



ICT-enabled  
integration facilitator  
and life rebuilding guidance



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# Pushing Participatory Design ahead

Co-creation approaches and their transformative impact on Participatory Design  
for Marginalized People

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# CONSORTIUM



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POLITÉCNICA  
DE MADRID



# OUTLINE



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## Socio-design

Value - Role - Impact



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## Co-creation & Participation

Approach - Process



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## Challenges from user research

Exclusion - Literacy - Diverse Requirements



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## Challenges from user research

Exclusion - Literacy - Diverse Requirements

## AI design and implementation

Information - Visual language - Matchmaking



# SOCIO-DESIGN DOMAIN

## VALUES

Social integration  
Equality  
Trust

ROLE

IMPACT





## SOCIO-DESIGN DOMAIN

VALUES

ROLE

Opens debates  
Guides reflections  
Transforms practices

IMPACT

# SOCIO-DESIGN DOMAIN

VALUES

ROLE

IMPACT

Challenges the status quo  
Fosters social innovation  
Improves quality of interactions



# CO-CREATION AND / OR / EQUAL TO PARTICIPATION



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Each participant contribute in different degrees and forms

And in different stages: inspiration, ideation, implementation.

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Roots in Bauhaus and in the Scandinavian School of Participatory Design:  
from workplace and computer system to digital technology and society.



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Roots in Bauhaus and in the Scandinavian School of Participatory Design:  
from workplace and computer system to digital technology and society.

### **Participatory Design**

Connecting the use context, the recognition of  
users' needs and requirements, the establishment of design suggestions,  
with the experiment of the artefact.

# BEYOND LEXICON



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## BEYOND LEXICON

### **Which theoretical approach?**

Knowledge and technology ownership

Accountability

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Egalitarianism, paternalism, fraternalism

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Accountability

### **Which mindset?**

Egalitarianism, paternalism, fraternalism

Openness for criticising and democratisation of technology

### **Which scope?**

Build a better world

Integration instead of separation

## PROCESS

# RESEARCH > DESIGN

Research on the user experience to inform design



# PROCESS



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## PROCESS

# DESIGN > RESEARCH

Transformative action of design to foster emerging practices and thus novel research paradigms



## PROCESS

# DESIGN > RESEARCH

Transformative action of design to foster emerging practices and thus novel research paradigms

### **Continuous Iteration and Experiment**

Bottom-up and UX-driven processes for AI implementation with the real beneficiaries in mind

# CONTINUOUS ITERATION AND EXPERIMENTS

## RESEARCH

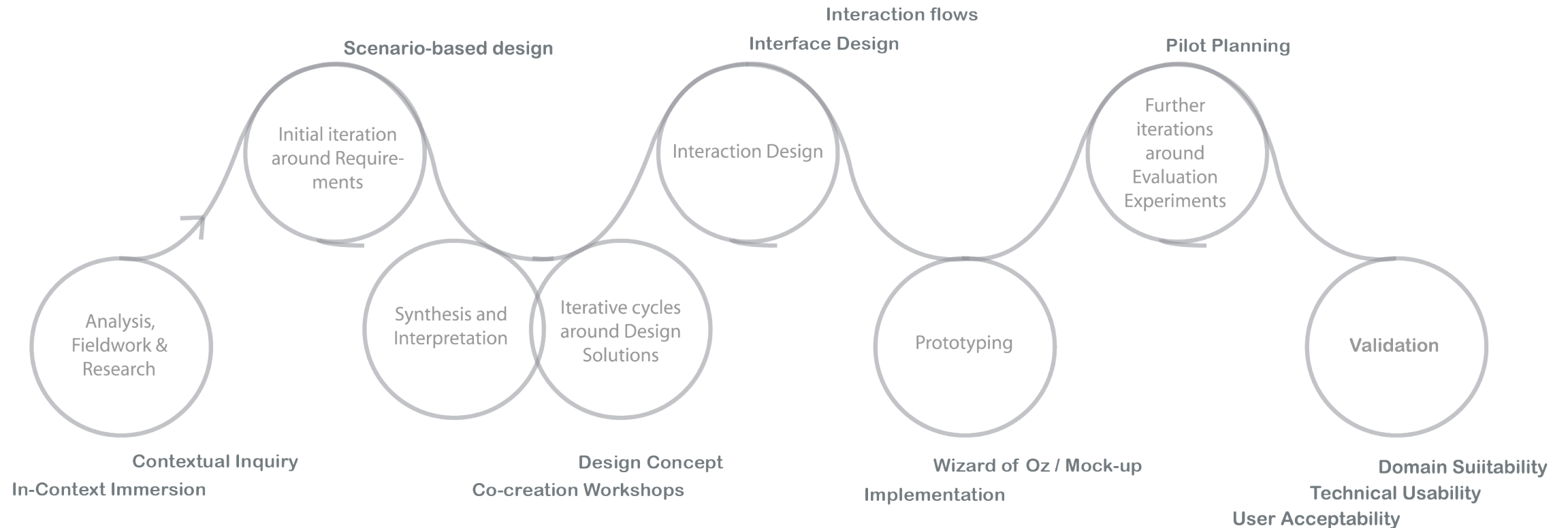
Stage 1 - Determination of the use context  
Stage 2 - Recognition of users' needs and requirements

