

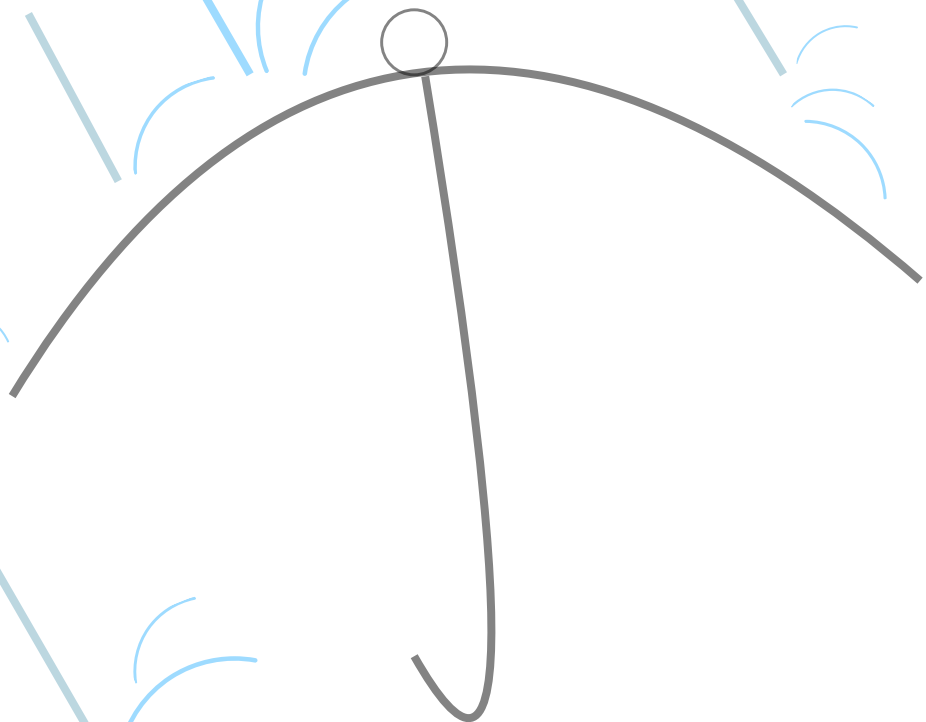
RAINGUARD

BEING HUMAN

2024 / 11 / 15

PROJECT 2

NAME
SENYAO WANG

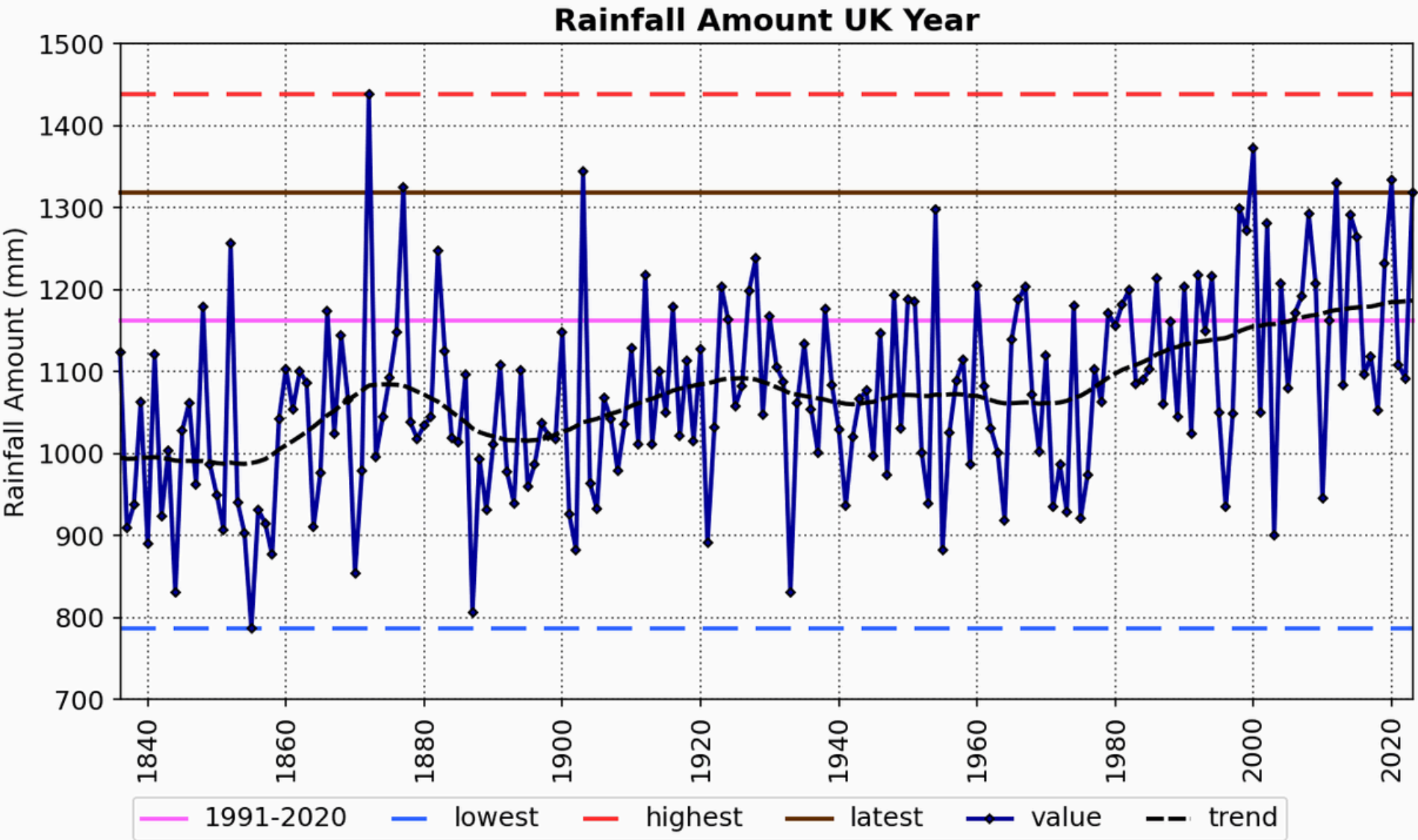


INTRODUCTORY ANALYSIS

Met Office

Source: HadUK-Grid 23/07/2024 15:13

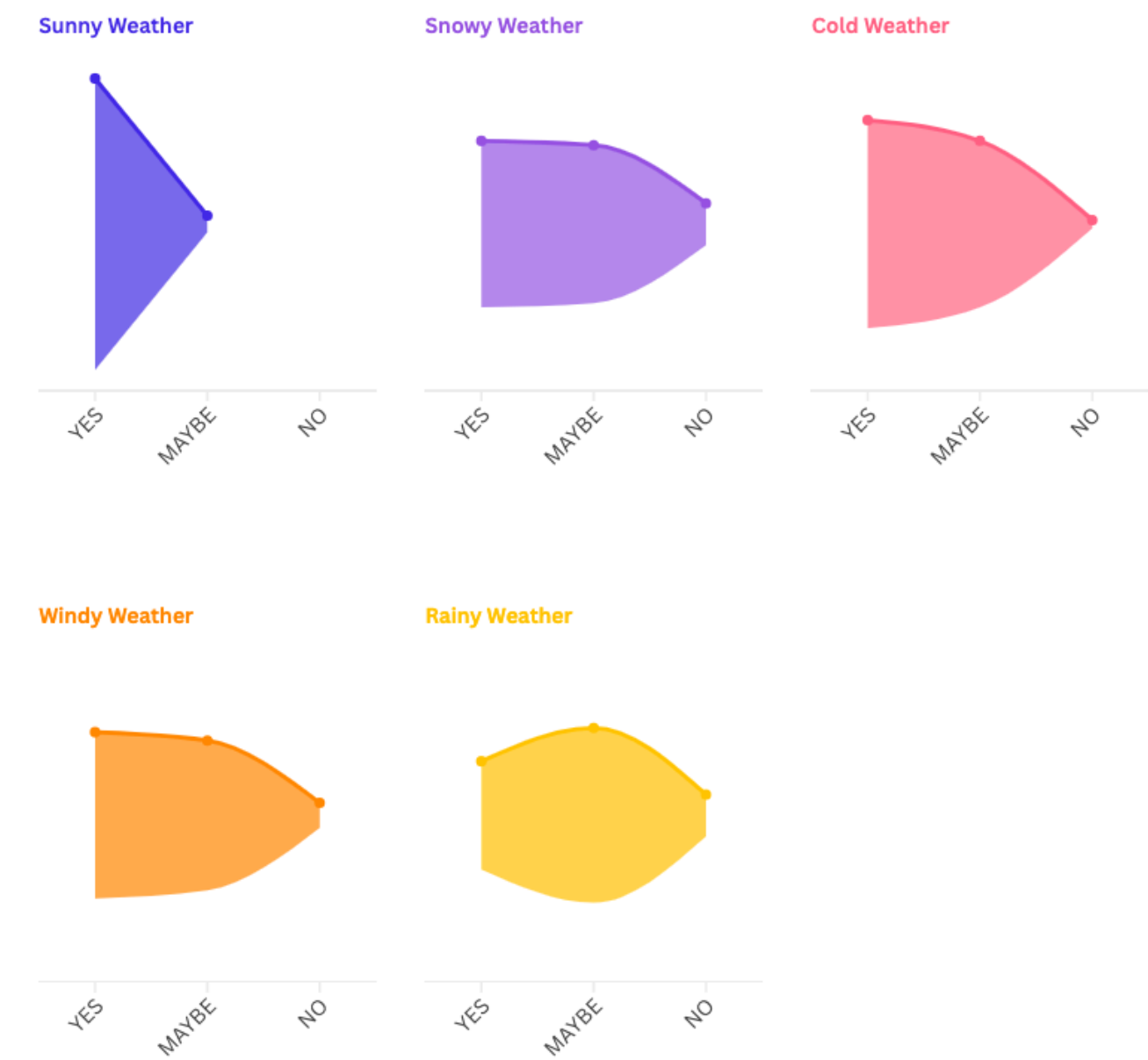
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Analysing the UK weather data I have found that it rains for nearly half the year and the number of days it rains is evenly spread across the months. Combined with our daily life experience that rain and snow are always falling and stopping unpredictably in a day, resulting in people having no way to prepare their rain gear.

