

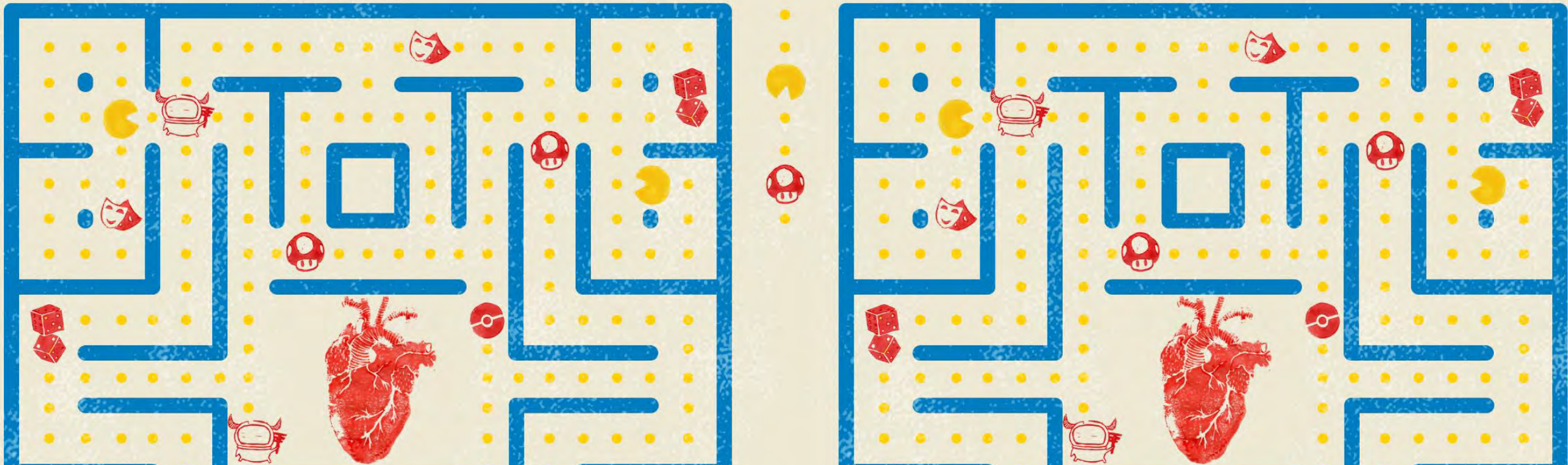


**GAMES FOR HEALTH EUROPE
2025**

DISCLOSURE SLIDE
for presentations at the

GAMES FOR HEALTH EUROPE 2025 CONFERENCE

I herewith confirm that there is not any conflict of interest with the conference organization or any of its sponsors.



EMPOWERING HEALTH: PERSONALISED SERIOUS GAMES &

Dr. Ir. Stéphanie Carlier
IDLab, UGent - imec

GAMIFICATION



SCORE 052 HEALTH 098 PAIN RELIEF 098

Score: 052 Health: 098 Pain Relief: 098

Gameplay elements: character, health bar, pain relief bar, score, hearts, smiley faces, medical symbols, landscape.

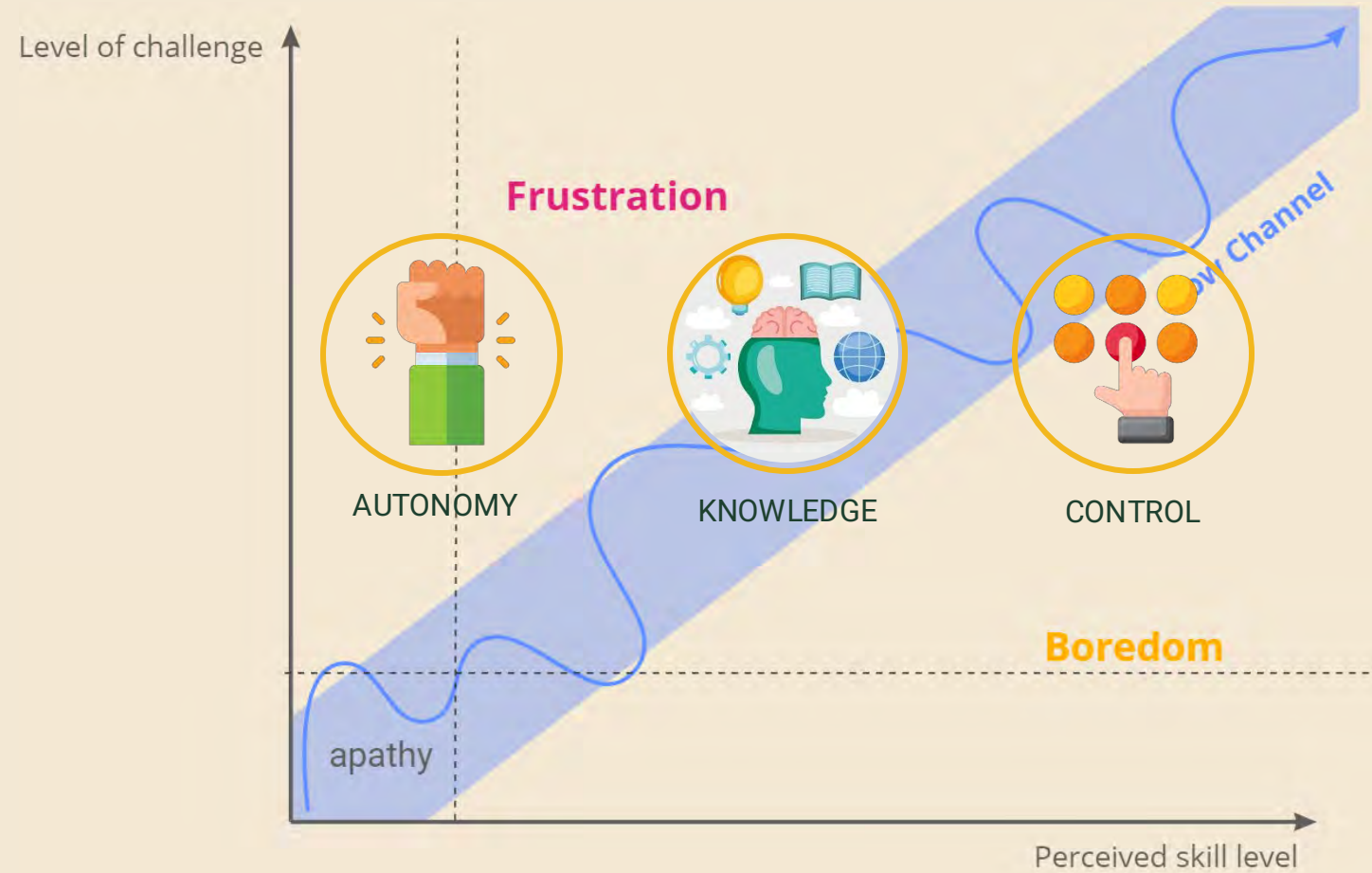
Can serious games & gamification empower healthcare?

