"Usability Testing and Redesign of a Mobile Application for Real Estate"

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The Spitogatos App
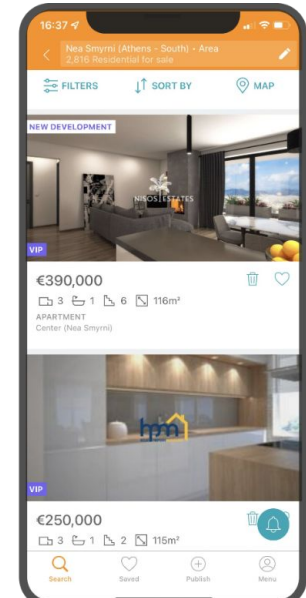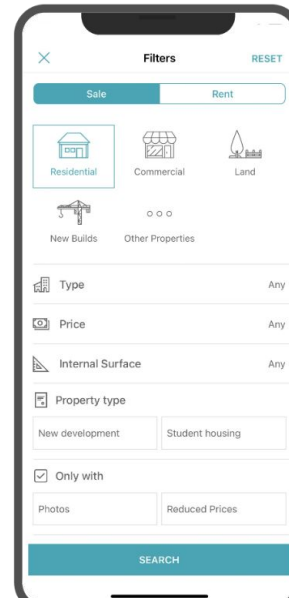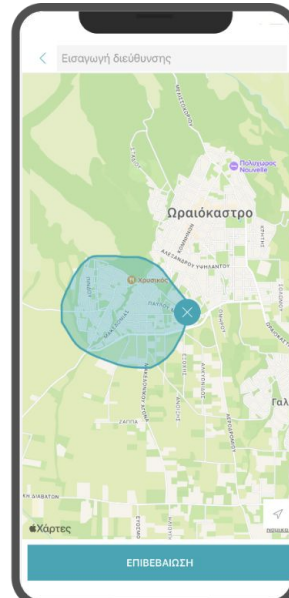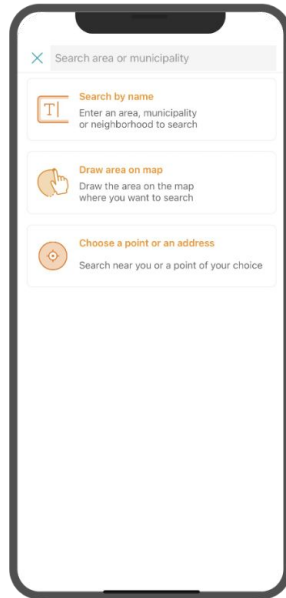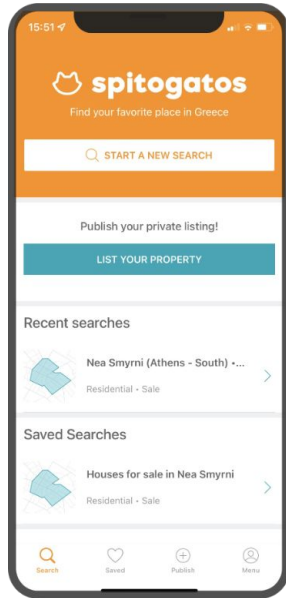
Methodological Approach

RESEARCH

App Analysis
Flowchart
UX Benchmarking
Usability Testing

DEFINE

Review Metrics
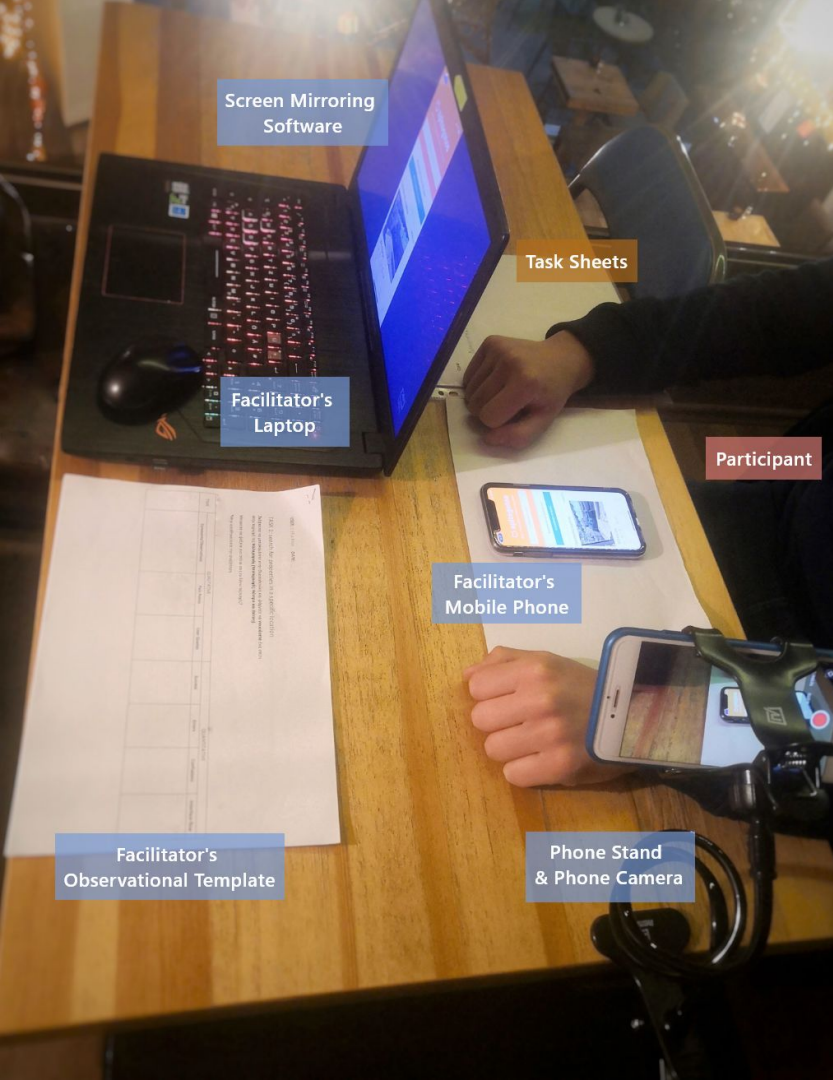Critical Insights
Affinity Diagram
Recommendations

