



Final Report

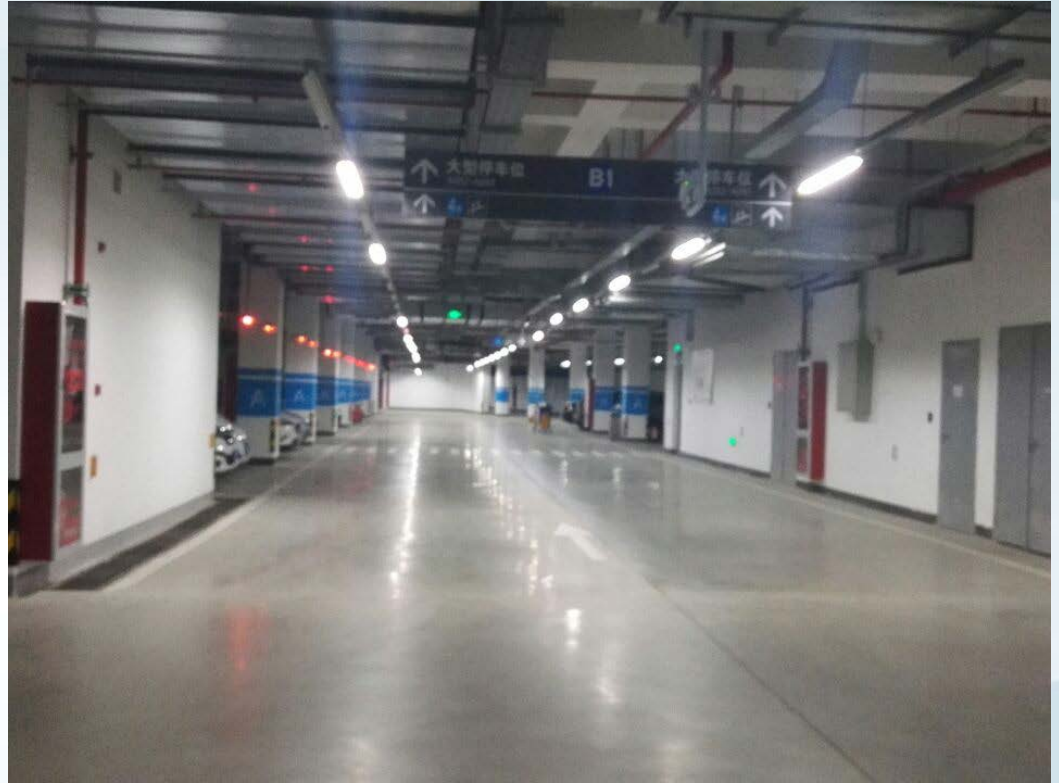
Underground Parking

DT TeamConstellar

王锦瑞 邱源 章烨昊 陆启明 刘润

Week 2

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



Definition?

Assumptions?

Underground Parking Lots

Pain Points?