## CO-CREATION

Stage 3 - Establishment of design suggestions

## EXPERIMENT & VALIDATION

Stage 4 - Experiment and evaluation of the artefact



# CHALLENGES FROM USER RESEARCH

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## 1\_Migrants' integration and exclusion counteracting

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**2\_Linguistic, cultural and technological literacy**



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Culture: acquire and manipulate concepts shared with the rest of the local community

Technology: understanding of potential and role of technology, use of ICT features and services

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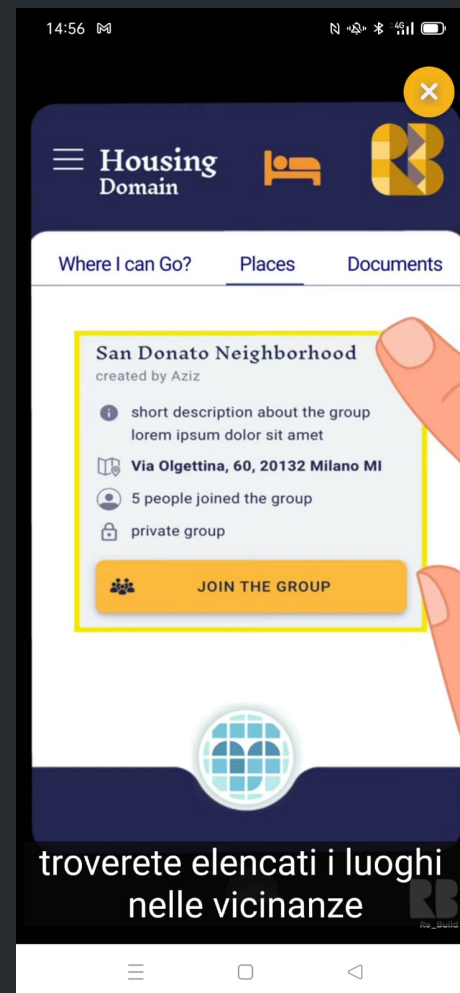
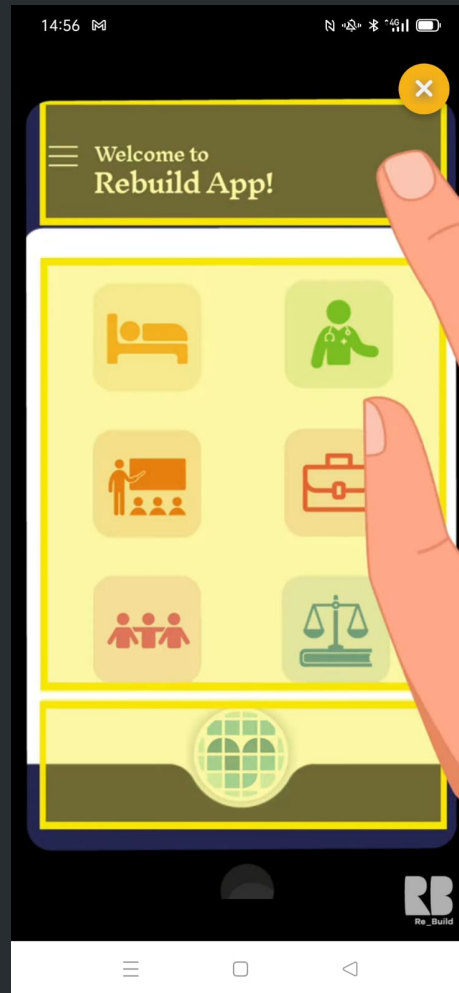
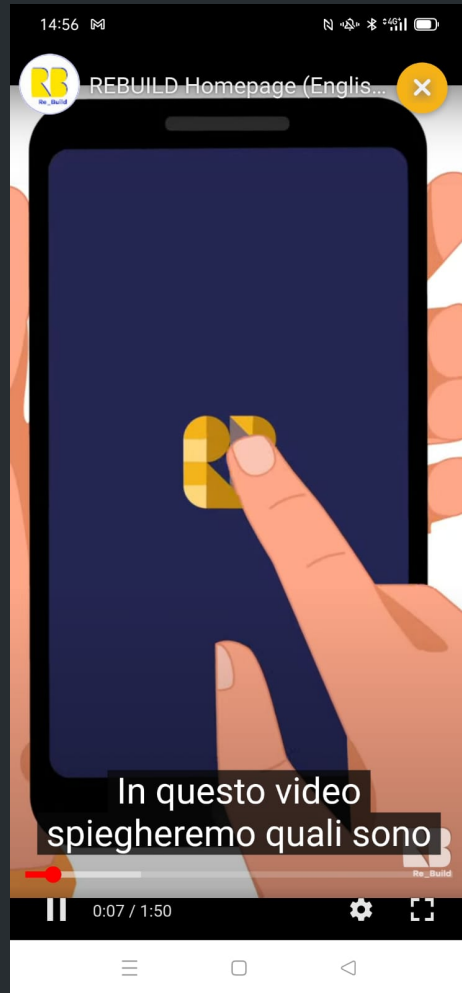
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## 3\_ Diverse requirements