I conducted a random survey of pedestrians and found that on a clear day, most people would choose to walk, but as the weather changed. Especially in the weather such as rain and snow, the proportion of people choosing to walk will be greatly reduced.

What do you walk in this weather

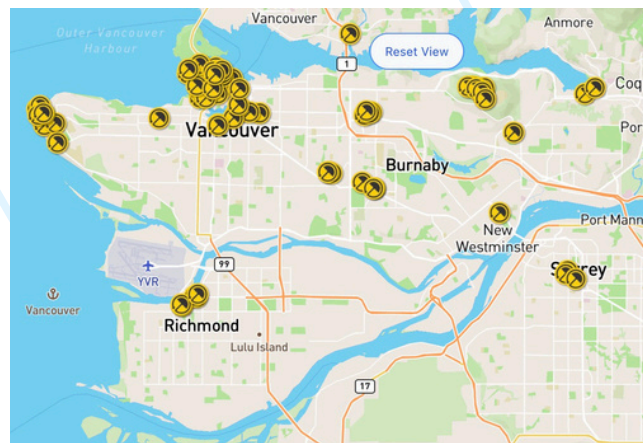


COMPETITIVE ANALYSIS

Canada – Urban umbrella sharing system

The "Umbracity" urban umbrella sharing system designed by a research team at the University of British Columbia in Canada has successfully solved the problem of umbrella recycling. The two umbrellas are placed in a self-service umbrella-picking machine with GPS positioning system, and users can obtain their location by downloading the mobile APP or logging on the official website.