SENSING

Explore the context

DEFINE

Identify and reframe
the core issue

ITERATE

Take feedbacks and
insights then iterate

CREATE

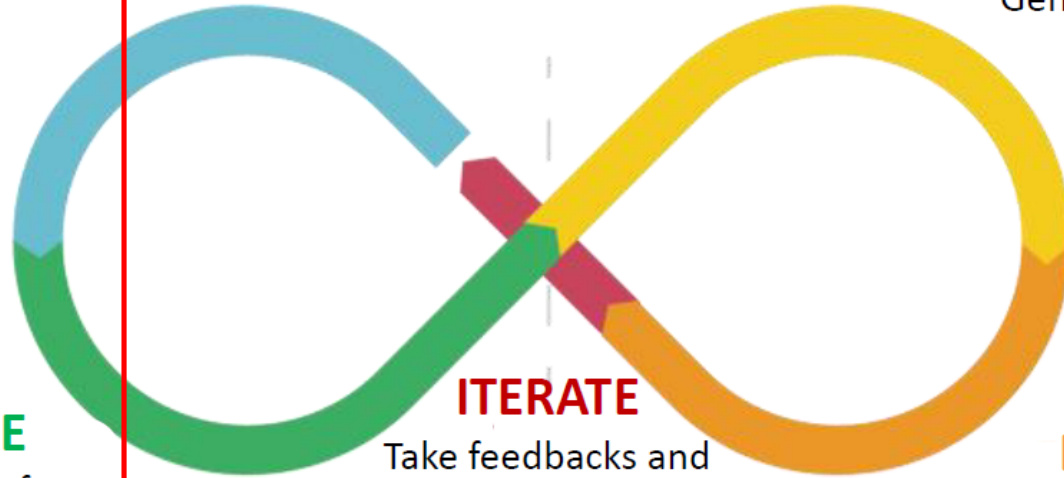
Generate multiple
solutions

Develop

Realize minimal form

CONTEXT

FORM





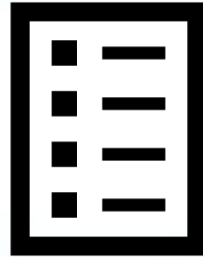
Desk Research

Week 3



Field Research

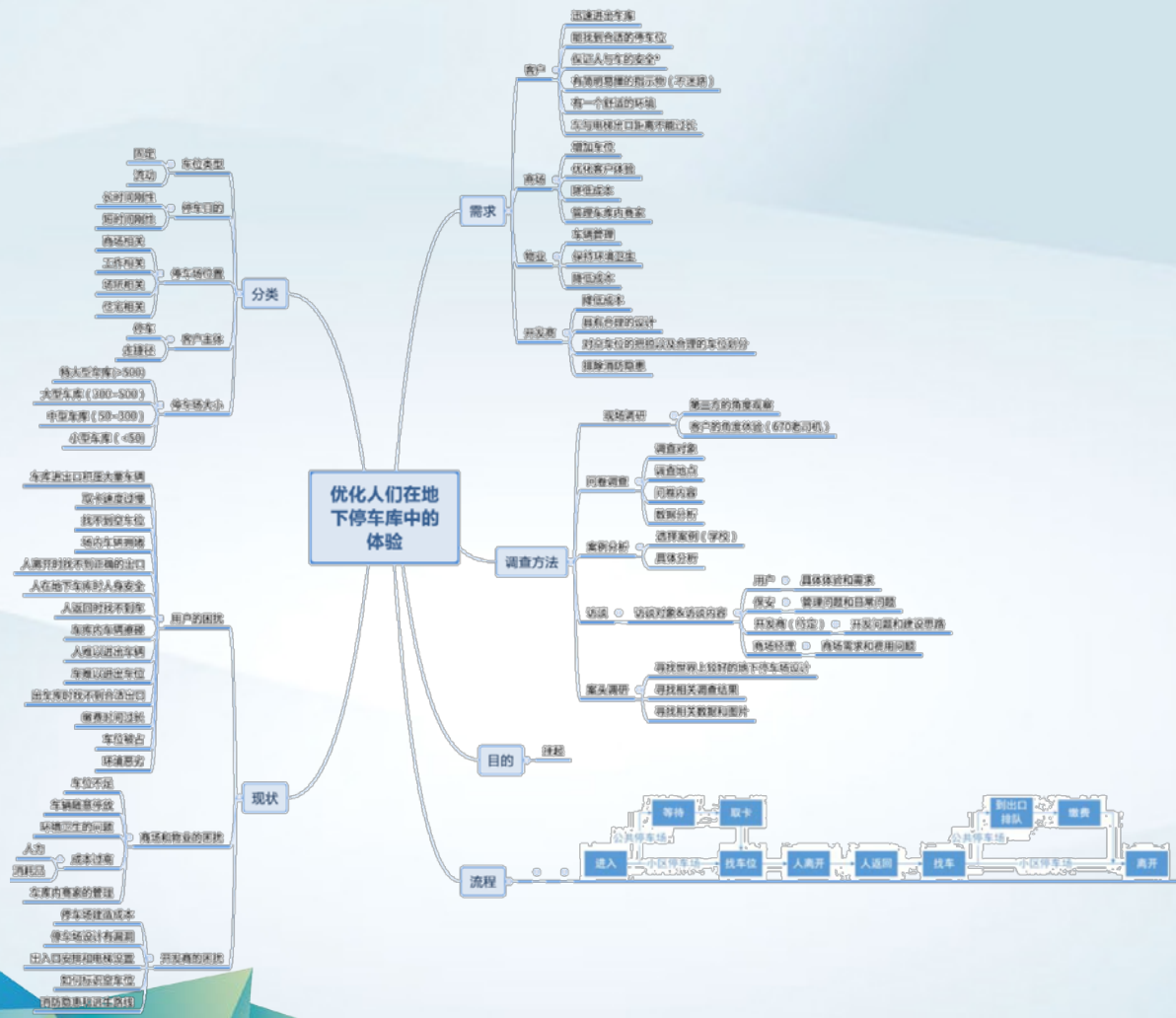
Week 4&5

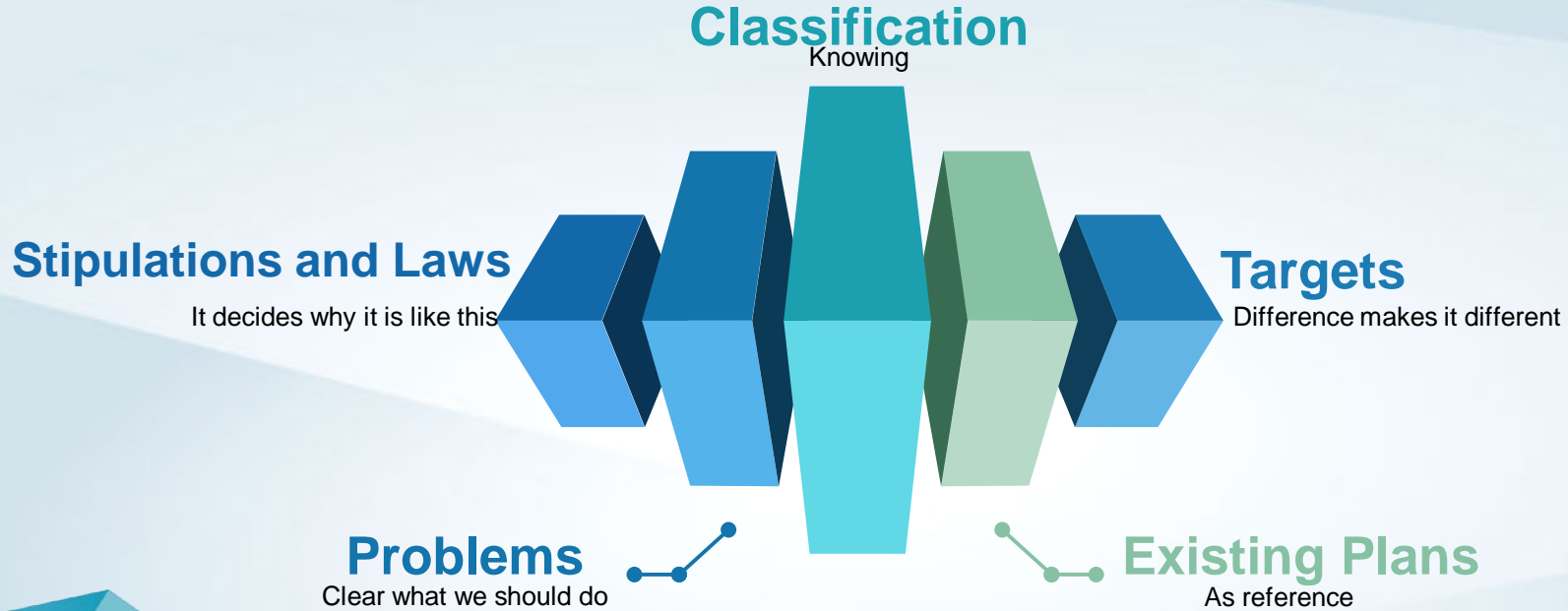


Mind Map

Week 3

Mind-Maps

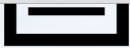




Field Research

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><div></div></div> 81.44%
没有	106	<div><div></div></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><div></div></div> 26.44%
有	352	<div><div></div></div> 61.65%
没有车	68	<div><div></div></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