IDEATE

Appmap
Paper Sketches
Mid-Fidelity Wires

PROTOTYPE

App Prototypes
Interactive Prototype

USABILITY TESTING

Type: Formative
Method: Moderated, In-person
Technique: Think-Aloud

- Spitogatos Application (3.2.0 Version)
- Laptop (using Screen Mirroring Software)
- Camera Holder + Phone camera
- Forms and note-taking tools

10 Participants   11 Scenario-Based Tasks   35'- 45' Time

- Age group 25-34
- familiar with the Spitogatos website
- 9 / 10 new Spitogatos app users

DATA	MEASUREMENT
Success Rates	**S**: (Number of participants Completing the Task Successfully/Number of Participants)*100%
Time on Task	**Mean**: Sum of all Participants' Completion Times/Number of Participants
Error Rates	**E**: (Number of Participants Performed the same Error/Number of Participants)*100%
Satisfaction Rates	**Mean**: Sum of all Participants' Rates per task /Number of Participants
Observations	**Notes** from video footage & onsite sessions
Comments/Quotes	**Notes** from video footage, onsite sessions, or through the debriefing session after the test.
Answers to open ended questions	Collected via written free-form responses (**questionnaires**).

Task	Complete Success (%)	Errors (%)	Time on Task (s)	Satisfaction
1. Search for properties to rent in specific areas	**30**	40	58	**3.4**
2. Set search criteria, filters, and categories	**50**	**50**	80	4.4
3. Add a new area on a previous search	70	30	74	3.6
4. Simultaneously searching for different locations	**0**	-	**203**	**1.6**
5. Search for property to rent in a specific area with specific criteria	**40**	**50**	**150**	3.9
6. Save properties with specific criteria	100	-	30	4.4
7. Change Location while keeping previous filters.	**50**	20	40	3.9
8. Save the search	100	20	31	4.1
9. Save properties with specific criteria and compare them with the previously saved ones.	90	-	62	4.7
10. Change the price filter in the previous search.	100	-	19	4.4
11. Remove saved search.	80	40	54	**2.7**

QUALITATIVE CODING - Affinity Diagram

POSITIVE FINDINGS

All Participants could save properties and searches by simply tapping on the heart icon and the save search button accordingly.

100% of the participants could save properties and searches effortlessly.

All participants could easily distinguish the icons, the location, and the information from the property description card.

All participants could easily discern property information from the search list.

All participants completed successfully task 10 and changed the filter price on the previous search.

100% of the participants were able to find filter component and change most of the filters.

All users could navigate from the tab bar back to the search and see <recently viewed> properties and searches.

100% of the participants were able to navigate through the tab bar readily.

NEGATIVE FINDINGS

Participants after not finding a search to apply locations in a tag format, but there was no such feature.

100% of the participants skipped the task after not finding a solution on searching different locations simultaneously.

Participants were confused to use patte... Half of the participants forgot to select the Rent tab on the filter's screen.

50% of the participants searched successfully for a property applying specific filters.

Some participants searched to the map, main add a curre... 50% of the participants searched to the filters first.

Most participants were confused about the edit search component

Participants were confused when filled a specific location and autocomplete did not respond.

40% of the participants were able to complete the task because of the auto suggest feature.

40% of the participants tried to delete the search more than twice.

All Participants were confused when they navigated to see their saved searches/properties or tried to delete them.

COMMON USER QUOTES

I want to write in the search more than one location.

Should have the rent tab selected by default.

The icons are very convenient in comparing properties.

Edit location icon is not obvious.

It could have the delete icon next to the edit.

Internal surface's min-max confounds me.

I want to be able to sort by Location.

I will search in the filters to see if I can add additional locations.

It could have a folder that separates the properties according to their characteristics or the area.

OBSERVATIONS

60% of the participants searched for properties by location name.

20% of the participants selected "Draw Area on Map".

10% of the participants selected to "Choose a Point or an Address".

10% of the participants tapped on the search bar "Search Area or Municipality"

Half of the participants returned to the main search screen to edit the existing location.

Qualitative data proved that users could not easily find the Edit Location component.

