

Shumka  Program

Design for Startups



Spring 2025

Improving Digital Therapeutics Through User-Centred Design

Paperplane Therapeutics × Selina Kang
(BDes, 2025)

Paperplane Therapeutics develops immersive virtual reality tools designed to reduce patient stress and improve healthcare experiences. Selina redesigned a tablet-based control system used by dentists to operate a VR platform during treatment, conducting user research and testing to streamline workflows, improve ease of learning, and create a more intuitive experience for clinical users.

Design Activities: User research, interaction design, usability testing, prototyping



X



PAPERPLANE
THERAPEUTICS

HI I'M SELINA!



Lead Designer

I'm passionate about creating designs that are:

- Simple and easy to use
- Supportive in everyday tasks and situations



Paperplane Therapeutics specializes in therapeutic virtual reality solutions for pain and anxiety management in medical and dental care

DESIGN PROBLEM

01

Redesign to improve the tablet interface, which felt outdated and was difficult for users to navigate smoothly.

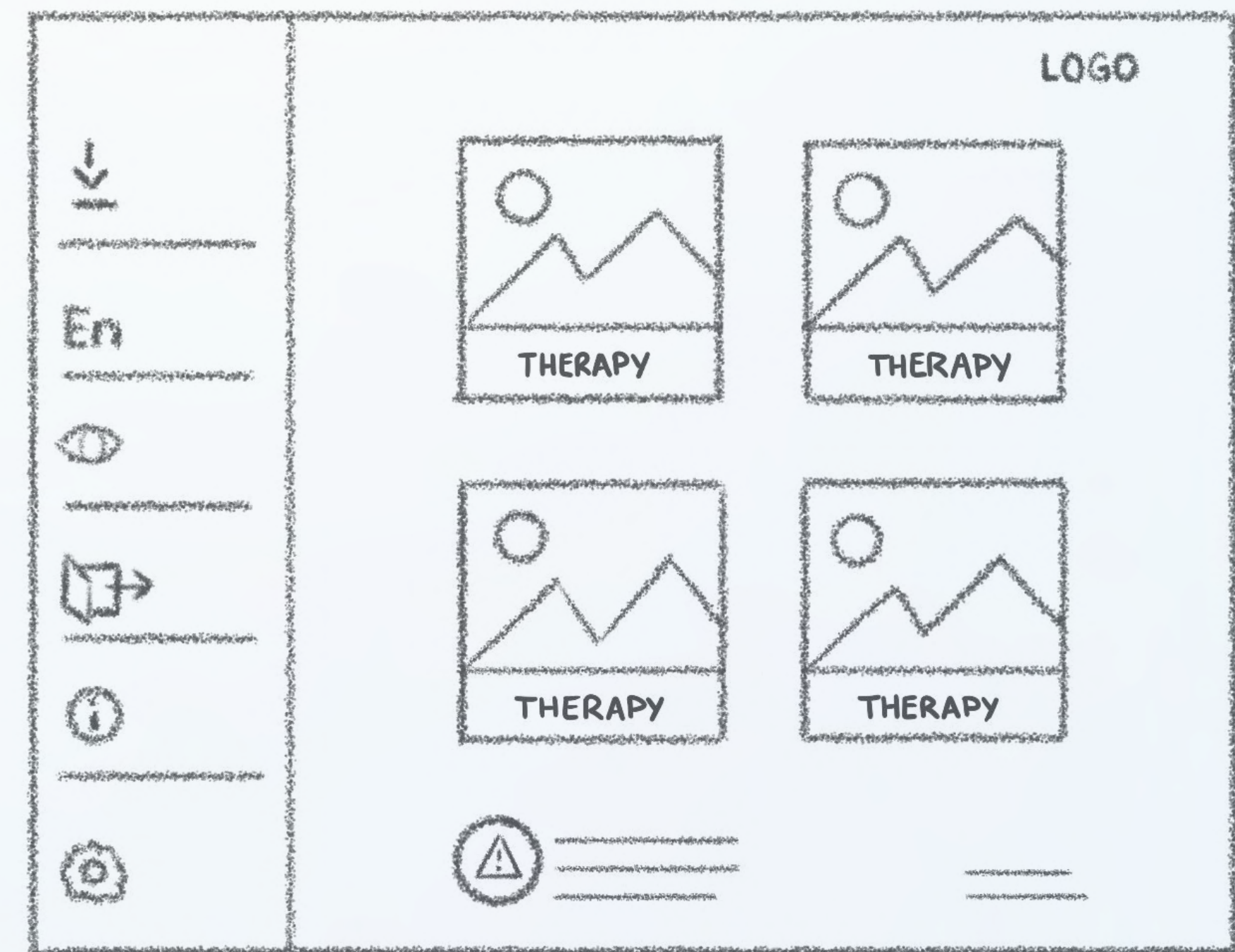
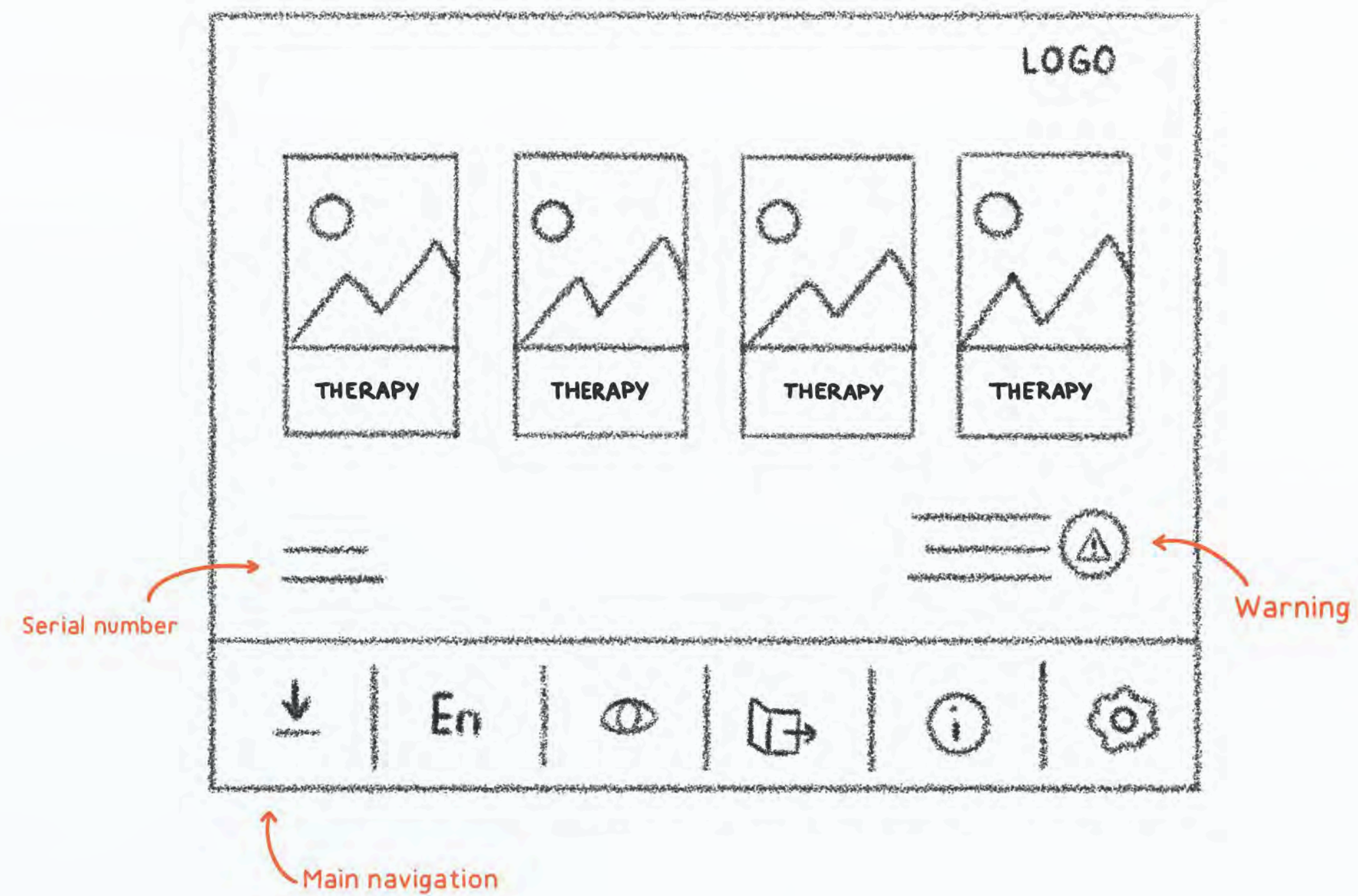
02