CHALLENGE 1



**MOTIVATION &
ENGAGEMENT**

EMPOWERMENT



CHALLENGE 2

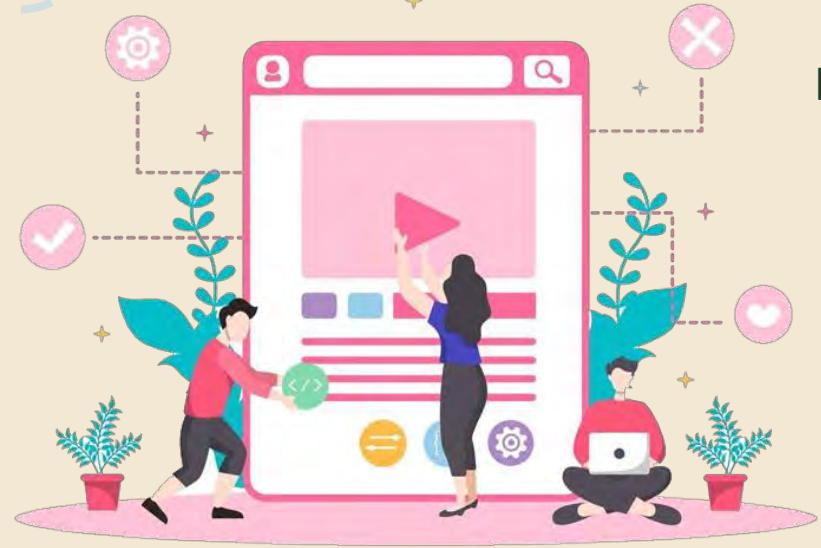


**KNOWLEDGE-DRIVEN
DESIGN**

data &
informatio
n



knowledge & insights



Involvement stakeholders
design process

AUTISM SPECTRUM DISORDER

42-55%
DEPRESSION & ANXIETY

VISUAL
VS VERBAL THERAPY

SERIOUS GAME
RELAXATION TECHNIQUES

DOMAIN EXPERTS:
RIDDL LAB @UGENT
2 THERAPEUTIC CENTRES GHENT

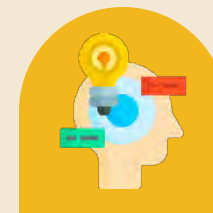




LESSONS LEARNED



MOTIVATE & EMPOWER PARENTS
CHILDREN: TOO MUCH CONTROL?