Participants' eye fixations fell on the price and internal surface filters first, forgetting to enter the filters above them.

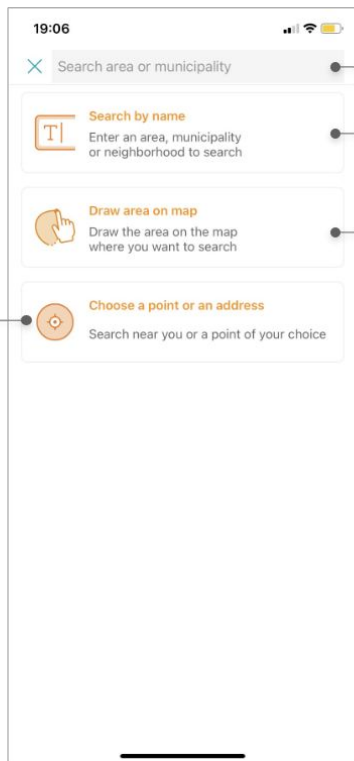Almost half of the participants forgot to select the Rent tab on the filter's screen. App has set "Buy" as default.

Participants were confused about how to use min-max patterns.

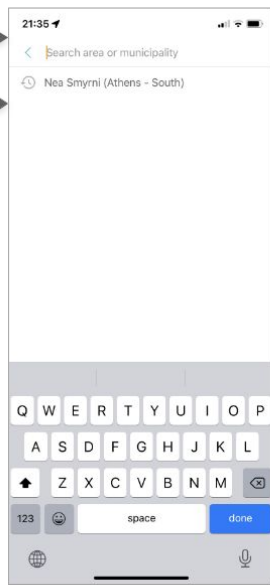**1** Not all search options were selected & minor differences between some of them.

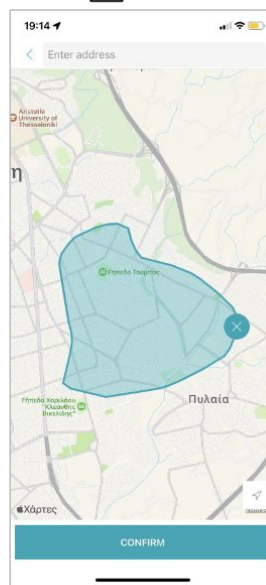**Search Options**

👤 **1 /10**

👤 **7 /10**

👤 **2 /10**
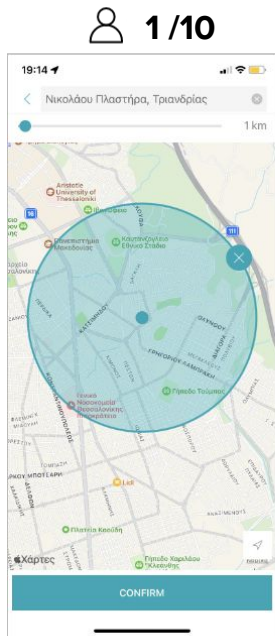
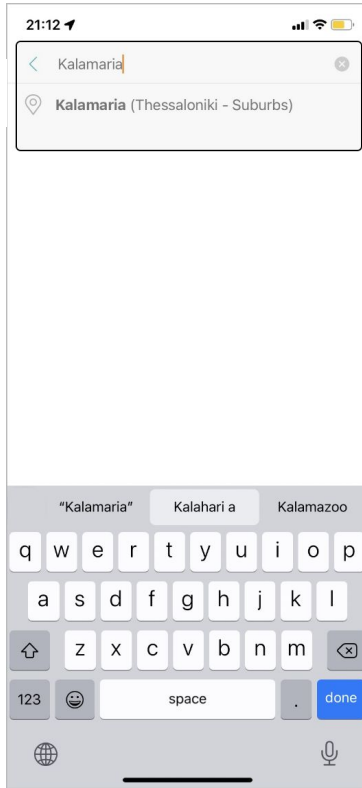Set a radius

Search by name

Draw area on a map

Recommendations
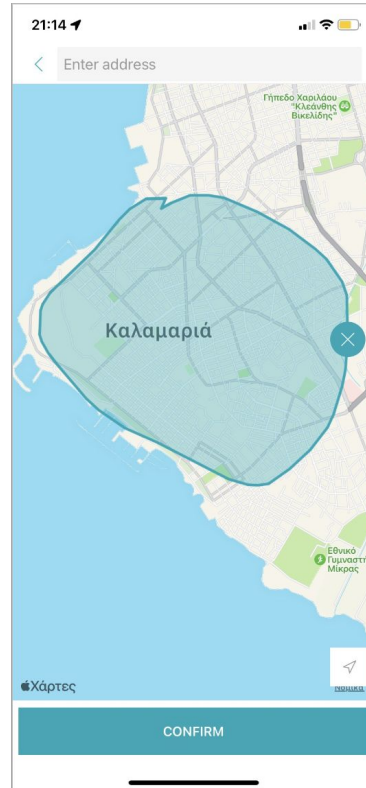
Merge «Search by Name» with «Search area»