SENSING

Explore the context

CONTEXT

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ITERATE

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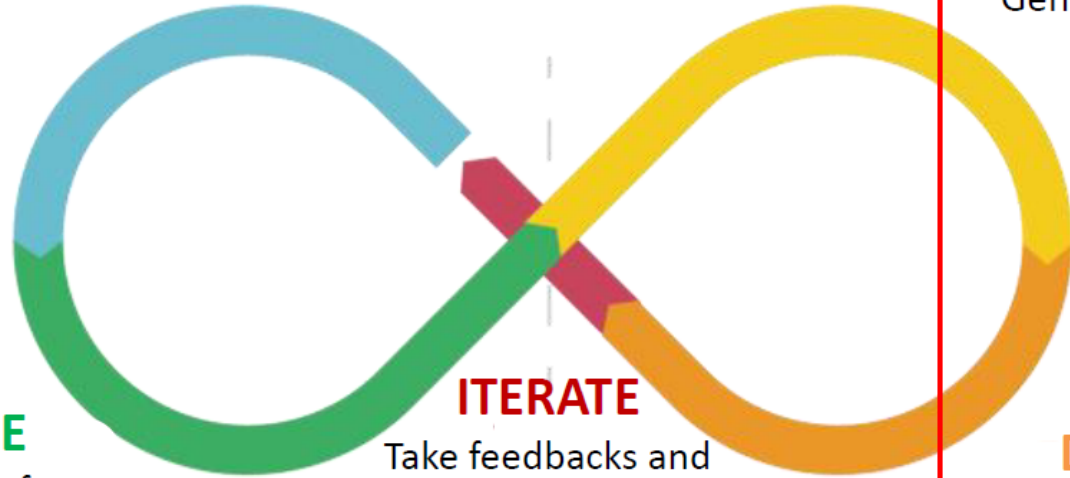
CREATE

Generate multiple
solutions

FORM

Develop

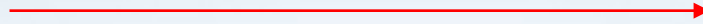
Realize minimal form





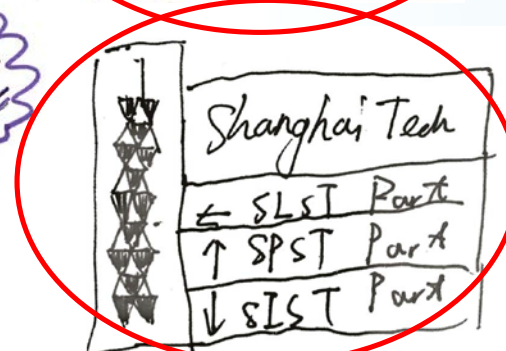
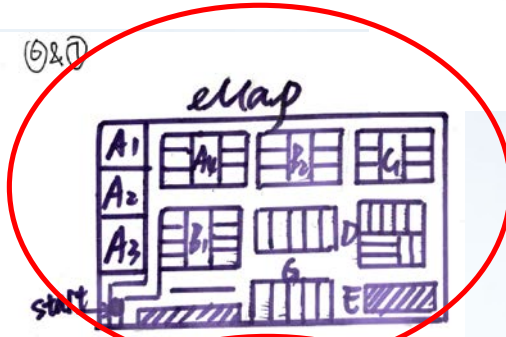
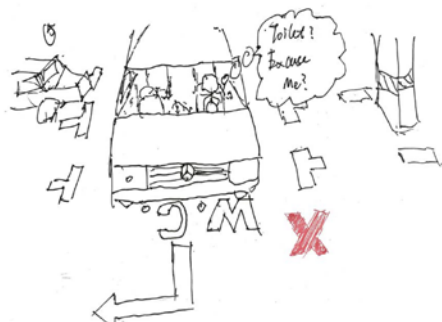
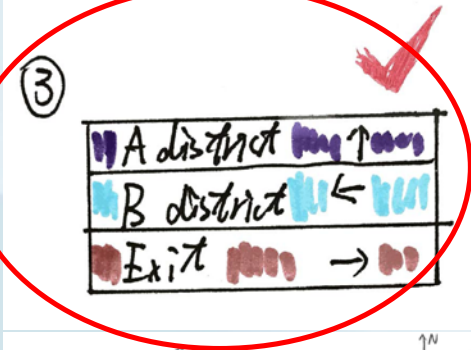
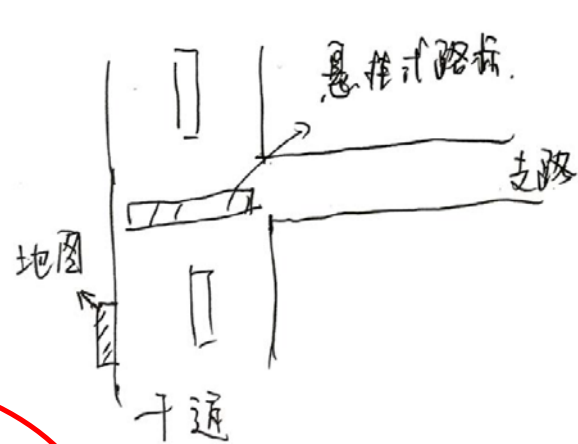
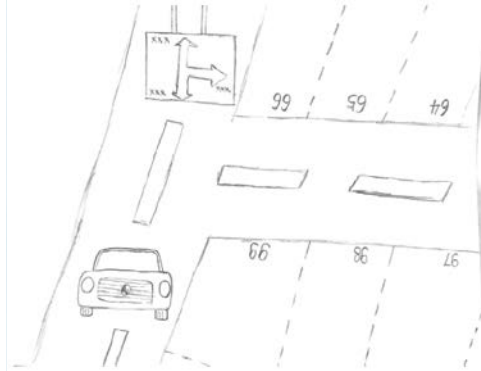
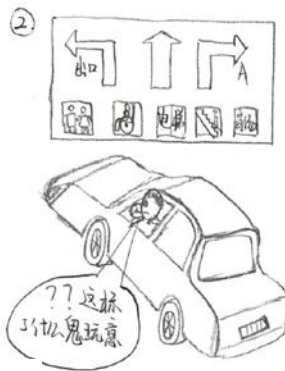
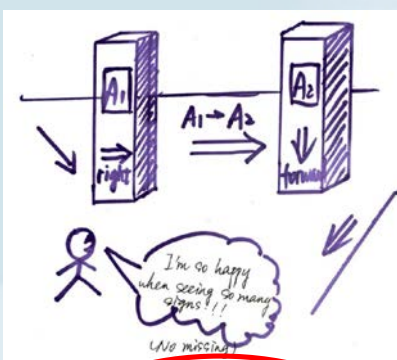
Ideation