GUIDELINES FOR SERIOUS GAMES
FOR CHILDREN WITH ASD



UNILATERAL SPATIAL NEGLECT

25–30%
AFTER STROKE

**LACK OF
AWARENESS**
HETEROGENEOUS & MULTIMODAL

VR SIMULATION
MUSICAL NEGLECT THERAPY

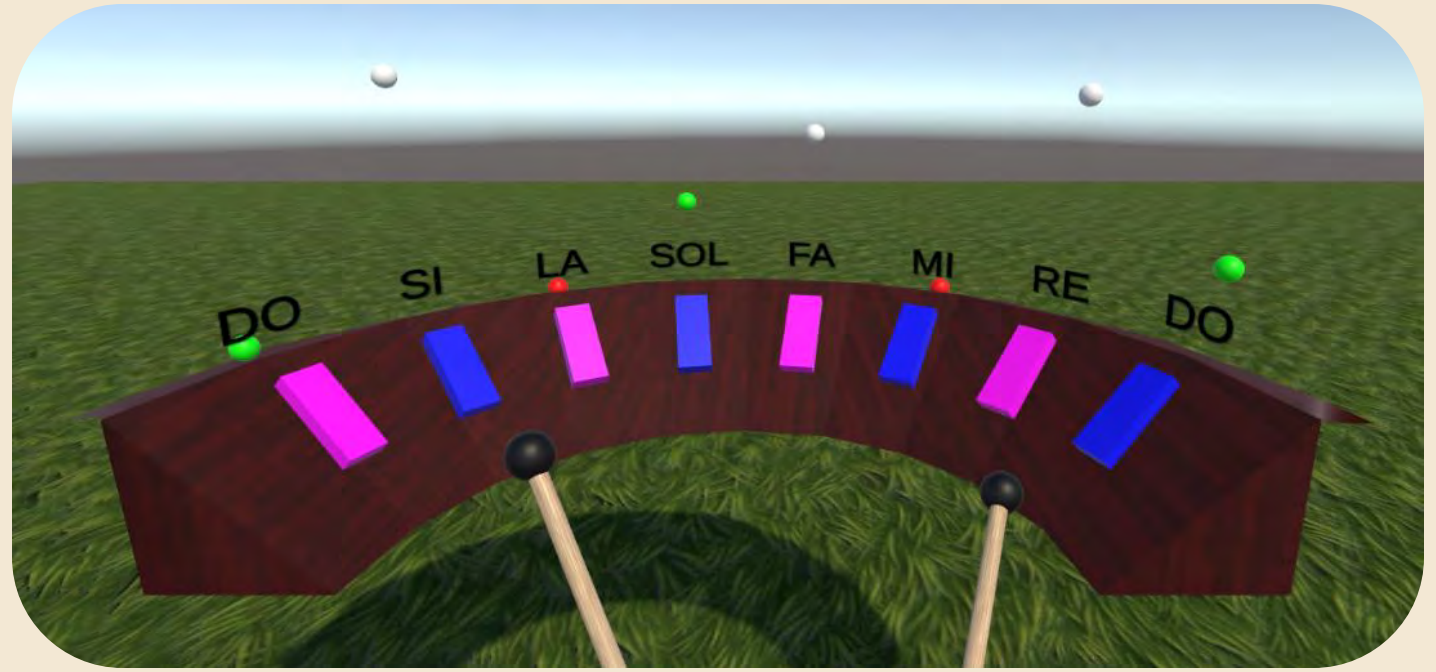
DOMAIN EXPERTS:
GHENT UNIVERSITY HOSPITAL

LESSONS LEARNED

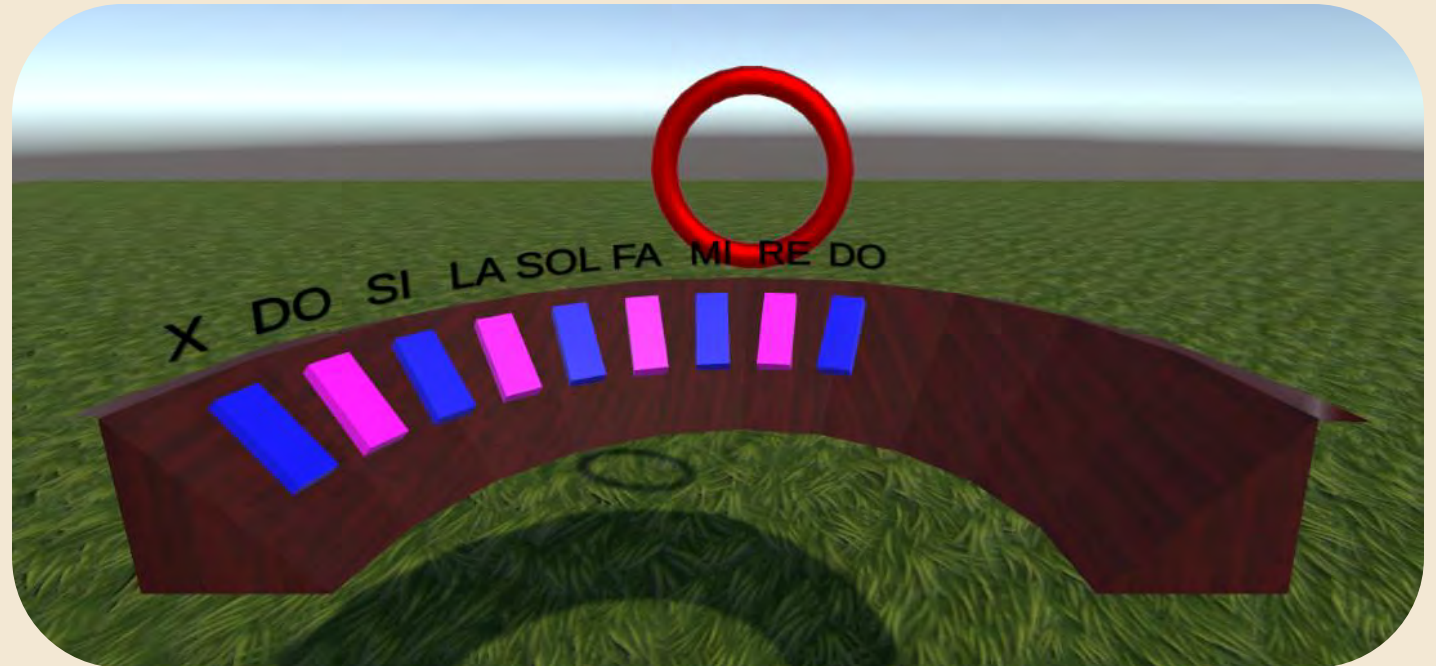


HETEROGENEITY CONDITION

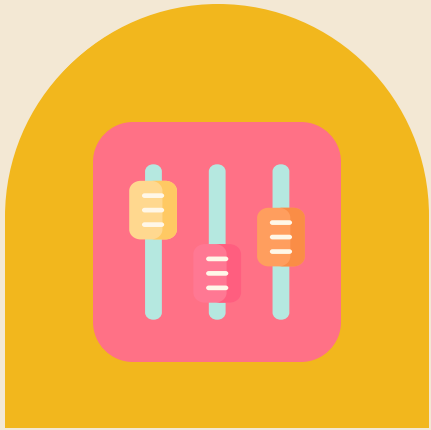
EMPOWER THERAPISTS



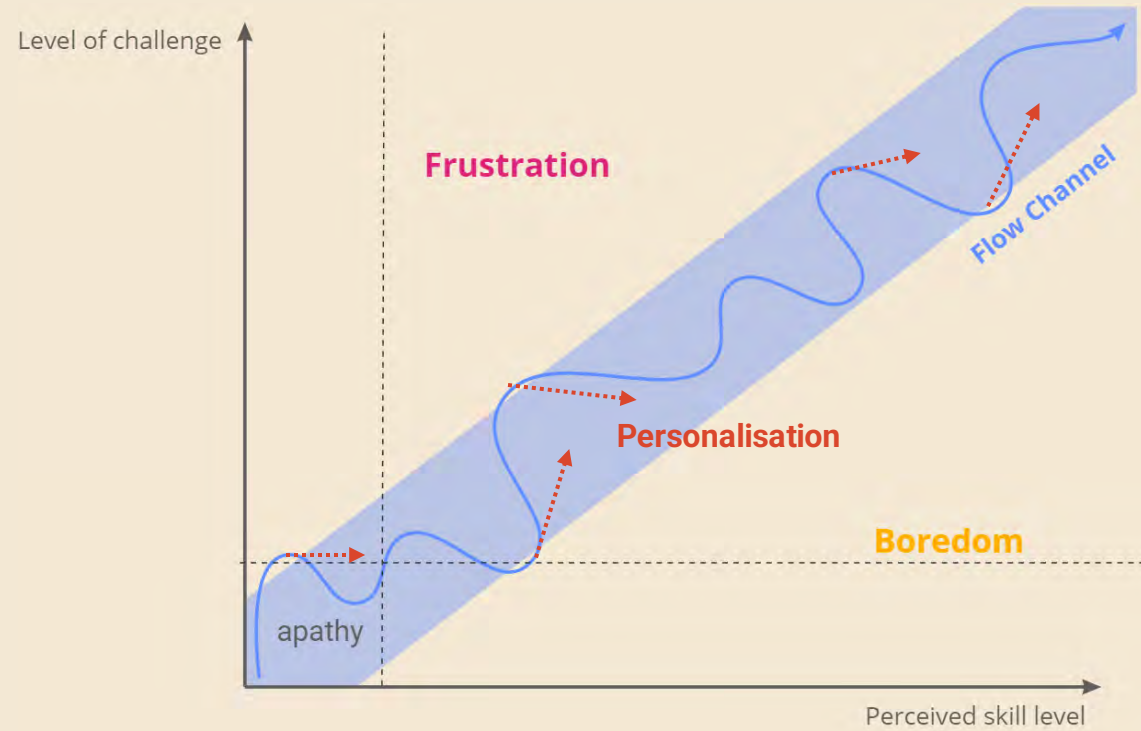
DASHBOARD FOR NEW INSIGHTS



CHALLENGE 3



PERSONALISATION



BEHAVIOUR CHANGE & PHYSICAL INACTIVITY

20-30% NON-COMMUNICABLE DISEASES

TYPE 2 DIABETES - CANCER – HEART DISEASES
CHRONIC RESPIRATORY DISEASES

GAP

INTENTION - BEHAVIOUR

ONTOLOGY

ACTION & COPING PLANS

DOMAIN EXPERTS:

