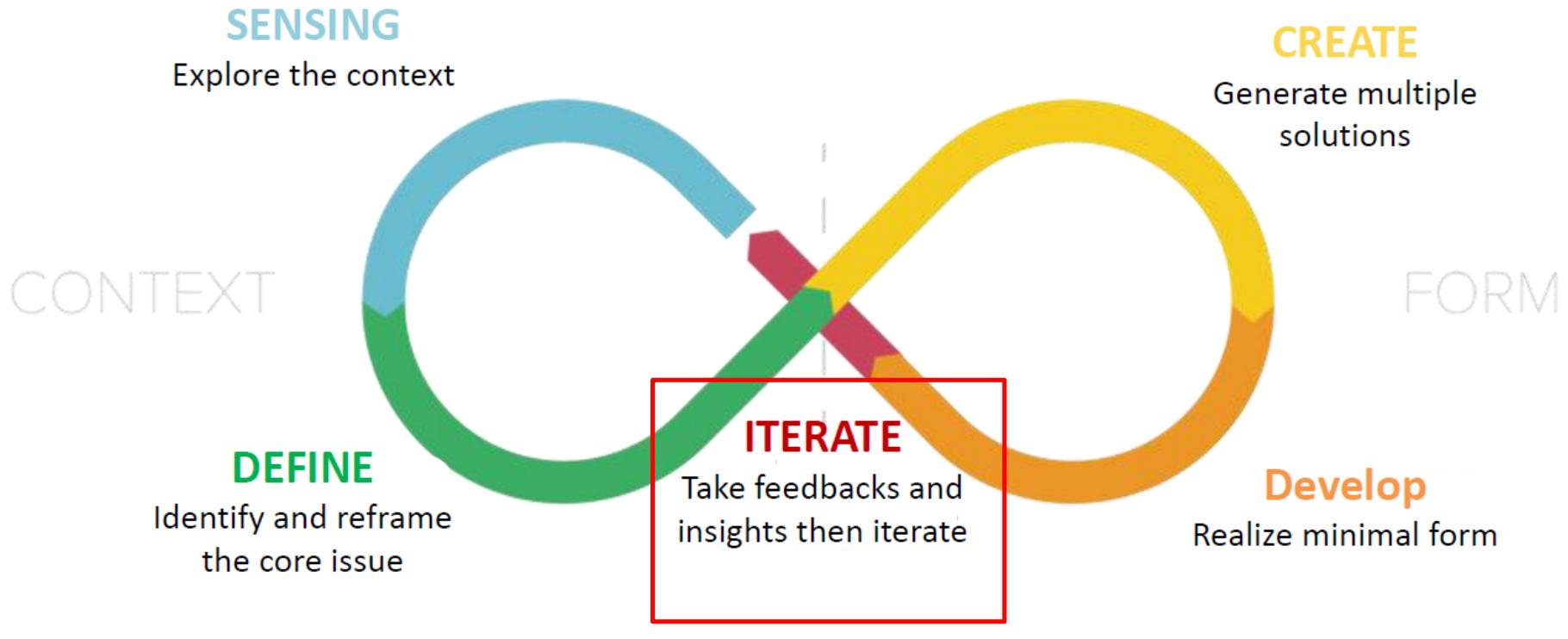
## District Designs



# Road Sign







# App prototype



## Platform

WeChat Mini Program.

This eliminate the need of developing both iOS and Android app, thus halving the budget.



## Localization

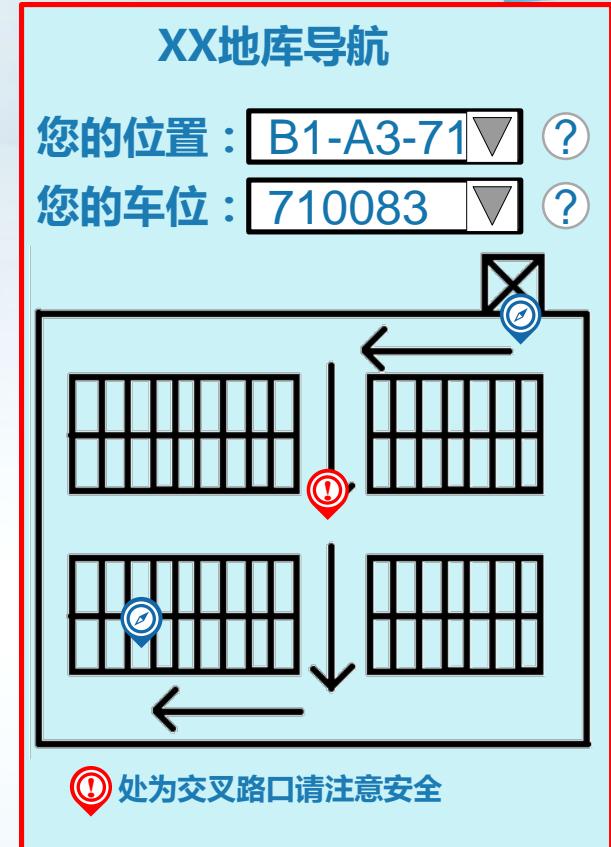
Land Mark.

While this is slightly less convenient, it avoids the problem of inaccurate Wi-Fi in-door localization and deploying AP.



## Budget

Estimated budget is RMB 15,000, with a potential of going up to RMB 50,000, depending on the need of parking lot owner.



# 2018

演示完毕 谢谢欣赏

部门 : XXX 汇报人 : XXX