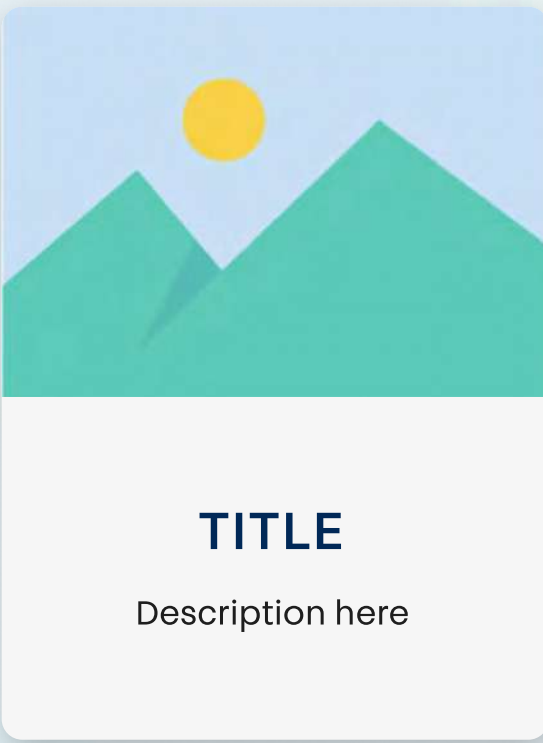
Design a help section to provide users with clear guidance and support when needed.

INFORMATION ARCHITECTURE



SKETCHES





Still State



Pressed State



Still State



Selected State



DREAM

An immersive, non-invasive, and drug-free CBT solution that reduces pain perception and anxiety.

Ideal for: venipuncture, catheter insertion, vaccinations, dressing changes, cast removal, hemodialysis, and dental treatments.

[See more](#) ▾



DREAM

An immersive, non-invasive, and drug-free CBT solution that reduces pain perception and anxiety.

Ideal for: venipuncture, catheter insertion, vaccinations, dressing changes, cast removal, hemodialysis, and dental treatments.

Age: 5+

Options: Mobile Head, Fixed Head, Joystick

[▶ Watch video](#)

[See less](#) ▴

WARNING: The use of the therapeutic solution in virtual reality is to be avoided for all epileptic patients. Please refer to the [help section](#) for more details regarding contraindications for use.