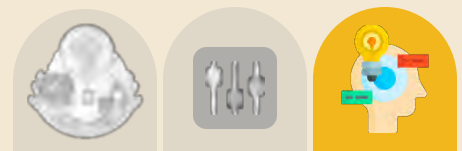
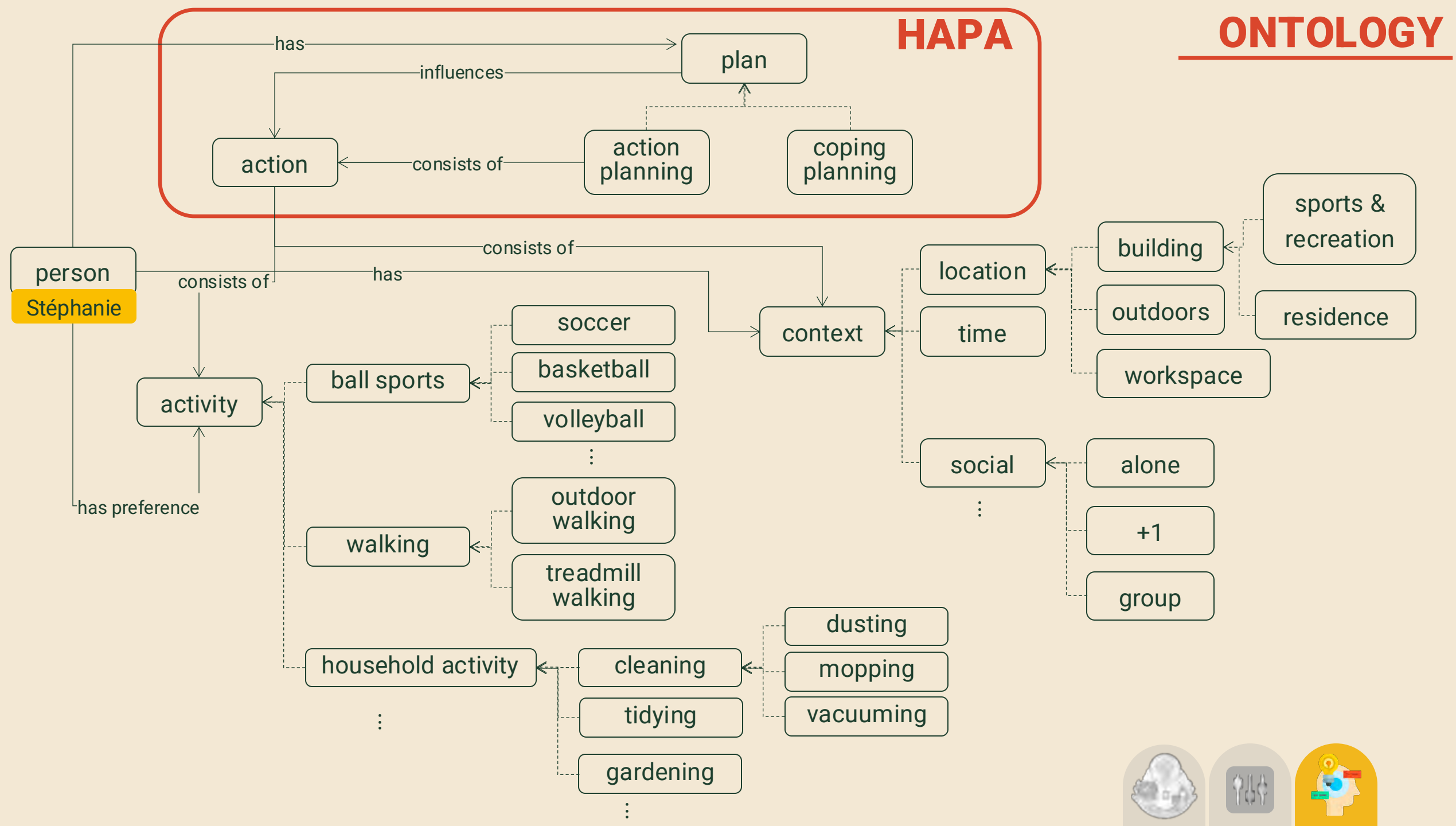
eBEHAVIOURCHANGE GROUP @UGENT
INTERNATIONAL RESEARCHERS

**GAMIFIED
DECISION SUPPORT**
ACTION- & COPING PLANNING



HAPA

ONTOLOGY



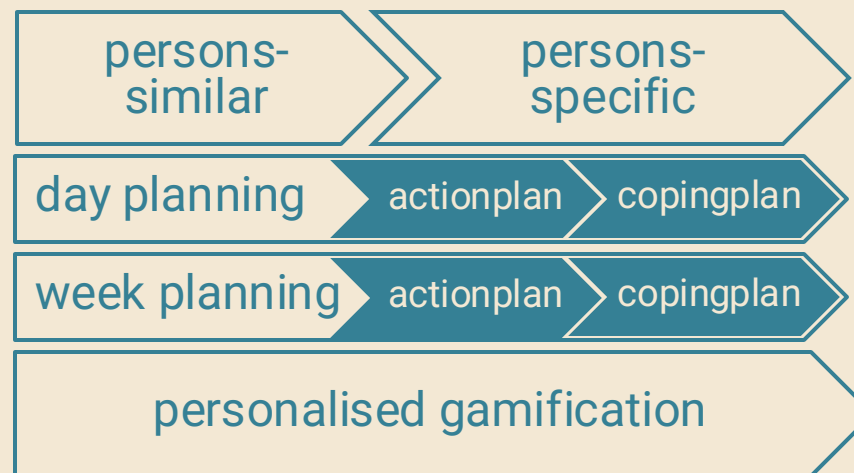


PERSONALISATION LAYERS

USER

ACTION & COPING PLANNING

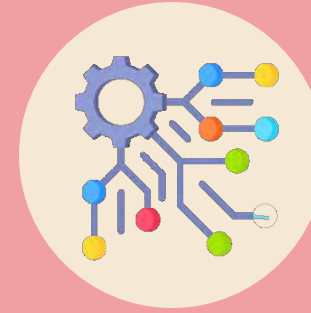
MOTIVATIONAL TECHNIQUES



PERSONALISATION ?



NOT
COMPARABLE



COMPLEX
PROCESS



USE CASE
SPECIFIC

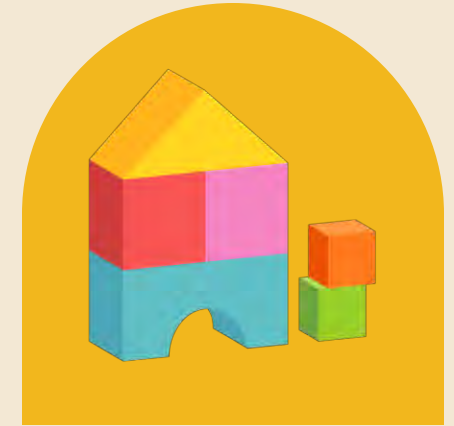
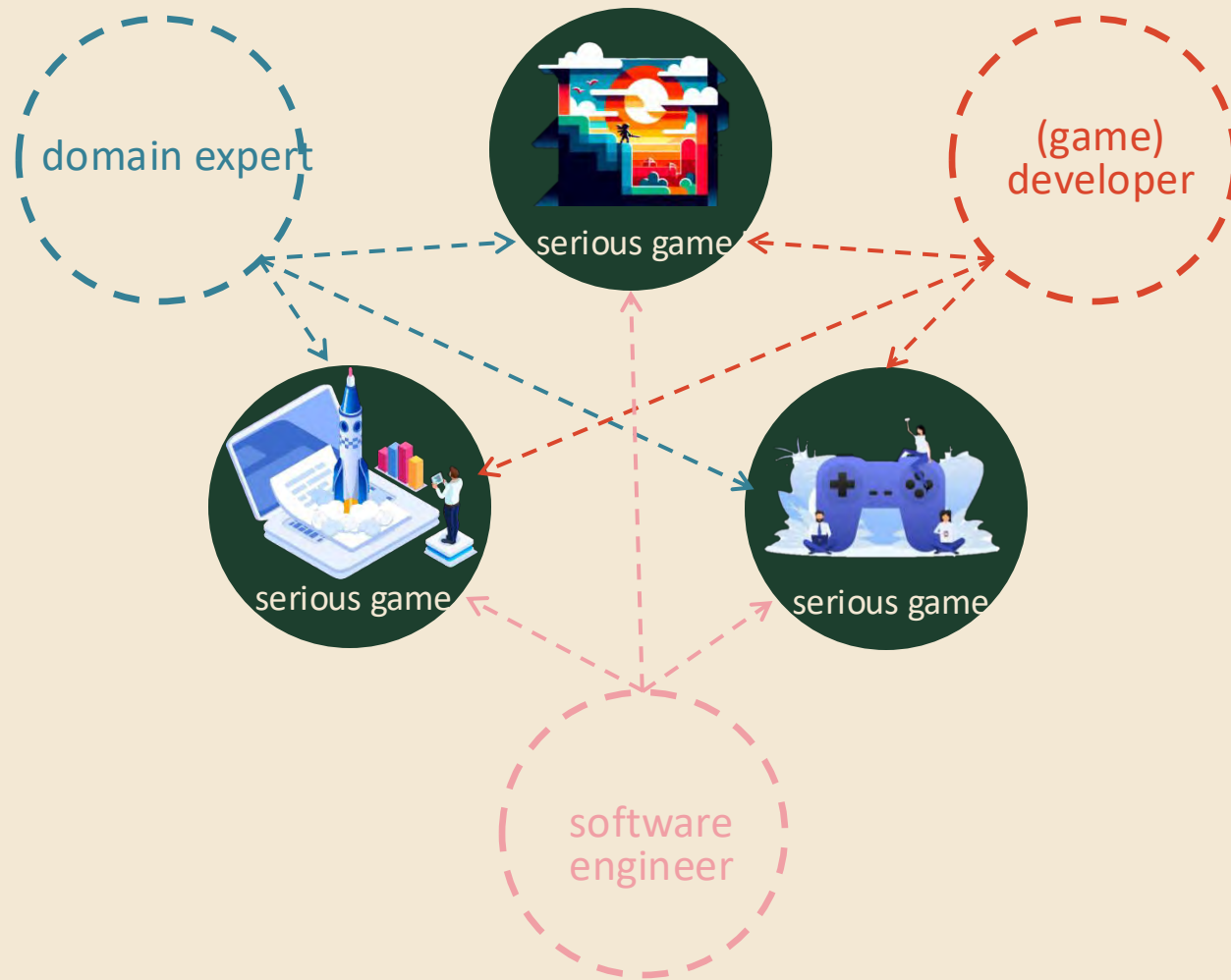
PERSONALISATION ?