Combine «Draw area on map» & «Choose a point or an address» features

The function of searching for different areas at the same time is limited.
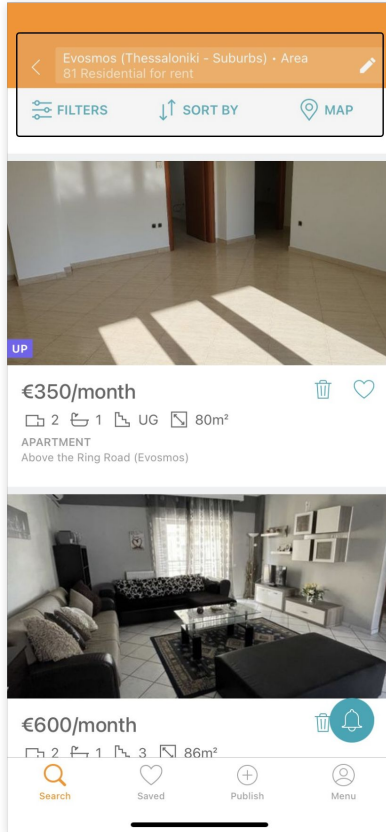
5 /10

Search by name

Draw area on the map

Recommendation

A tag input pattern on the search field

The ability to draw more than one area in a single search

3 Lack of visual hierarchy on the property list screen (search field-edit component).

Property Results Screen

Recommendation

Apply visual hierarchy on the property list top bar to make the edit location component more apparent

4 Confusion over basic/fundamental filters and categories.
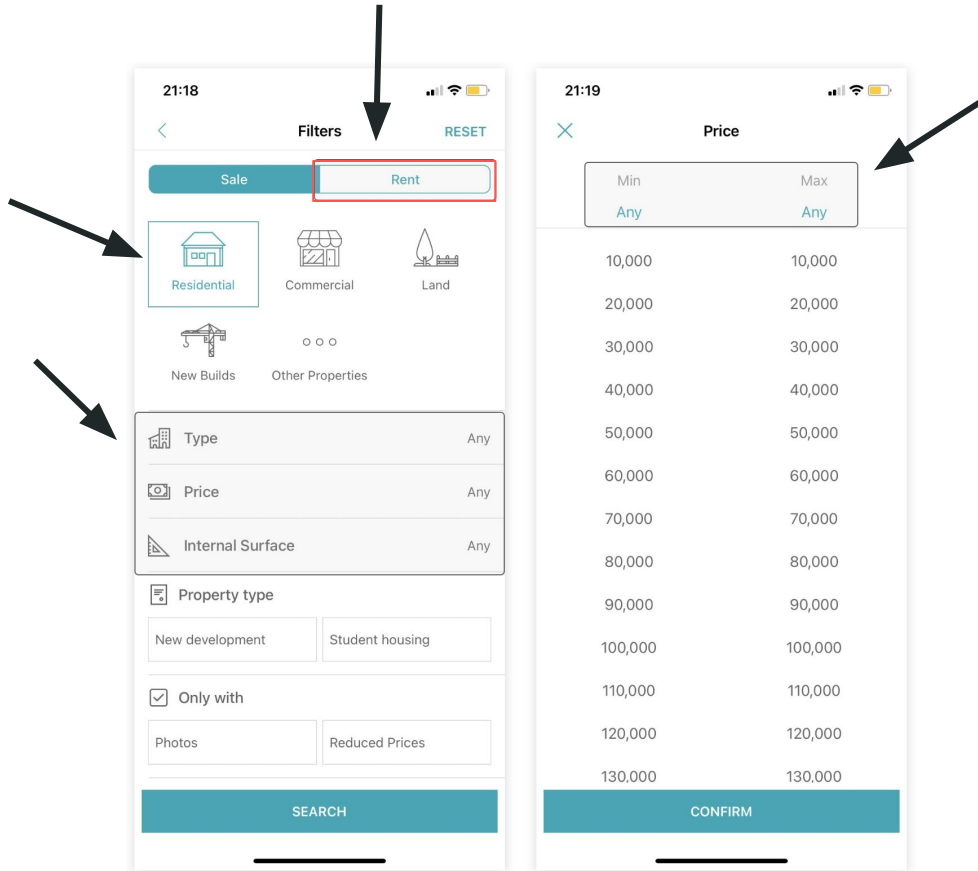
Filters Screen

Recommendation

Improve filters functionality and layout.

