Heuristic Evaluation

Structure of the individual report

Part I: Your Name

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Part II: Project Description

UrbanHub is an application that helps users to create a planning/itinerary to visit different interesting locations in one or more cities through a mobile application using AI.

Part III: Evaluation Execution

The evaluation was done in person, with me playing the role of a user wishing to plan a trip to a city, and two members of the prototype being evaluated where, the first played the role of the computer and the second that of the "facilitator".
We used the paper prototype and most of the interaction was made on this prototype. Only a few of the interactions have been made by asking the facilitator to be sure that I understood what can be done.

Part IV: List of Violations

1. H7: Flexibility and efficiency of use

Where: On the page to list created trips
What: There is no button to easily access the page to create a new trip
Why: This is not efficient, because if the user sees from the list that a trip is missing, he has to go back to the home page to click on the button to add a new trip, whereas a simple button on the list could save him time and make the application more efficient.
Severity: 2

2. H4: Consistency and standards

Where: On the page to list created trips
What: The terminology used is different from the button used to access the page
Why: A difference in terminology can disrupt the user's browsing experience, telling him he's clicked in the wrong place. If the button is labeled "trip", the page should display "trips" and not "itineraries".
Severity: 1

3. H4: Consistency and standards

Where: Page to list created trips + page to create a new trip
What: The initial navigation bar disappear when you select an option on it
Why: In my experience, the navigation bar should be visible on all pages linked to a navigation element. For example, the bar should always be present on the trip list page and the trip creation page, since these pages can only be accessed from this navigation menu.
Severity: 1

4. H4: Consistency and standards

Where: *Page to personalize the trip by voice*
What: There is no indication that we should firstly click on "stop" before clicking on "restart" or "confirm"
Why: If the buttons are present but not clickable a visual element should indicate that we can't use it right now with a possible indication of the reason.
Severity: 2
Aucune indication qu'il faut cliquer sur le carré avant de cliquer sur le reset

5. H4: Consistency and standards

Where: On the full form to create a new trip
What: *The button on the navigation bar indicates that we will create a "NEW" trip but once we are on the page it says "NEXT" trip.*
Why: A difference in terminology can disrupt the user's browsing experience, telling him he's clicked in the wrong place
Severity: 1

6. H4: Consistency and standards

Where: On the page to select the city of the trip
What: The display of the input can be misleading
Why: The input is a text input where certain options are displayed according to the text entered (for example, if you press "R", you'll see "Ravenna", "Rimini" and "Roma" as options), while the icon suggests to the user that it's a drop-down list
Severity: 3

7. H3: User control and freedom

Where: On the page to plan the trip using the voice and more specifically the help pop-up
What: There is no visual indication on how to close the help pop-up
Why: The user should always be able to see quickly how to exit the current interaction
Severity: *3*

8. H1: Visibility of system status

Where*: On the page to plan the trip using the voice*
What*: While you're recording, there's no indication of what the system understands.*
Why*: If the trip is very long, the explanation can take some time and, as a result, errors on the part of the user or what the system understands can occur very often. Having visual information about what the system understands can help users to realize the error not at the end, but while they're talking.*
Severity*: 3*

9. H4: Consistency and standards

Where*: On the form to create a new trip*
What*: There is 3 step and there is 3 different button (label + design) to go on the next step*
Why*: It's important to maintain design consistency when we're working on the same functionality. So, in my opinion, having the same button to go from step 1 to 2 and from step 2 to 3 can be interesting. What's more, the button to validate the trip should also be similar or very different (not the same action).*
Severity*: 3*

10. H5: Error prevention

Where*: On the last page of the form to create a new trip*
What*: How to change the city isn't clear while how to change the date is very clear*
Why*: A user who selects the wrong city and, as a result, obtains the wrong trip risks losing out on changing the city.*
They will click on the edit icon, but will only be able to change the date, not the city. Consistency in the editing behavior of these two elements (back to step 1) may be useful to avoid confusion.
Severity*: 3*

11. H4: Consistency and standards

Where*: On the form to create a new trip*
What*: The behavior of the "Go back" button is misleading*
Why*: On the first step, the go back leaves the form but then, on the other pages, it allows to go back on the previous step. But the end of the form, where you can edit the information entered at step 1, lets the user think that you can't go back between steps.*
At the same time, what happens to the data? Is it retained? Deleted? Is there an error or a message to warn of the impact?
Severity*: 4*

12. H5: Error prevention

Where: On the form to create a new trip where you can edit the date after indicating all the steps by voice
What: No prevention against loss of information for deleted dates
Why: Changing the date from "12-20-2023 to 12-27-2023" to "12-20-2023 to 12-25-2023" does not result in any prevention by means of a message or other means, whereas you lose the information relating to the 26th and 27th (deleted days).
Severity: 3

13. H7: Flexibility and efficiency of use

Where: On the pop-up to show the itinerary trip of the day
What: The map doesn't give more information than the list and should display the path between steps
Why: In my opinion, the use of a map is more to know the path between steps instead of simply show the location of each steps
Severity: 2

14. H9: Help users recognize, diagnose, and recover from errors

Where: On the form to create a new trip where you can edit the date after indicating all the steps by voice
What: There is no way to undo a change at the end of the form
Why: Changing the date from "20-12-2023 to 27-12-2023" to "20-12-2023 to 25-12-2023" will result in the loss of data for the 26th and 27th, but if this is an error, you won't be able to undo the action. At the same time, if you use the "modify" function to delete a step from a defined day, you may encounter the same problems where several steps are deleted, but you can't undo the action.
Severity: 3

15. H7: Flexibility and efficiency of use

Where: On the page to select the city of the trip
What: There is no indication of the country where the city is
Why: If two cities have the same name in different countries, this may cause confusion for the user looking for the city in question, so displaying the country associated with the city may make the search easier.
However, if the application is for Italy only, this information should be displayed somewhere else, if not next to the city.
Severity: 2

16. H9: Help users recognize, diagnose, and recover from errors

Where: On the page to list trips
What: There is no way to remove a trip added

Why*:* If the user create a trip but want to cancel it, he is currently not allowed to do so
Severity*:* 2

Part V: Summary and Recommendations

Report in the table below the total number of identified violations.

Heuristic	# violations
H1: Visibility of system status	1
H2: Match between system and the real world	0
H3: User control and freedom	1
H4: Consistency and standards	7
H5: Error prevention	2
H6: Recognition rather than recall	0
H7: Flexibility and efficiency of use	3
H8: Aesthetic and minimalist design	0
H9: Help users recognize, diagnose, and recover from errors	2
H10: Help and documentation	0
HN: Non-heuristic issue	0

Overall, the application is very well realized and designed, and its usefulness is perfectly understood. Only a few points could be improved to optimize the user experience.
The biggest change that needs to be made is in the area of error handling, by giving the user a little more warning and information about what he's doing and what's happening (or going to happen). This will prevent any unintentional actions on the part of the user and facilitate progress, especially on long journeys.