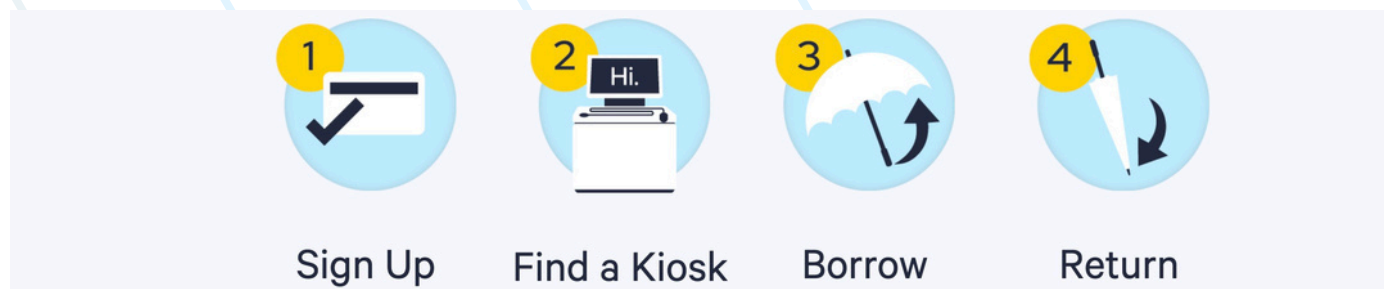
Kiosk locations



Get the location of the shared umbrella on the map



Umbracity self-service umbrella taking machine



Users need to register an account in order to borrow and return an umbrella, and simply scan the QR code on the machine to complete the borrowing. When you finish using, you can complete the scan code in any self-service umbrella machine in the city to return the umbrella.

Japan – Vending machines and donations

Japan has long had the practice of providing citizens with shared umbrellas in public places, and people can easily find two shared umbrellas in places with high traffic.



In recent years, companies have gradually joined the industry, through the self-service vending machines, entertainment venues to provide the public with their own company LOGO sharing umbrellas, in the convenience of public travel at the same time to achieve publicity purposes.



PAIN POINT

Market pain point

Lack of coverage for umbrella sharing services:

Lack of simple, scan code rental and return functions, complex processes affect the efficient user experience.

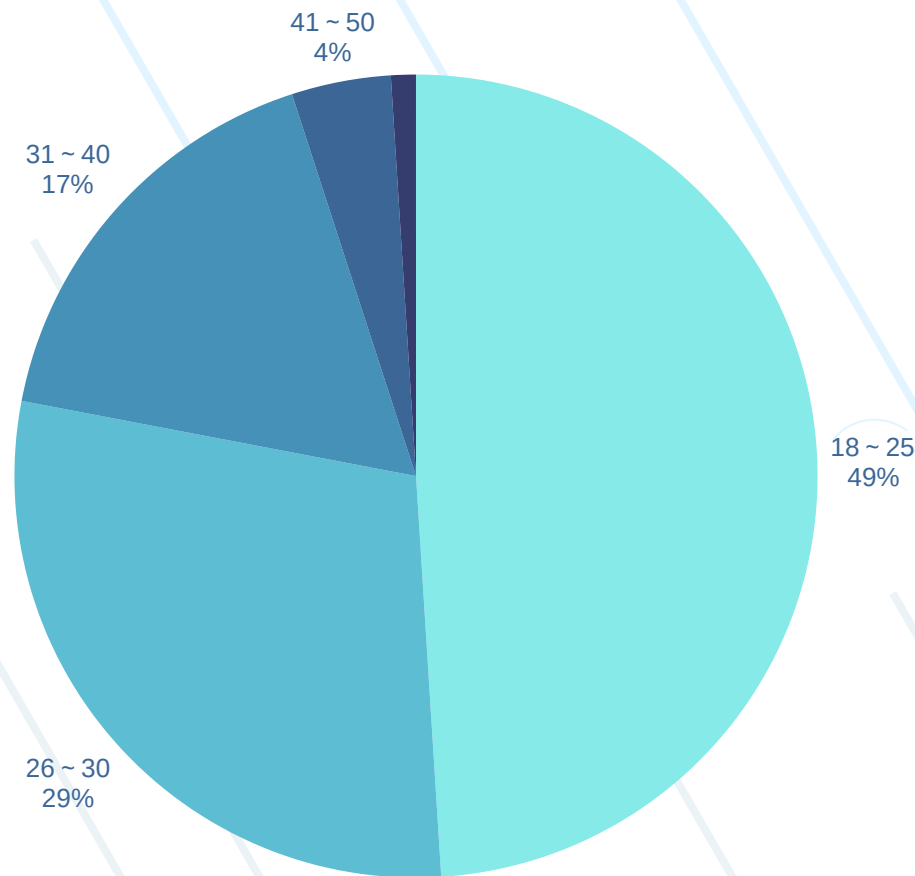
Users may have concerns about payment transparency and umbrella damage.