Apply visual principles [spacing and balance] to create the perception of equal distribution.
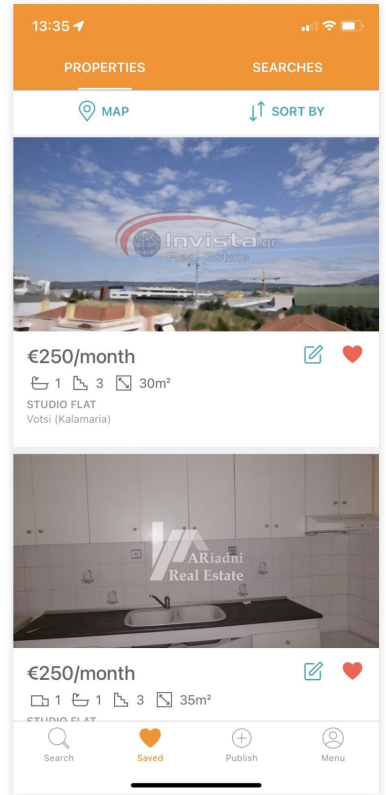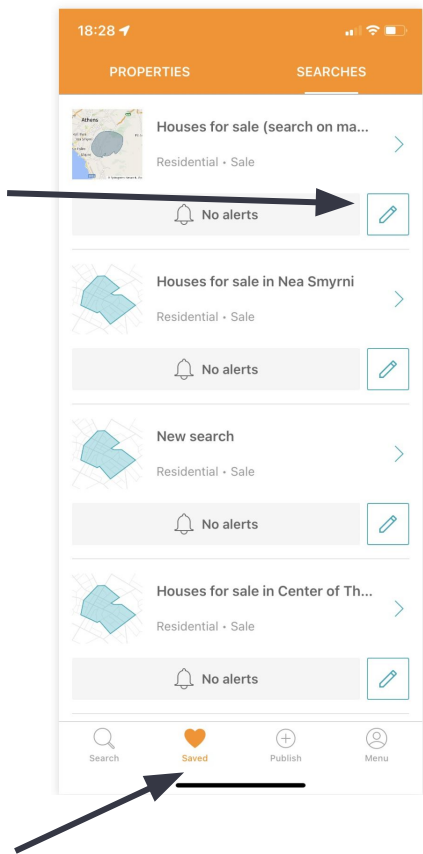
Saved Searches/ Properties

Recommendation

Add a straightforward saved search card that users can experience directly all actions offered.

Add representative images of the saved location.

6 Functionality issues on the search navigation tab (toolbar).

Saved Searches/ Properties
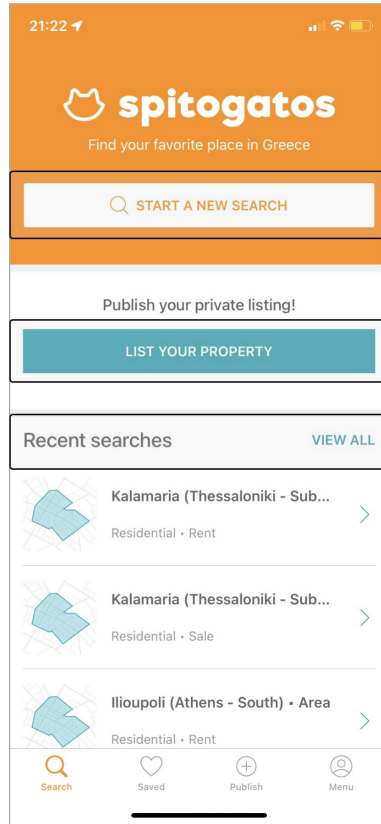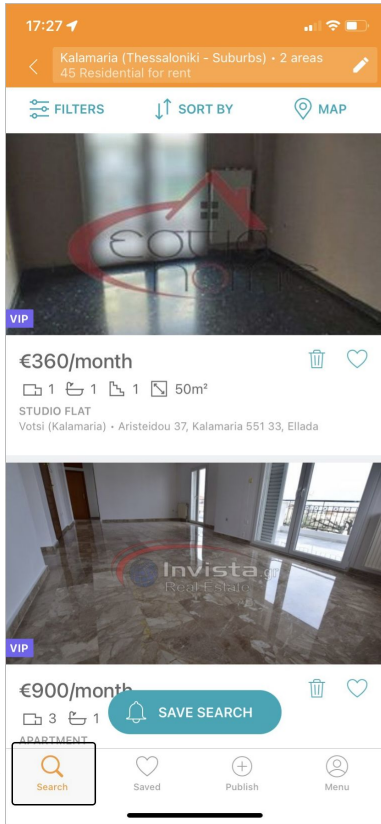
Recommendation

Design a Home Tab that includes all user actions during navigation separately from the search features