~~STANDARDISATION~~

REUSABILITY

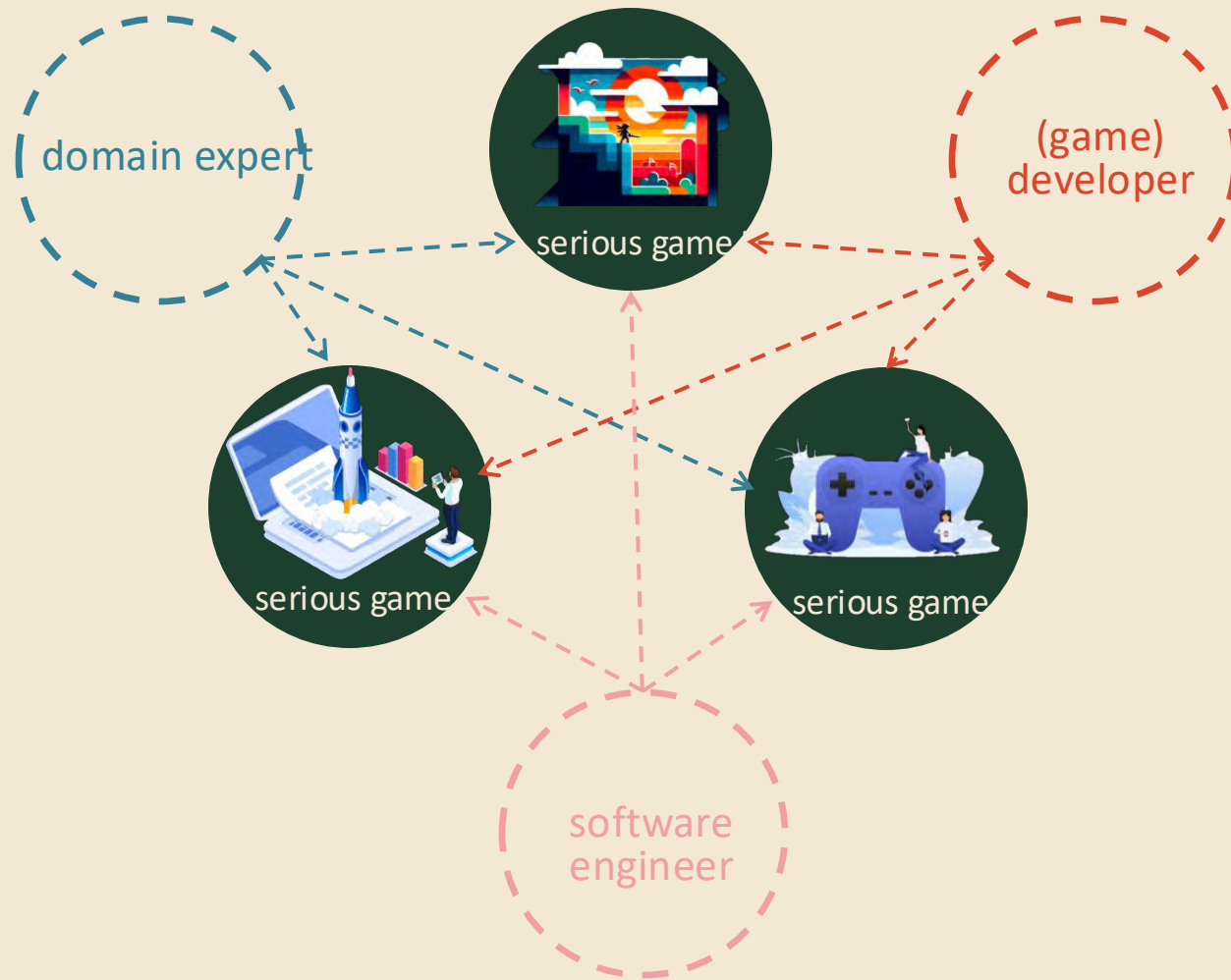


CHALLENGE 4



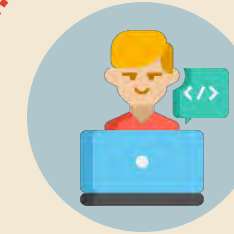
REUSABILITY

FRAMEWORK



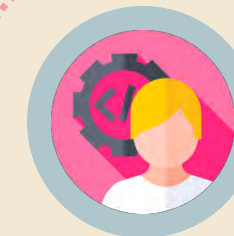
**DOMAIN
EXPERT**

Why is it personalised?



