User Testing Feedback & Prototype Iteration Report

1. TESTING BACKGROUND AND OBJECTIVES

TESTING PURPOSE:

The core purpose of this user test is to evaluate the prototype design of our multi-user collaborative travel intelligent planning software and identify potential problems in functionality, usability and user experience. At the same time, the test also aims to collect user feedback on interface design and social interaction functions to guide subsequent functional iteration and optimization.

TESTING METHOD:

We chose to use the **"Think Aloud"** method as our primary user testing approach for the following reasons:

1. Direct insights: This method allows us to directly understand users' thought processes and emotional reactions while using the application.

2. Real-time feedback: We can obtain feedback immediately when users encounter issues, rather than relying on post-test recollections.

3. Uncovering unexpected issues: Users may discover problems we hadn't considered during the design process.

4. Rich qualitative data: This method provides a wealth of qualitative data, helping us gain a deeper understanding of the user experience.

PARTICIPANTS:

Six users who travel frequently and often use travel planning tools participated in the test. The age range is mainly between 20 and 27, ensuring the representativeness of the test population.

2. TESTING PROCESS AND USER FEEDBACK

Issue Category	Task	Observation	User Quote	Severity (1-5)	Potential Solution
UI Discoverability	Add attraction to itinerary	User struggled to find the add button	"I see the Queensland Museum here, and I want to add it to my trip... but how? I don't see an 'Add' button anywhere obvious."	4	Make the "+" icon more prominent or add a clear "Add to Trip" button
Missing Feature	Discuss plan with friend	User couldn't find in-app communication feature	"Okay, I want to ask my friend if they prefer the museum or the botanical gardens. Where's the chat function?"	5	Implement in-app chat or comment system
Missing Feature	Track trip expenses	User unable to find budget management feature	"Now that I've added the hotel and a few activities, I want to see how much this is all going to cost. Is there a budget section somewhere?"	4	Add a dedicated expense tracking and splitting feature

Map Functionality	Plan efficient route	User struggled to determine travel times between attractions	"I can see where everything is, but I have no idea how long it takes to get between these places."	3	Add estimated travel times between selected attractions on the map
Content Depth	Research destination details	User found attraction information lacking	"I feel like I'm not getting enough information to decide if I want to visit this place."	3	Enhance attraction listings with more details, reviews, and related suggestions
Visual Hierarchy	Review daily itinerary	User had difficulty identifying critical events quickly	"Everything's here, but it's all given equal importance visually. I'd really like to see my dinner reservation and the river cruise departure time stand out more."	3	Implement a system to highlight or visually differentiate critical or time-sensitive events

FUNCTION DISPERSION AND LACK OF DISCOVERABILITY:

Several users were tasked with planning a trip to Brisbane, Australia. They began by exploring the app to add attractions to their itinerary. While navigating through the "Explore" tab, they found interesting places but struggled to find a clear way to add them to their trip plans. After several attempts, they eventually discovered the small "+" icon to add attractions. Later, when managing their itinerary, users had to switch between multiple tabs ("Explore," "My Trips," and "Plans") to complete their tasks.

One user remarked, "I feel like I'm constantly jumping between screens to do simple things. It would be great if I could access most functions from one main screen."

LACK OF REAL-TIME COMMUNICATION TOOLS:

During the collaborative trip planning sessions, many users expressed the need for an in-app communication feature. When planning a group trip in the "Plans" tab, users instinctively looked for a chat or comment feature within the app but could not find one. As a result, they had to switch to external messaging apps to discuss the plan before returning to the travel app to make changes.

One user voiced their frustration, saying, "It's disruptive to keep switching between apps. I wish we could just chat about the plan right here in the app."

TRAVEL BILL MANAGEMENT FUNCTION REQUIREMENTS:

When planning multi-day trips with several activities and accommodations, users sought a way to track expenses within the app. After adding multiple items to their itinerary in the "Plans" tab, they searched for a dedicated section for managing expenses but couldn't find one.

A common sentiment was, "In group trips, keeping track of who paid for what and how much each person owes is always a hassle. It would be so helpful if this app could automatically calculate and split expenses as we add items to our itinerary."

THE MAP FUNCTION LACKS INTUITIVENESS:

Users using the map feature in the "Explore" tab to plan their route for the day encountered difficulties in determining the best order to visit multiple attractions.

While looking at the map, they commented, "I can see where everything is, but I have no idea how long it takes to get between these places. It would be great if the app could show me travel times between attractions so I can plan my day more efficiently."

INSUFFICIENT DESTINATION INFORMATION QUERY FUNCTION:

While researching potential destinations for their trips, users utilized the search function in the "Explore" tab but found the results lacking in detail. For example, when selecting the Queensland Museum, they wanted more information about current exhibitions, ticket prices, and visitor reviews.

One common feedback point was, "I feel like I'm not getting enough information to decide if I want to visit this place. I'd love to see more details, reviews from other travelers, and maybe even suggestions for similar attractions nearby. Right now, I feel like I need to leave the app and Google everything separately."