Lack of uniformity in user requirements: diverse needs, abilities and limitations and thus diverse interaction strategies: from natural language processing to purely visual language

Migrants' personal perspectives and expectations in regaining autonomy and reconstruction of life experience

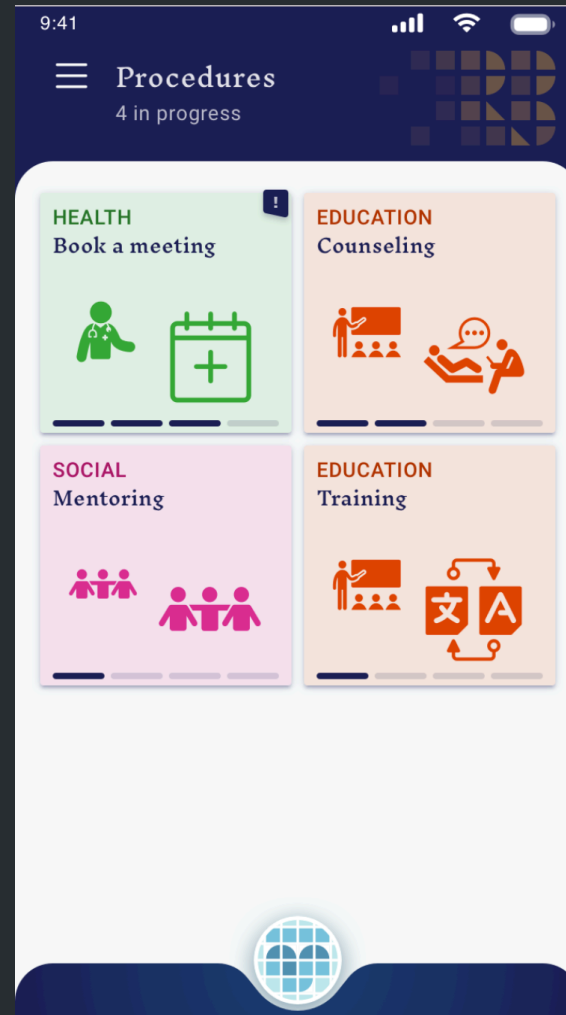
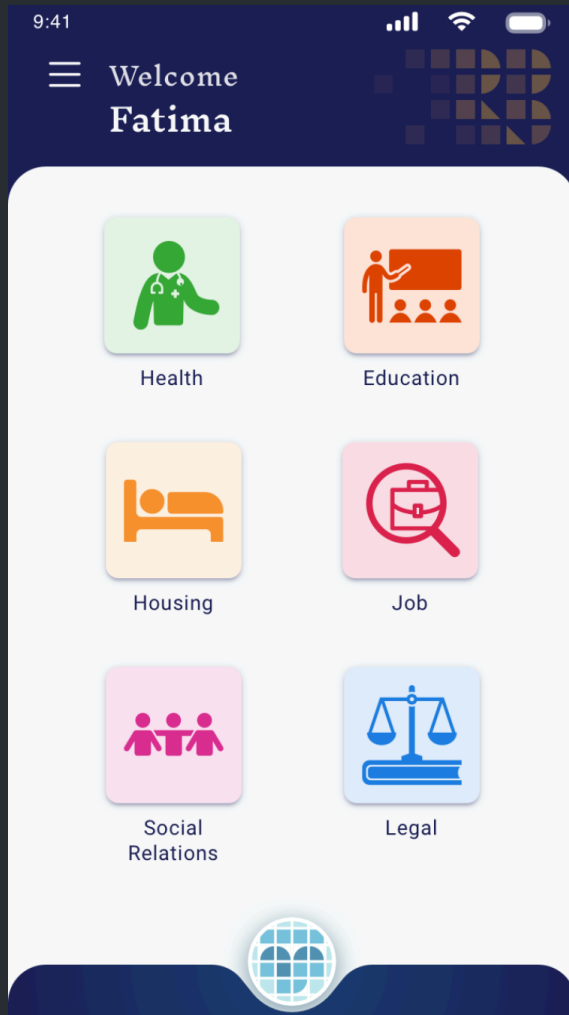
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## AI DESIGN AND IMPLEMENTATION