**(GAME)
DEVELOPER**

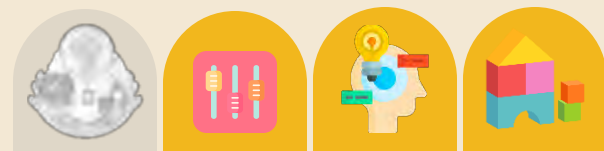
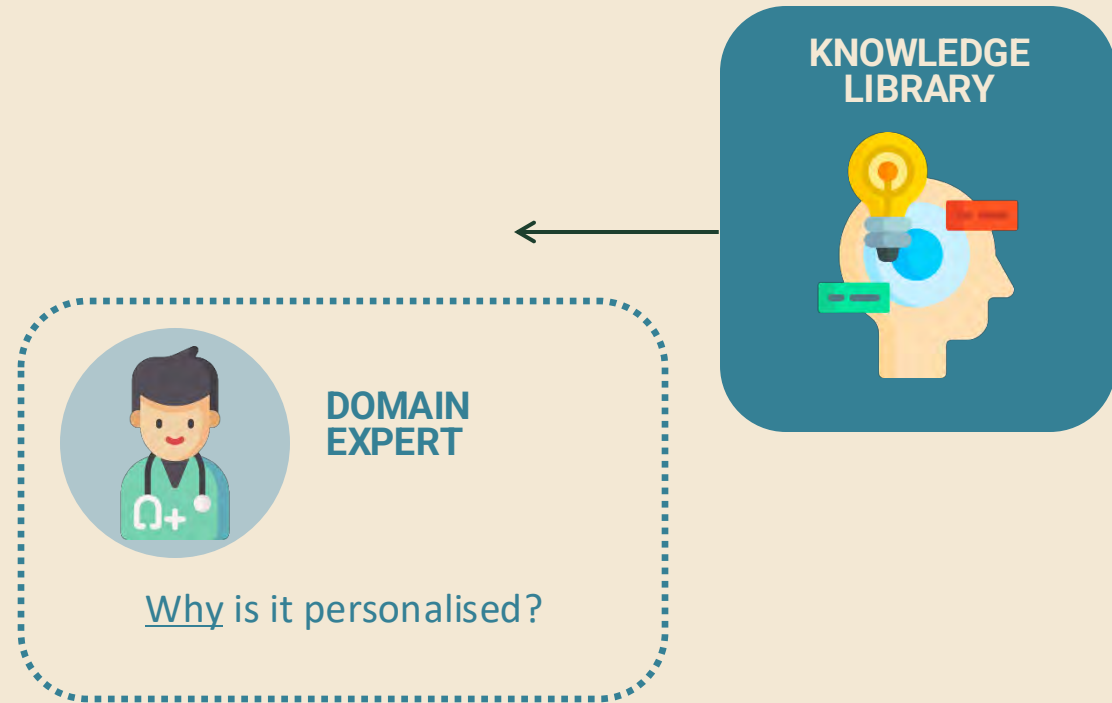
What parameters can be used for personalisation?



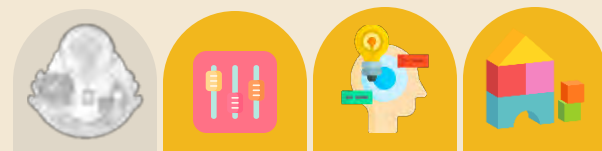
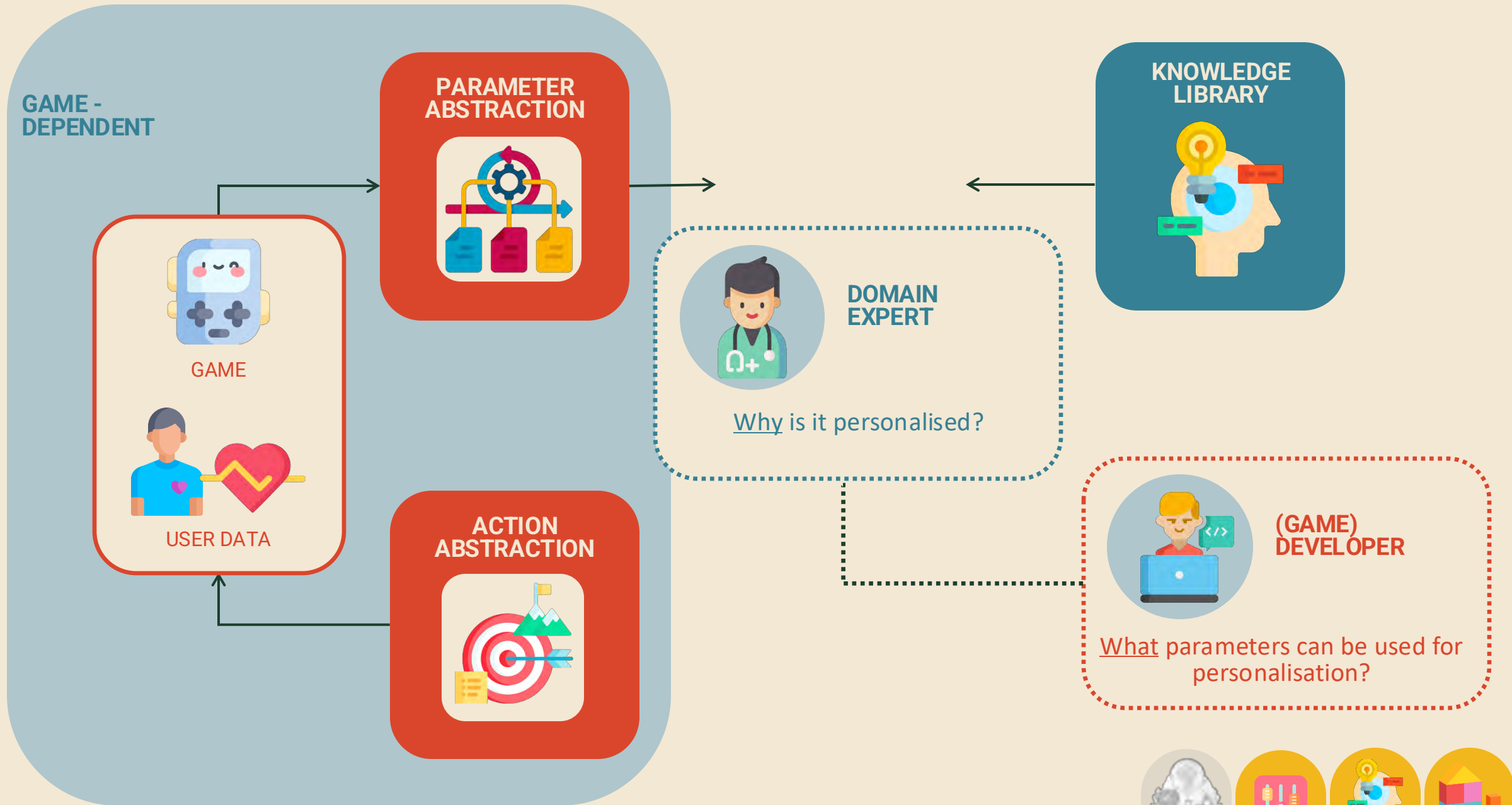
**SOFTWARE
ENGINEER**

How can it be personalised?