Week 8



Modeling

Week 9



Ideas

③

A district \rightarrow

B district \leftarrow

Exit \rightarrow

⑥ & ⑦

emap

start





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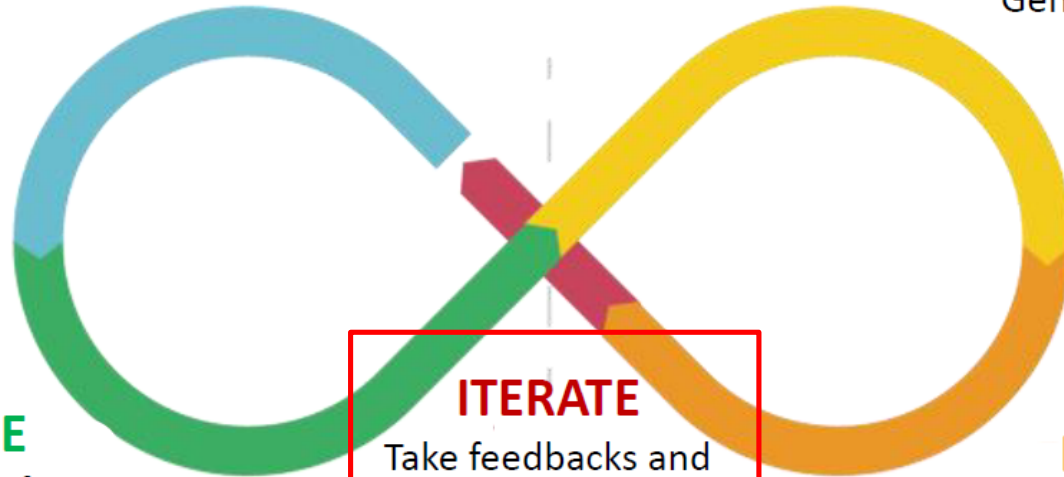
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App prototype



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.



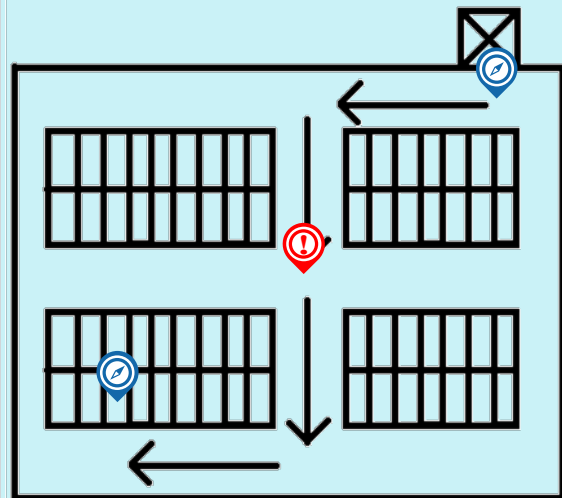
Budget

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

XX地库导航

您的位置 : B1-A3-71 ▼ ?

您的车位 : 710083 ▼ ?



⚠ 处为交叉路口请注意安全



2018

演示完毕 谢谢欣赏

部门：XXX 汇报人：xxx