Environmental :

The heavy use of single-sex plastic rain gear has a negative impact on the environment, and more and more users want to find environmentally friendly alternative products

User pain point

18 ~ 25 26 ~ 30 31 ~ 40 41 ~ 50 51 ~ 60



Umbrella Sharing Consumer Audience Distribution

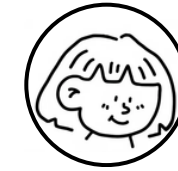
1. User groups

Target age: 18-28 years old, mainly young students
Occupation: Mainly international students.
Lifestyle: Flexible and convenient solutions are needed to cope with uncertain weather.

2. User pain points

Forget to bring an umbrella, and it is difficult to quickly obtain rain gear during emergencies.
Lost or damaged umbrellas during travel increase the cost of living.
Lack of real-time maps and weather alerts to plan trips in advance.

User interview



Li Wei

22 years old

Occupation:
postgraduates

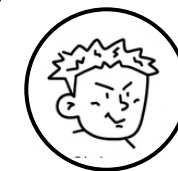
Habits:
carelessness

Concern:

Getting used to the changeable British weather. She often forgets to bring her umbrella, so she needs to buy cheap umbrellas frequently, but they are easily damaged.

Exception:

She wanted to find a convenient and economical solution to manage her rain gear problem during her daily commute.



David Smith

25 years old

Occupation:
postgraduates

Habits:
Environmental protection

Concern:

David is passionate about sustainability. He often explores London's urban Spaces, but is often caught off guard by the sudden rain.

Exception:

He hated using a disposable plastic umbrella raincoat and wanted to find an environmentally friendly alternative.



Aisha

23 years old

Occupation:
postgraduates

Habits:
conserve

Concern:

She finds the weather in the UK changeable and unpredictable and often struggles to adjust to the frequent rainfall.

Exception:

Aisha wanted to find an economical way to manage rain gear while accommodating her limited student budget.

Conclusion

All highlighted the need for a smart shared umbrella app with features such as real-time sitemap, weather alerts, transparent pricing, and a convenient borrow/return process.

■ USER FLOW

Awareness Stage

Users learn about the Smart Shared Umbrella System (RainGuard) through social media, advertisements or recommendations from friends. They became interested in the service and decided to explore APP capabilities.

01



02

Exploratory Stage

Users open the APP to view umbrella land options and nearby site locations. Find out how many umbrellas are available and how far away they are via a live map on the APP.

Rental Experience

The user selects the site, rents the umbrella by scanning the code through the APP, and completes the operation easily. Provide 15 minutes of free premium service to enhance user flexibility.

03



04

Use and Return

After the user completes the trip with the umbrella, the umbrella is returned to the nearest station. The return process is verified by APP code scanning to ensure quick completion.

05

Feedback and evaluation

Users can view loan history, rate and provide feedback. At the same time, the accumulated points can be redeemed for preferential or free use time, encouraging users to continue to use the service.

■ Demand analysis

System functional section

Scan code to borrow and return

Real-time map: Displays the real-time location of the shared umbrella site and the number of available umbrellas.

User authentication: Protect users' personal information and payment data.

Site status update

Privacy and security needs

Weather Alerts:

Convenience: Find the nearest site quickly

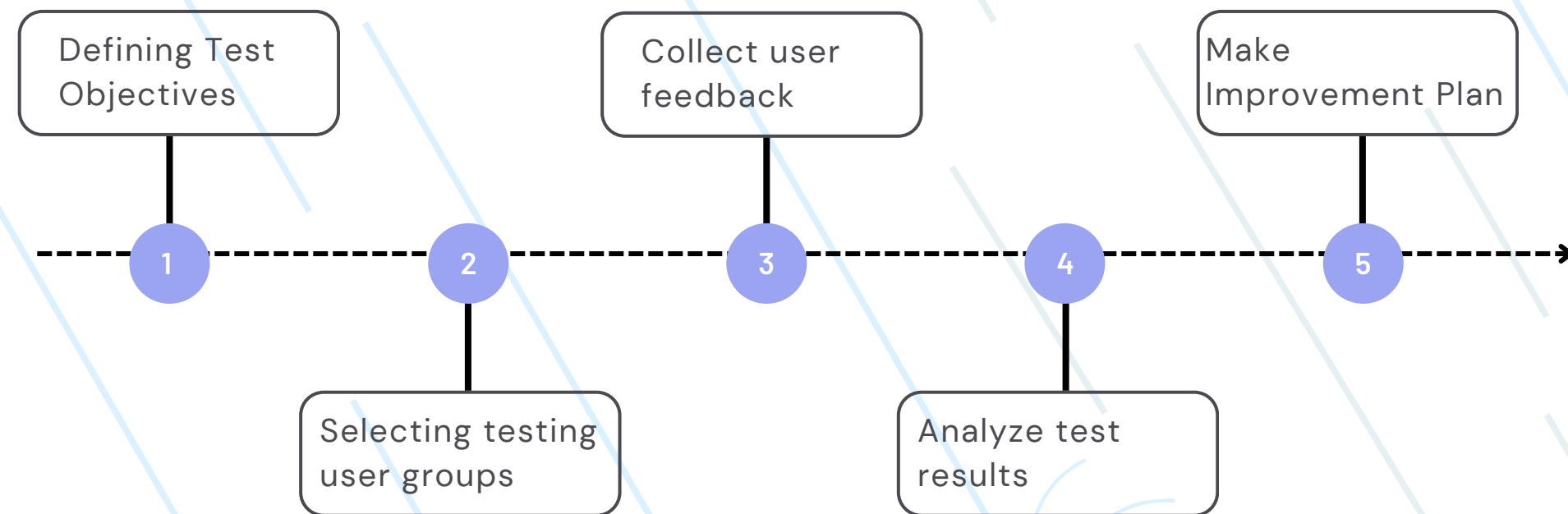
Transparency: Clear privacy costs

User demand

DESIGN REVIEW

Research methods and usability testing

Goal: Ensure that the application provides a consistent and excellent experience for different user groups through usability testing.



Summary of experience

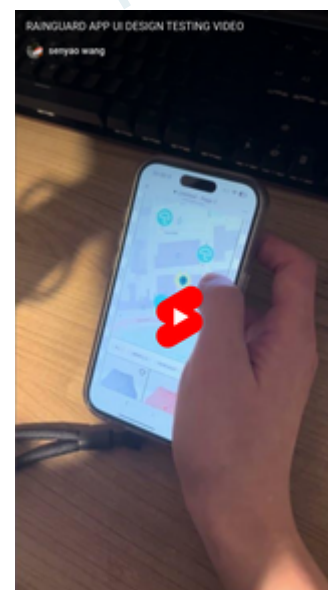
Weather Alerts: Provides location-based weather forecasts and usage recommendations.

Summary of experience

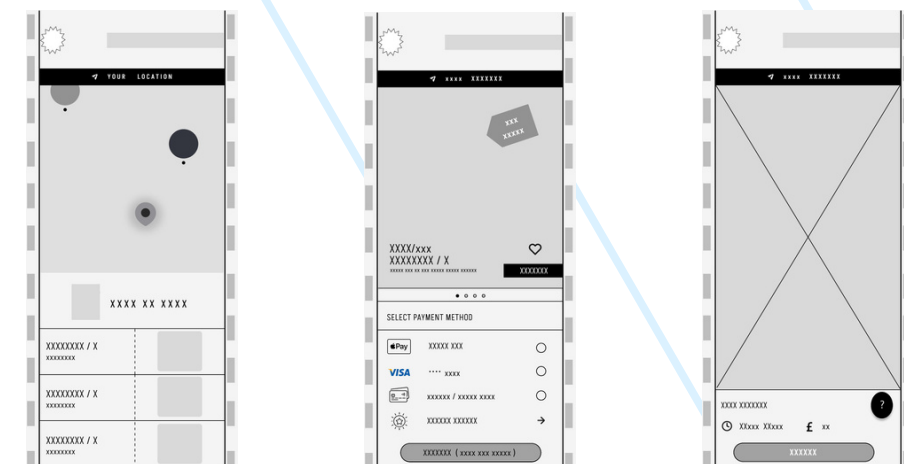
Search and Locate: Set a city selection interface after the login interface