VISUAL HIERARCHY IMPROVEMENTS FOR PLANS OVERVIEW:

Users reviewing their daily itineraries in the "Plans" tab found it challenging to quickly identify the most critical events of the day. After planning a full day in Brisbane, including museum visits, lunch reservations, and an evening river cruise, they remarked,

"Everything's here, but it's all given equal importance visually. I'd really like to see my dinner reservation and the river cruise departure time stand out more – those are the time-sensitive things I can't miss."

3. USER FEEDBACK SUMMARY

During the user testing process, we received a lot of valuable feedback, mainly focusing on the following aspects:

Visual Hierarchy Improvements for Plans Overview：
While users found the time-sequenced structure for daily itineraries clear and effective, they suggested highlighting key events (such as flights, major attractions, or reservations) within each day's plan. This would make it easier for users to identify the most important activities at a glance while maintaining the chronological order.

Function dispersion and lack of discoverability:
Many users reported that the design of some critical functions needed to be more scattered, making it difficult for users to quickly find the required functions during use. For example, users said that the attractions adding and itinerary management functions are widely distributed on the interface and are challenging to detect, which affects the fluency of use.

Lack of real-time communication tools:
The problem of real-time communication in collaborative travel planning was mentioned many times. Users said that when planning a trip with friends, they often need to switch to other communication applications for discussion, significantly affecting the overall user experience. Users hope to be able to communicate with

friends directly in the application to avoid the inconvenience caused by switching applications.

Travel bill management function requirements:
Bill management is another functional requirement that has been mentioned many times. Users hope the application can provide more complete bill management functions to help them automatically calculate the various expenses in the group travel and display the amount each member should pay. This functional requirement reflects the user's attention to financial management during travel.

The map function lacks intuitiveness:
During the testing process, users pointed out that although the prototype's map function shows the location of the attractions, it needs an intuitive display of the distance and time required between the destinations. Users hope that when planning an itinerary, they can see the relative distance and transportation time between the attractions to arrange the itinerary reasonably.

Insufficient destination information query function:
Regarding destination selection, users said that the current interface lacks convenient query functions and cannot quickly obtain the destination's detailed information and recommended content. This feedback shows that users hope to filter and understand the details of attractions more efficiently to make more informed travel decisions.

4. ITERATION AND IMPROVEMENT MEASURES

Based on user feedback, we have carried out comprehensive functional iteration and optimization of the prototype, and the specific improvements are as follows:

Integrated functional interface design:
In response to feedback on scattered functions, we designed an integrated main interface to integrate commonly used travel planning functions (such as attraction addition, itinerary editing, map viewing, etc.) to reduce the number of times users switch between different interfaces. Clear navigation prompts have also been added to enable users to find the required functions more quickly.

Addition of chat room function:

To solve users' need for real-time communication tools during travel planning, we have embedded a chat room function in the main interface. This allows users to communicate in real-time with friends participating in the travel plan in the application. Users can leave messages and discuss and modify plans directly in the application when talking about the itinerary, which significantly improves the efficiency and interactivity of collaborative work.

Improved bill management system:
We developed a detailed bill management system in response to user demand for bill functions. This function can automatically track and record all expenses for group travel and calculate the amount to be paid based on each person's participation. Users can view travel budgets, expenditure records, and each person's cost sharing in real-time through the app, avoiding financial disagreements during travel.

Optimization of map functions:
In response to user demand for map function improvements, we have enhanced the visual display of maps. The map can now intuitively display the relative distance between various attractions and provide detailed transportation time estimates to help users better arrange their daily itineraries. Users can see the geographical distribution of attractions and dynamically adjust their itineraries based on travel time.

Enhanced destination query function:
In the destination selection interface, we have added a query function. Through the search bar, users can quickly find detailed information about the destination, such as attraction reviews, opening hours, recommended activities, etc. This function allows users to obtain relevant information more easily and provides more support for travel plans.

5. SECOND ROUND OF USER FEEDBACK

After completing the above iterations, we conducted a second round of user testing, mainly to evaluate the user experience of the new function. Here are some key results:

Integrated interface and chat room function: Users responded positively to the integrated interface and embedded chat room function, saying that these improvements made the planning process smoother. This was especially true when

multiple people collaborated without switching applications, which greatly improved communication efficiency. Users also said that the chat room function enhanced the social interaction of travel planning and facilitated group decision-making.

Bill management function: The bill management system was widely praised. Users expressed satisfaction with this feature, especially regarding the transparency of travel budgets and cost-sharing. Many users pointed out that the bill function solved the pain points of financial management and provided convenience for future group travel.
Map function optimization: The improved map function was considered more intuitive and practical. Users especially liked that they could see the distance and travel time estimates between attractions, which helped them arrange their daily activities reasonably.

Destination query function: The addition of a query function allows users to quickly obtain attraction information and suggestions, reducing the time it takes to find the required information. This feature is widely regarded as improving the application's ease of use and information acquisition convenience.

6.   PLANS AND CONTINUOUS OPTIMIZATION

We will continue to iterate on the prototype based on user feedback and further optimize the functional experience in the next version. Our goal is to continuously improve overall user satisfaction and ensure that the application can better meet users' needs in collaborative travel planning. At the same time, we plan to expand the application's user group through further marketing and user participation and collect more feedback from actual usage scenarios to continuously improve the product.