Create a repeat pattern across the design

7 Improper entry field usage (auto-suggest component).
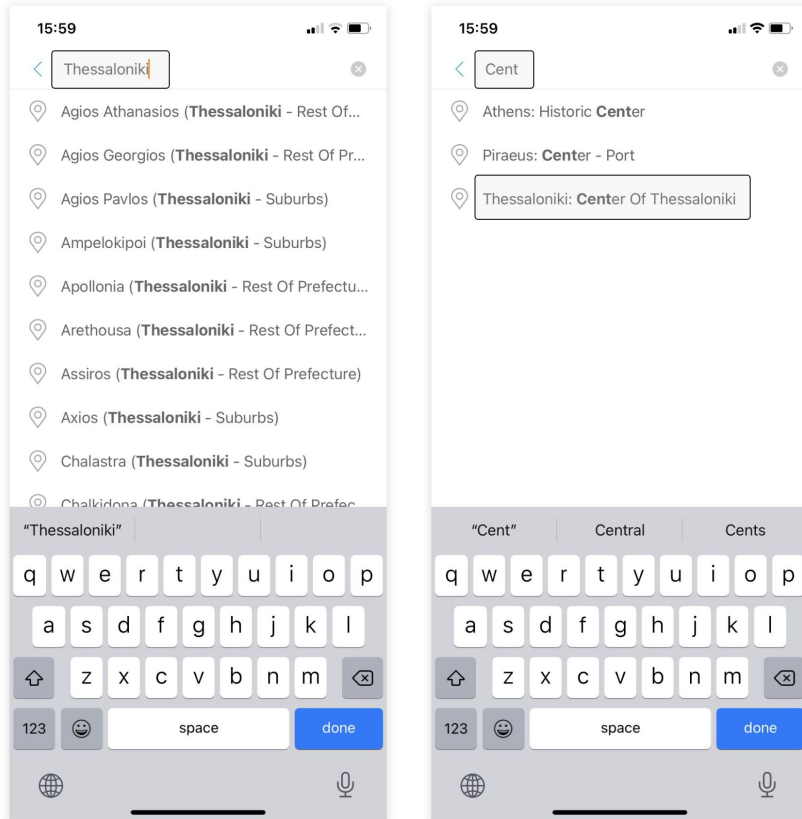
Search modal

Recommendation

Improvement of the language prediction tool provides users with accurate suggestions

IDEATION PHASE - Raw sketches & low-fidelity prototypes
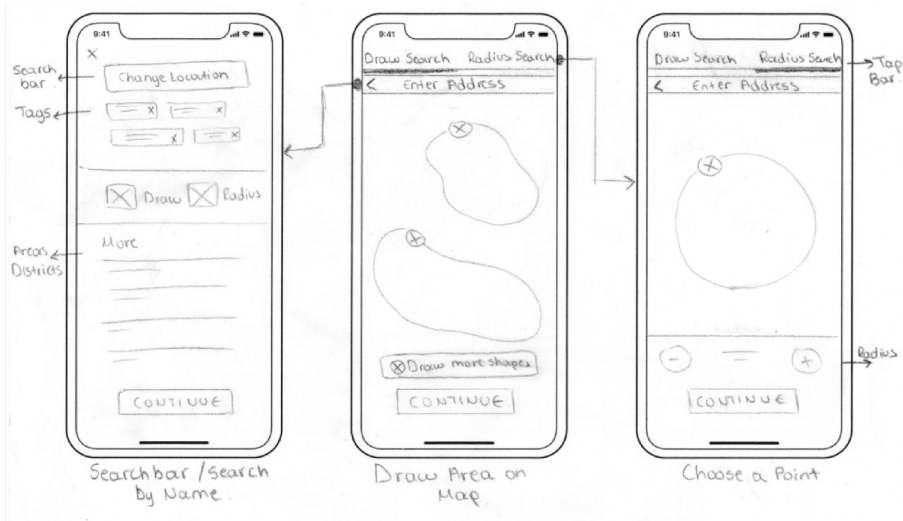
Draw area/ Add radius screens
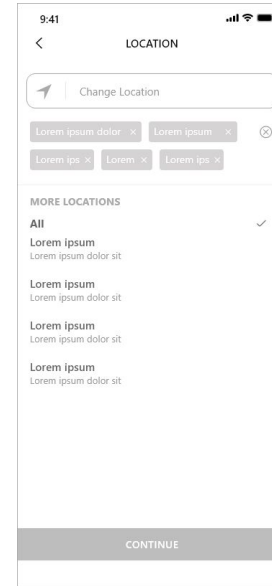
Search by name
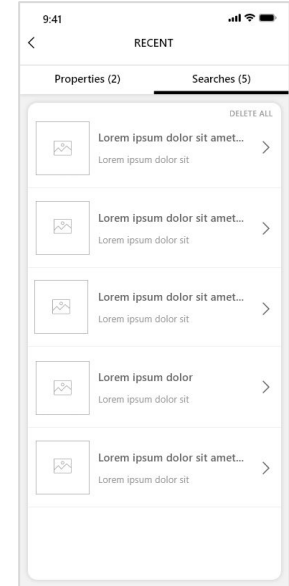
Saved searches