**INFORMATIVE SUPPORT**  
guidance-oriented user experience

**PURPOSE AND IDENTITY**  
self-presentation, video-tutorials, and usage tips



## AI DESIGN AND IMPLEMENTATION

**VISUAL LITERACY**  
Pictograms,  
conversations, dialogue

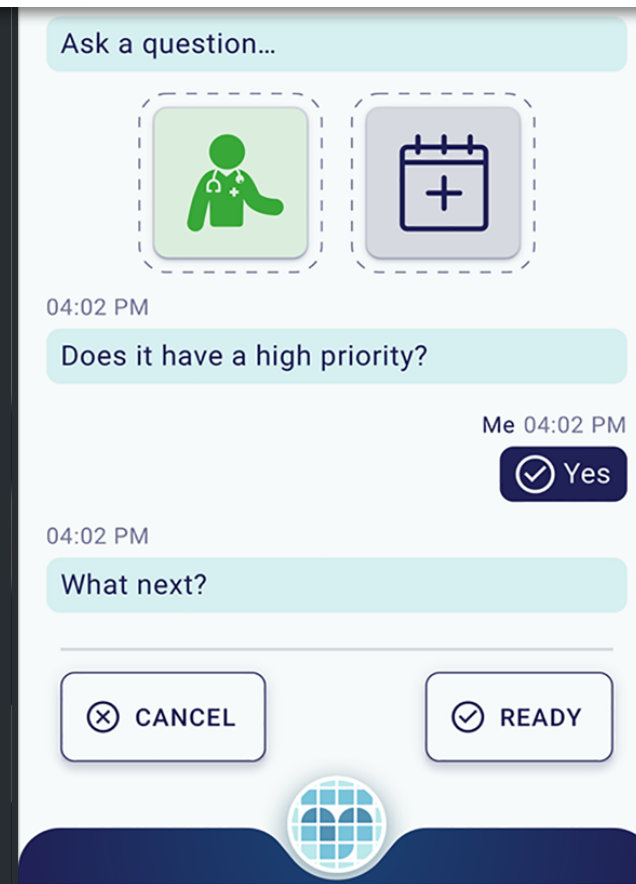
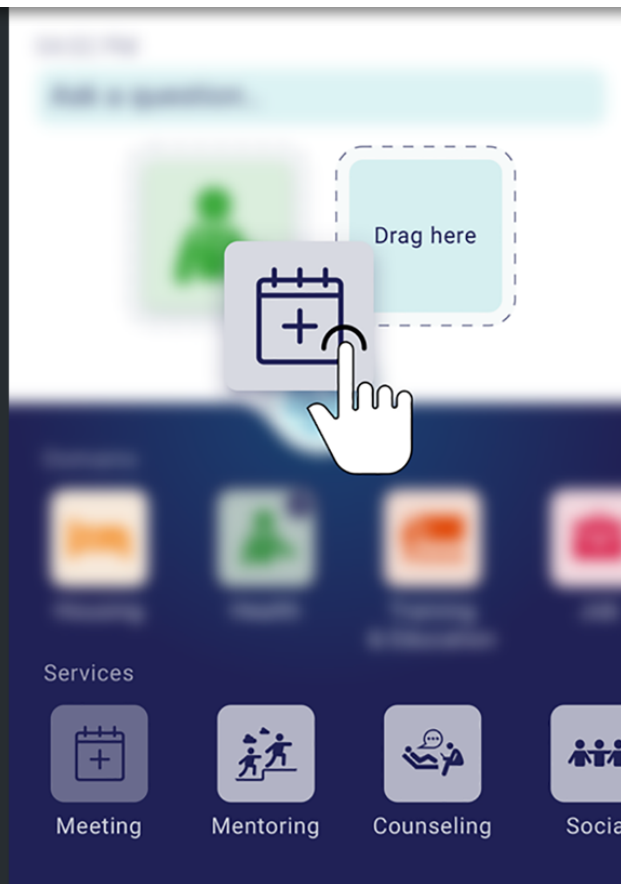
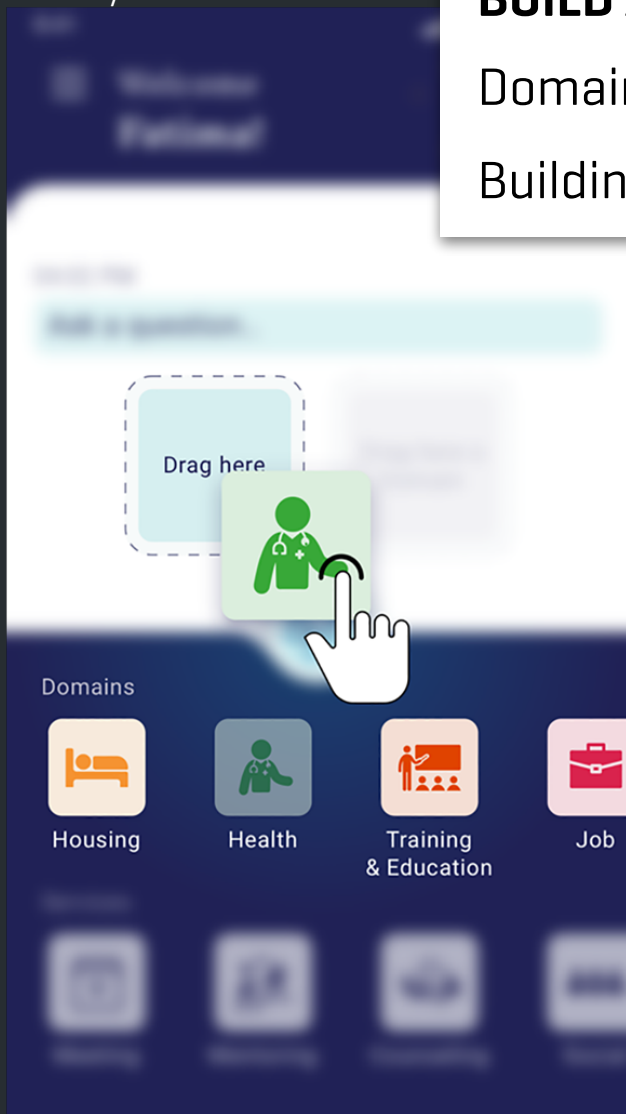
**TASK SOLVER**  
Video-message exchange



## BUILD A QUESTION

Domain and Services visual representation

Building Blocks strategy



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Conversations' structures highly under control

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### Conversations' structures highly under control

- Rule-based chatbots to keep the implemented languages aligned in terms of vocabulary, sentences' structure and conversation trees
- Support provision for input and answers are controlled and verified ex ante to maximize precision and clarity in the provided information



## MATCHMAKING AND PROACTIVE SUGGESTIONS

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Hybrid filtering for cross-domain interactions and personalised suggestions:

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- the recommendation system proposes the available services for the needed domain in the user's region and according to user journeys

# LESSON LEARNT



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## LESSON LEARNT

### **Collective design mindset**

Project partners' culture and practices

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### **Evidence-based human centred AI**

Technology that fosters a more effective inclusion of migrants and refugees in the local communities

### **Wide participation perspective**

Experimenting with the entire local community, including citizenship, Public Authorities and other minorities in order to increase effectiveness of service provision.

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# Life Rebuilding Guidance

<https://www.rebuildeurope.eu/>



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