Still State

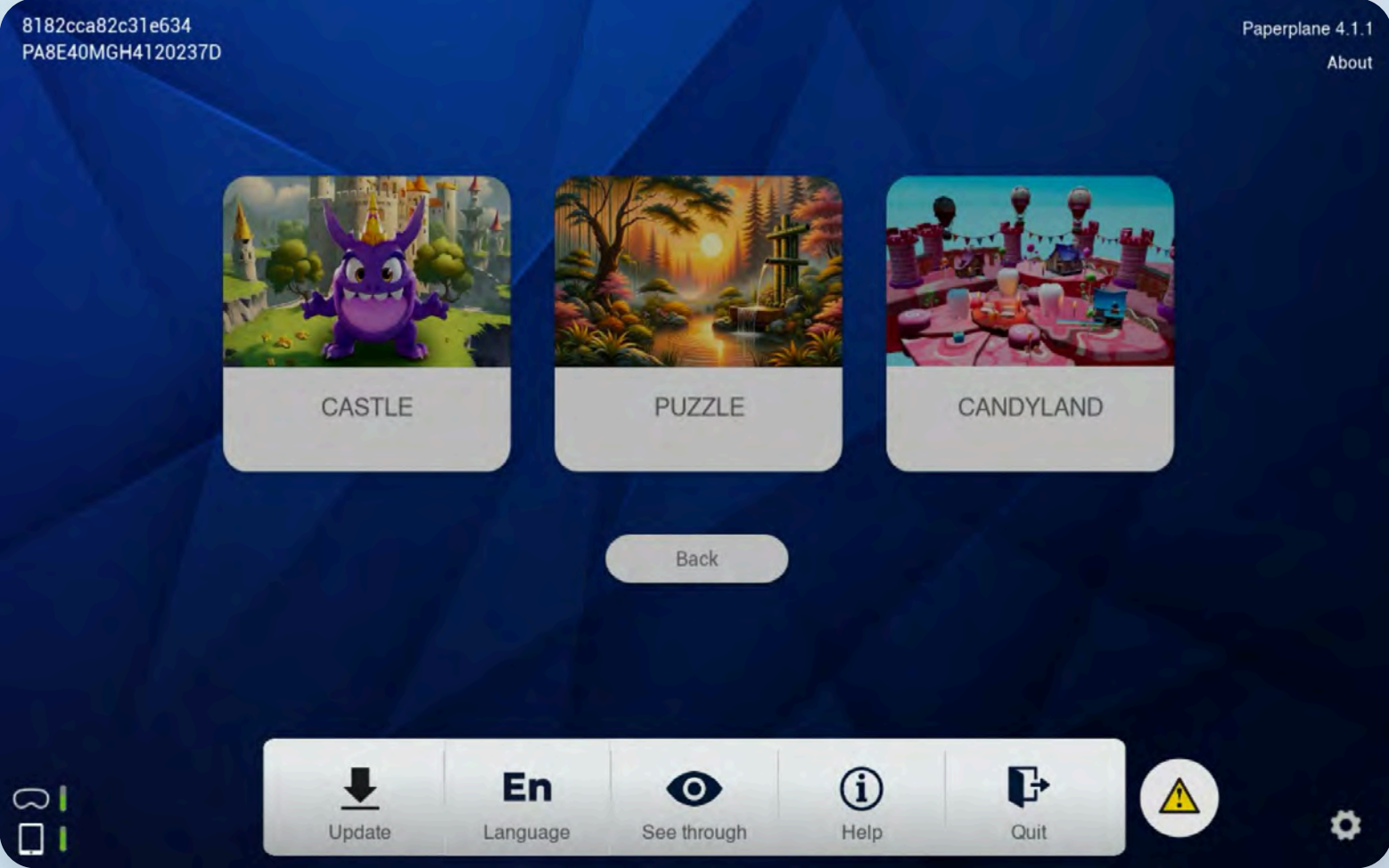