High Fidelity Prototype

"Draw Search" Screen

Existing UI
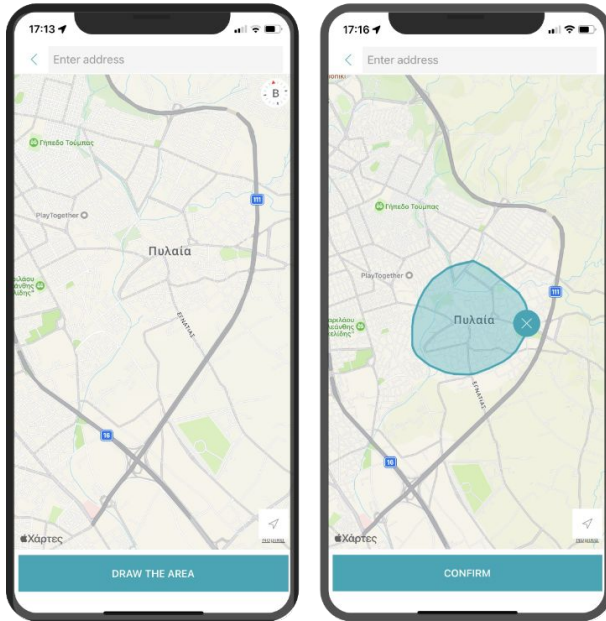
Proposed solutions
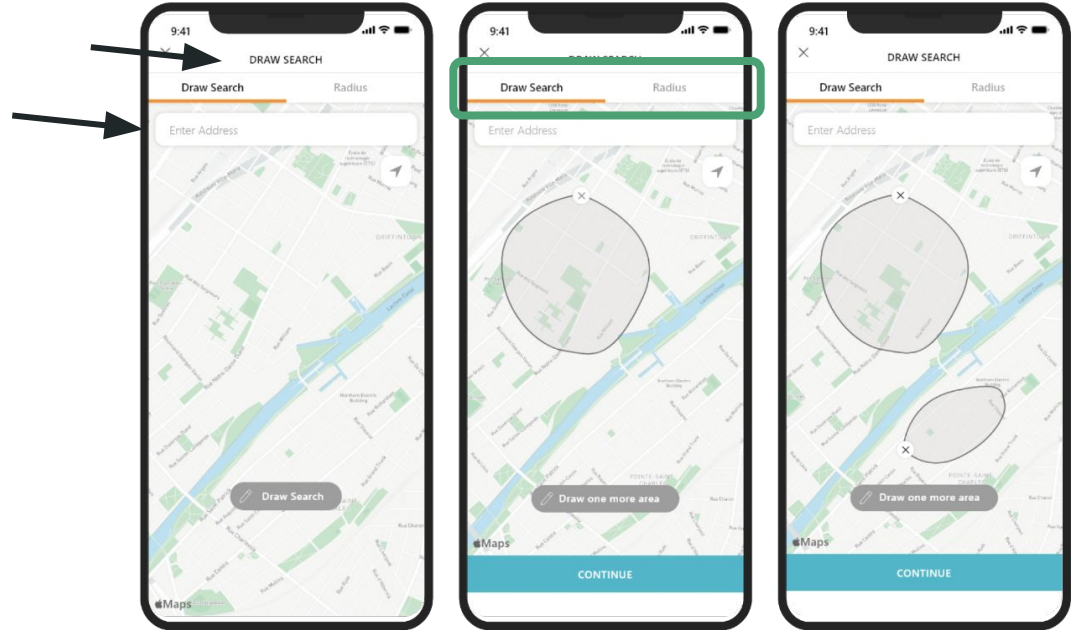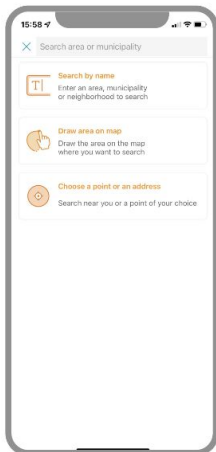
High Fidelity Prototypes "Property List" Screen

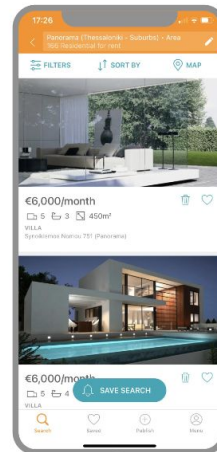**Existing UI**
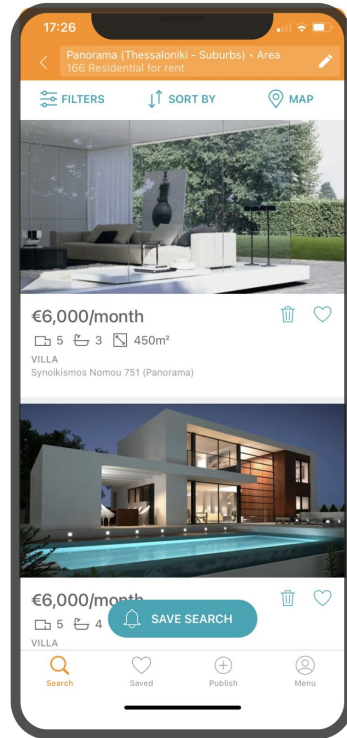
Proposed solutions
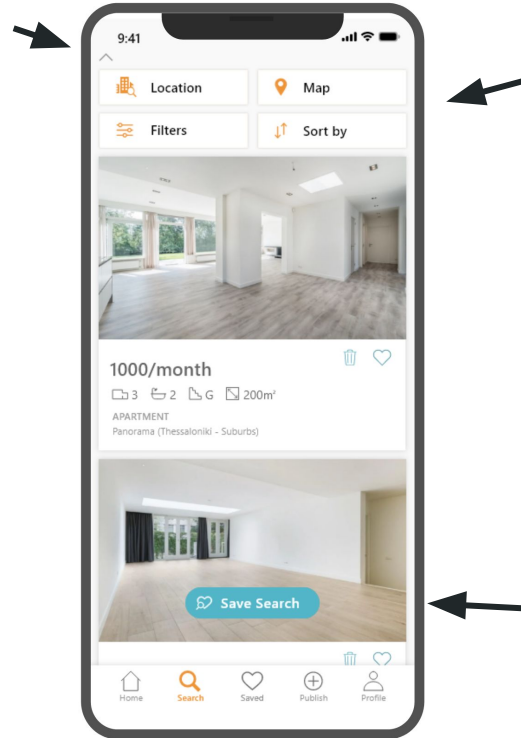
EXISTING UI