Brand Image and Trust: Build trust between the brand and the user

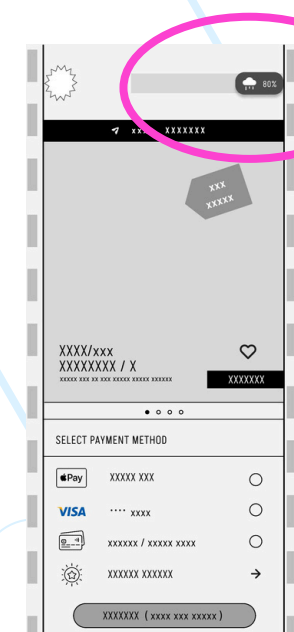
Simplify pages:
Reduce user wait times



Testing video:
<https://youtube.com/shorts/uokECBZ7J9E?feature=share>

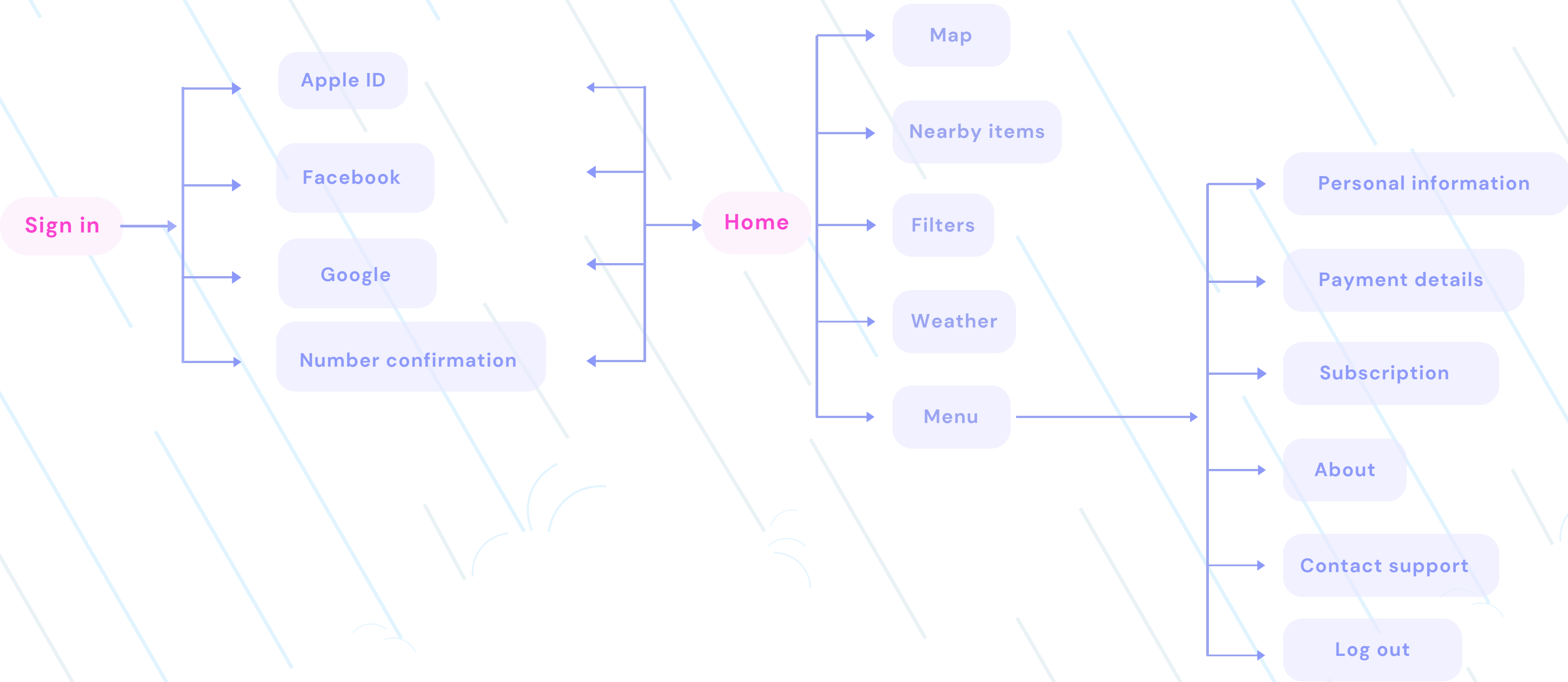


User orientation
(City selection interface)