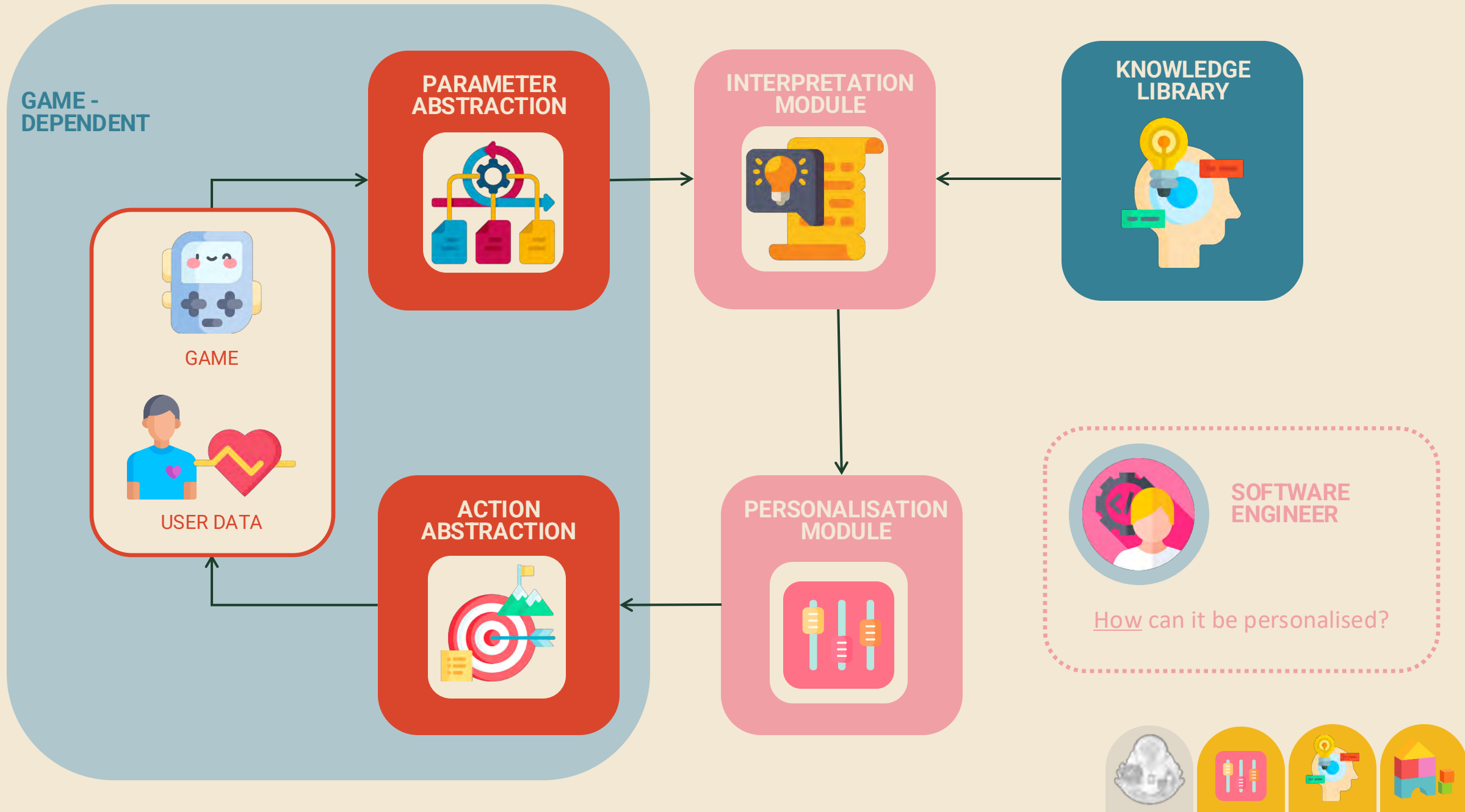
FRAMEWORK



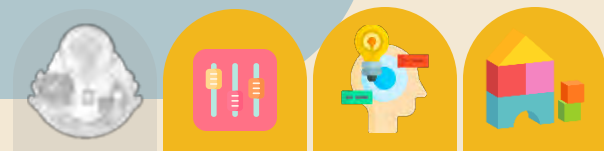
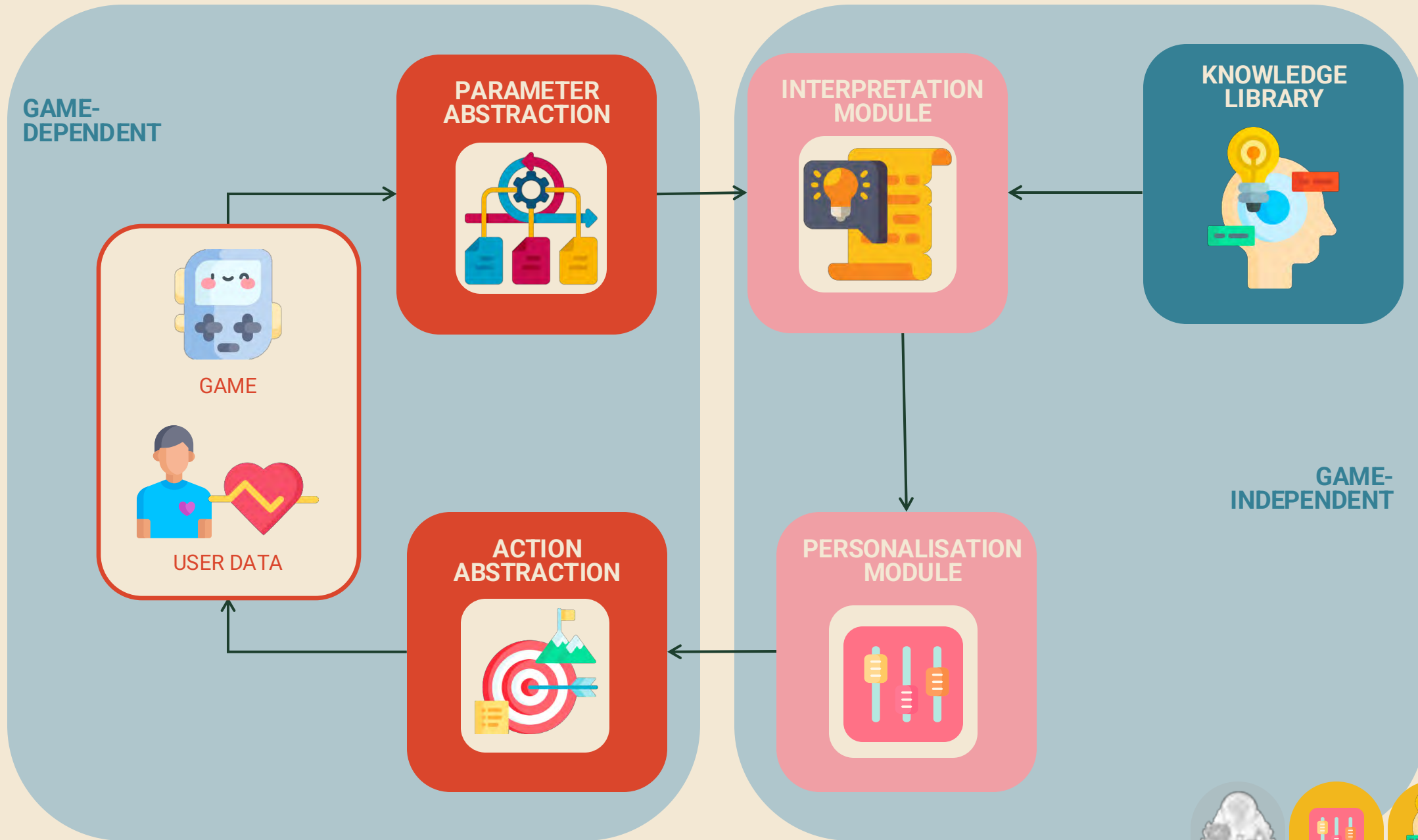
FRAMEWORK