"SEARCH" SCREEN   "SEARCH BY NAME" SCREEN   "DRAW SEARCH" SCREEN   "FILTERS" SCREEN   "PROPERTY LIST" SCREEN   "SAVED PROPERTIES" SCREEN
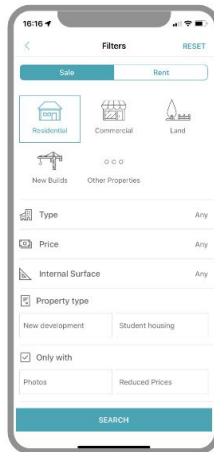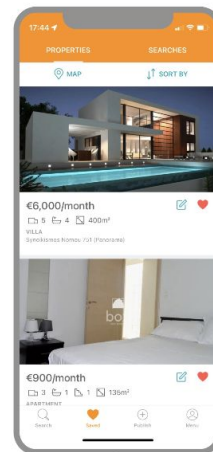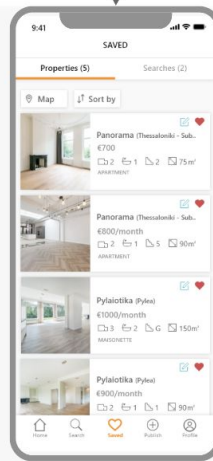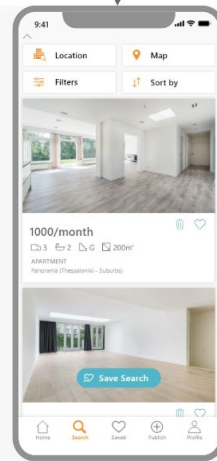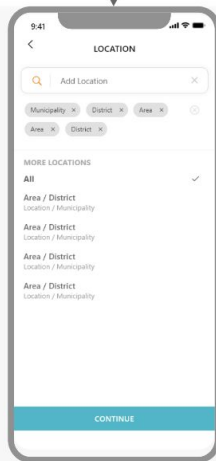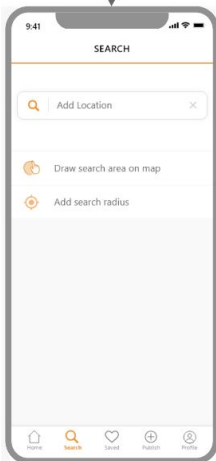
REDESIGNED SCREENS

18

REFLEXION & NEXT STEPS

USABILITY TESTING

➜   time-consuming and laborious

➜   significant results on the real practices of mobile
    users

➜   user satisfaction, engagement, and retention

REDESIGN PROPOSALS

a distinct and systematic outcome of the usability testing
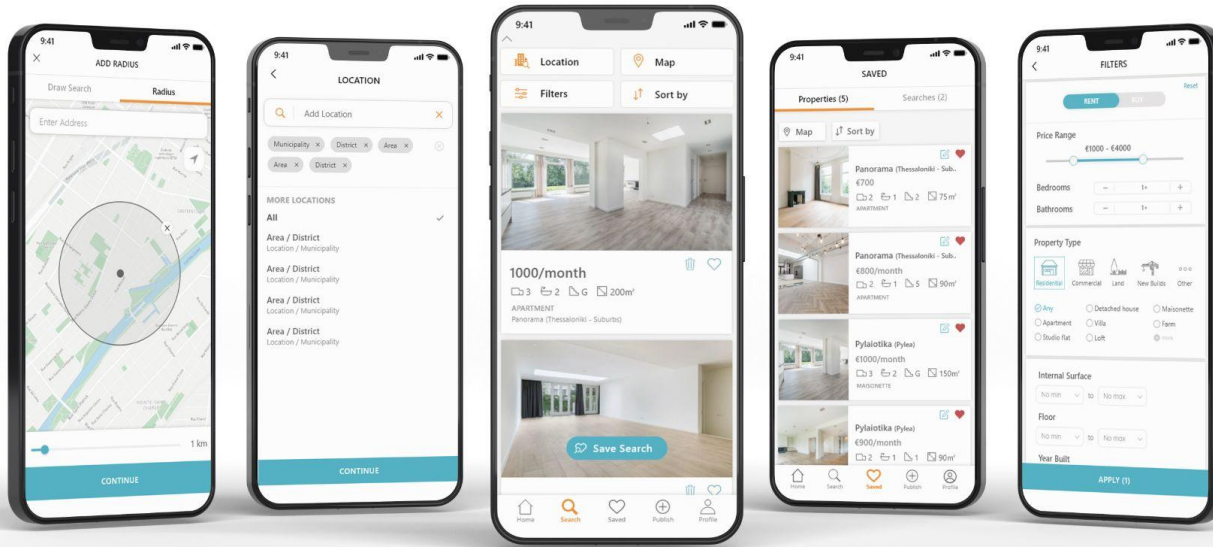of the app

THE DESIGN/IMPLEMENT/TEST LOOP

the standard iterative cycle suggested by researchers is
counter to traditional design practice

BUSINESS STRATEGY & TECHNICAL RESTRICTIONS

THANK YOU!

Interactive Prototype