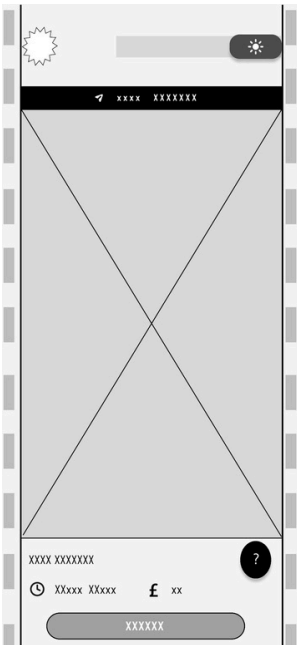
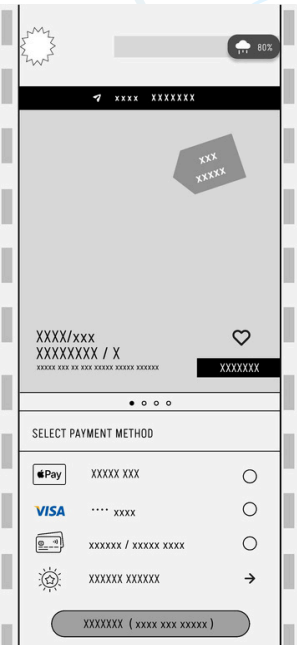
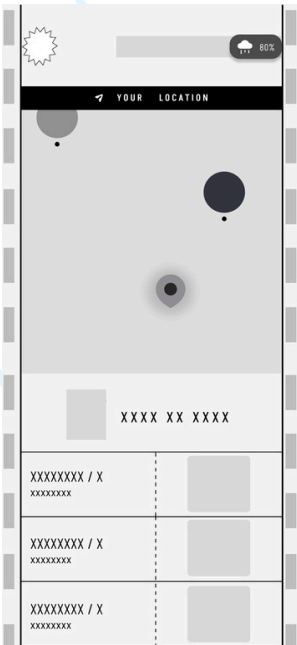
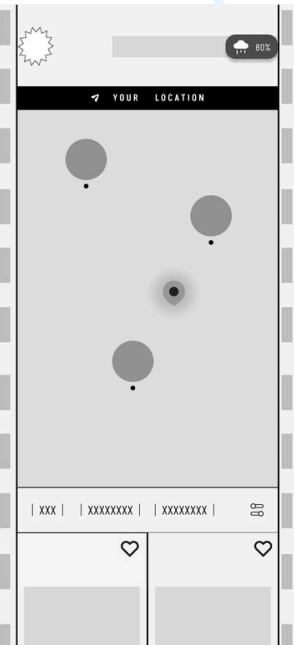
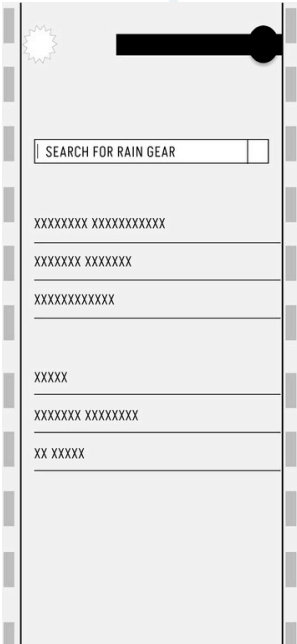
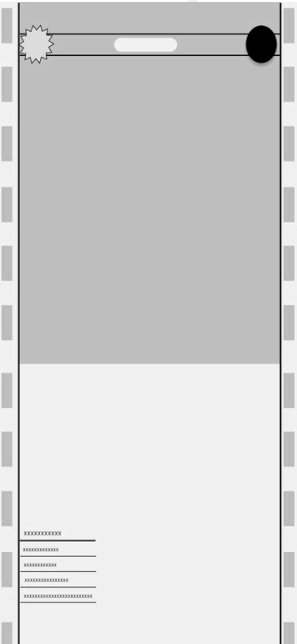
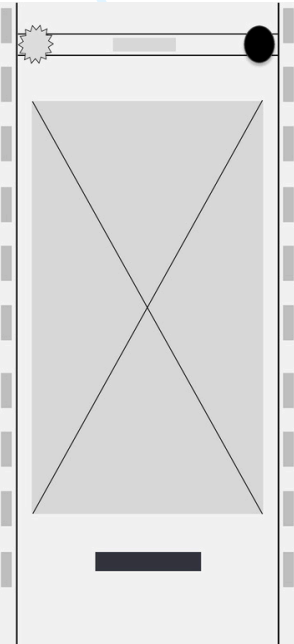
Weather real-time

■ USER FLOW





DESIGN REVIEW



THANK YOU