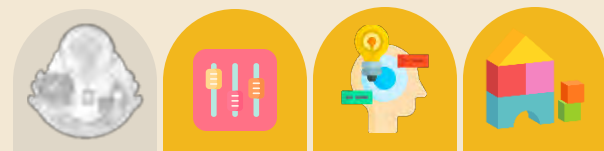
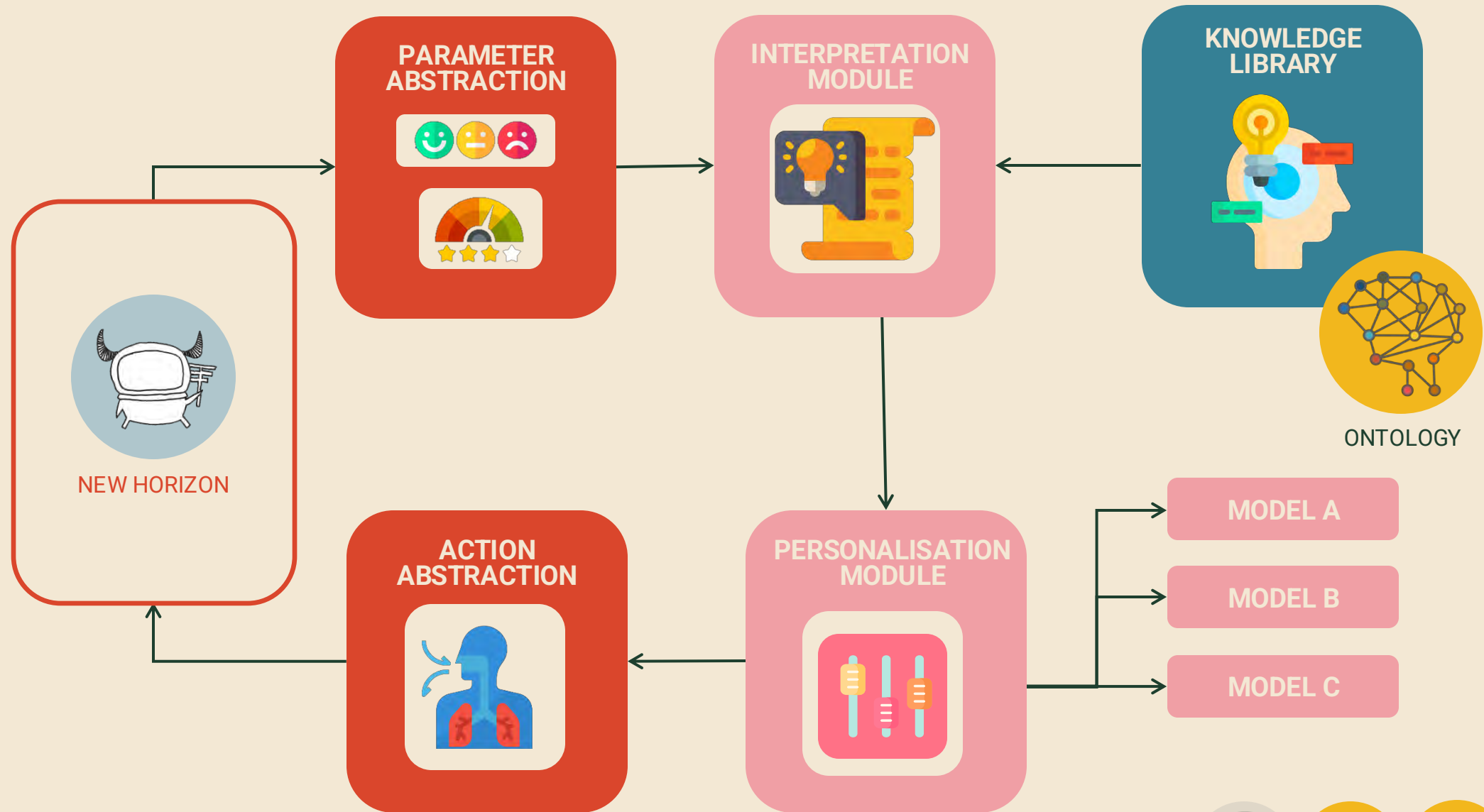
FRAMEWORK



FRAMEWORK



FRAMEWORK



FRAMEWORK



CONCEPTUALISATION



FRAMEWORK



IMPLEMENTATION

WHAT'S NEXT?



CONCEPTUALISATION

FRAMEWORK

IMPLEMENTATION



INTEGRATION CO-CREATION
& FRAMEWORK

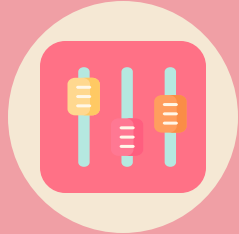


PLUG & PLAY SOFTWARE
PLATFORM

IN CONCLUSION...



EMPOWER ALL
STAKEHOLDERS



PERSONALISATION IS
LAYERED



FORMALISATION
EXPERTISE



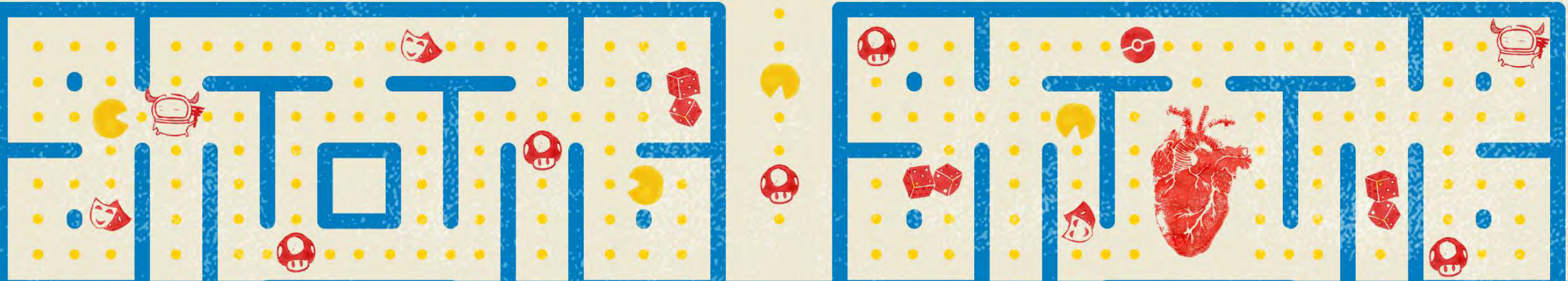
REUSABILITY



Life is more fun if
you play games

- Roald Dahl





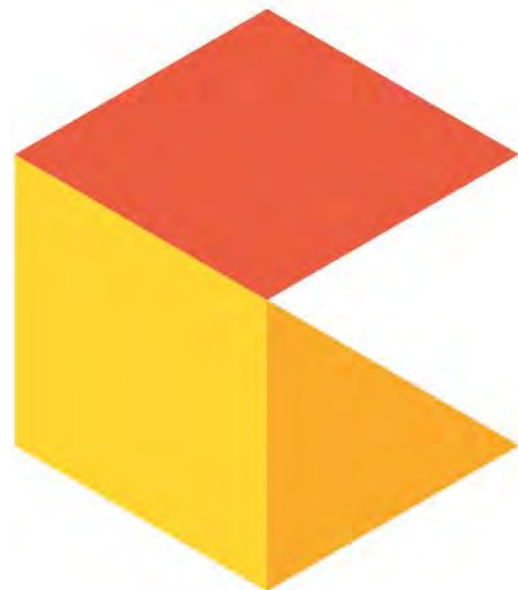
Dr. Ir. Stéphanie

Carrier
Post-Doctoral Researcher at IDLab,
Ghent University in collaboration
with imec

Stephanie.carlier@ugent.be

Want to know more?
Find my PhD book here





GAMES FOR HEALTH

EUROPE

2025