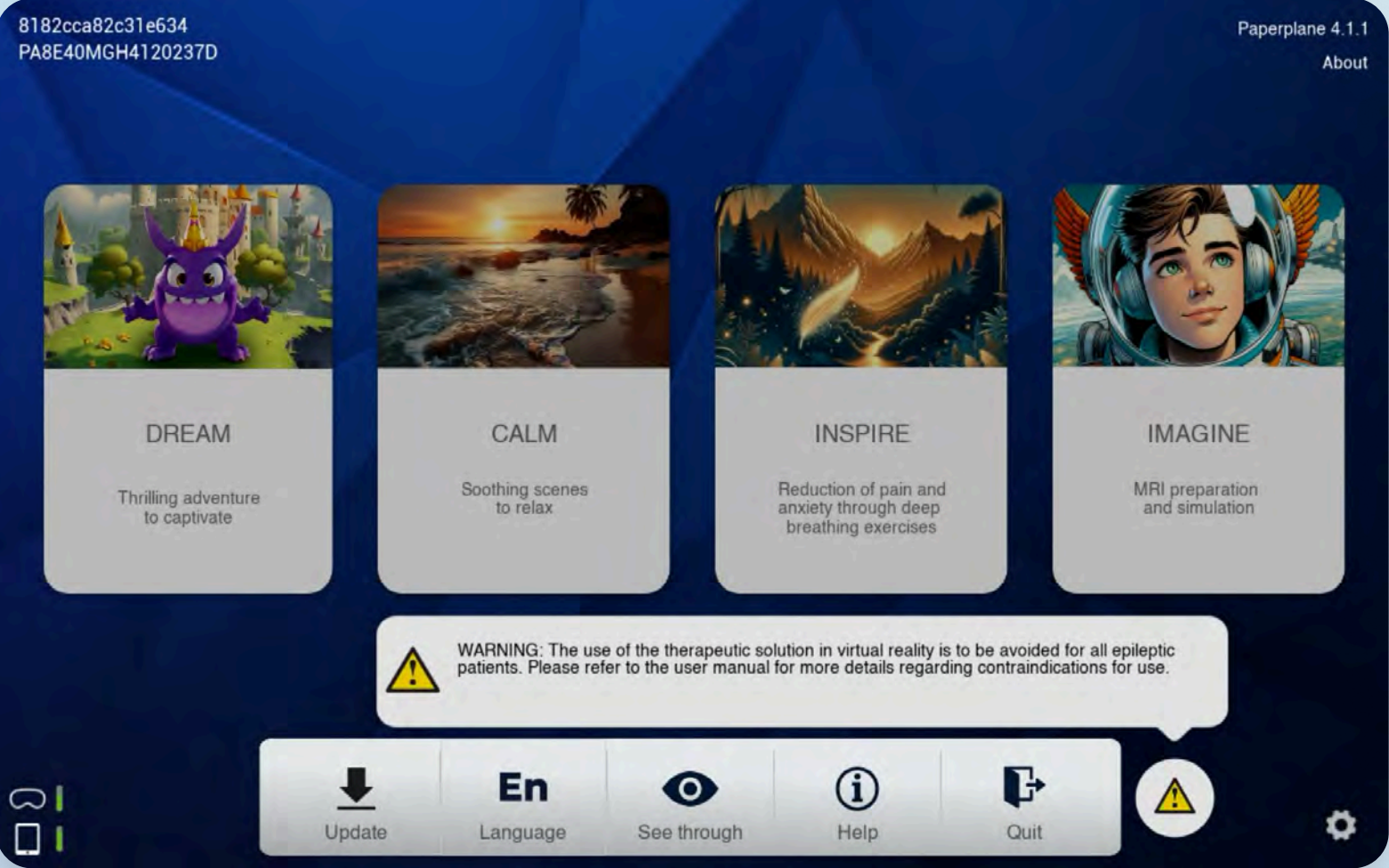
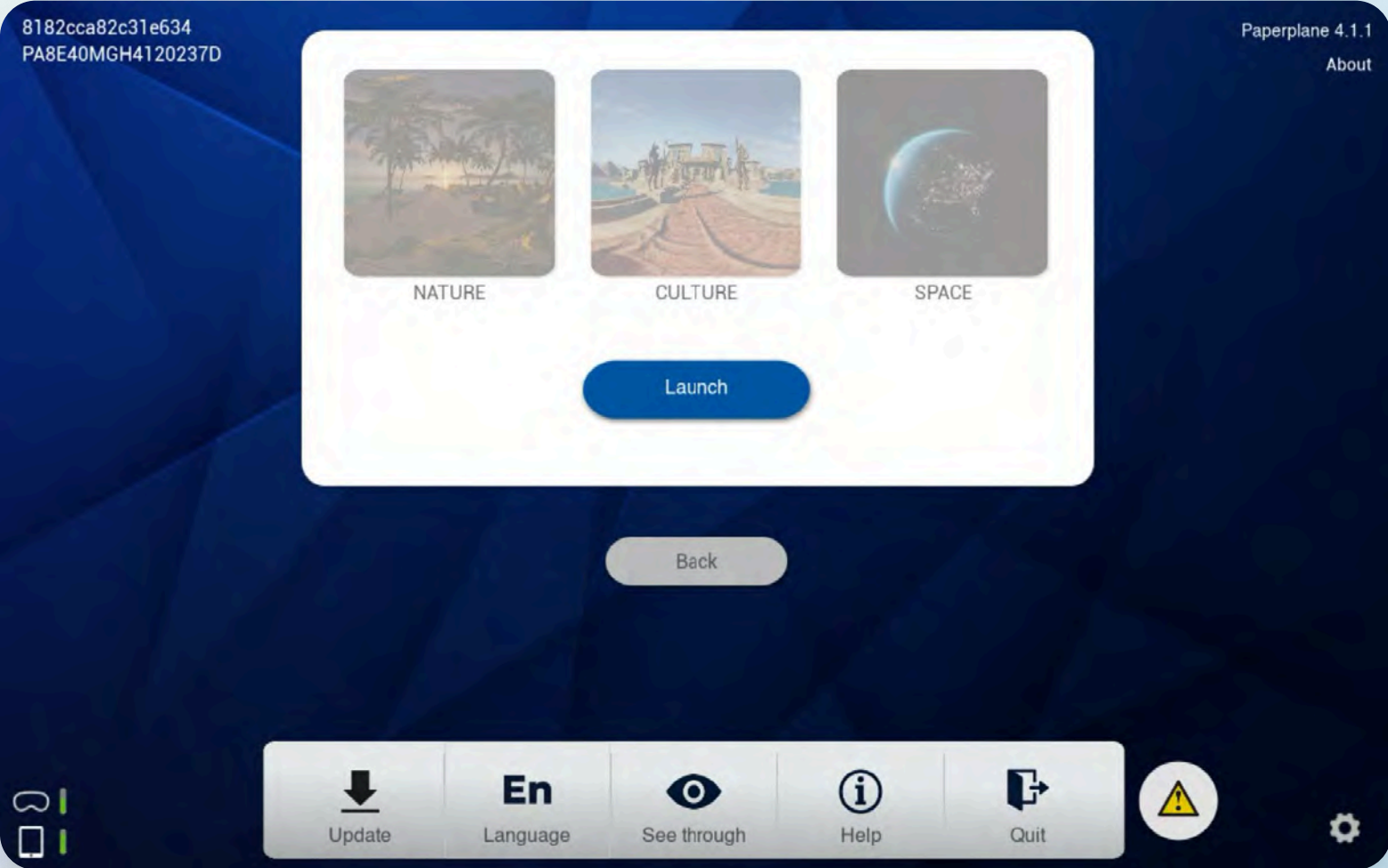
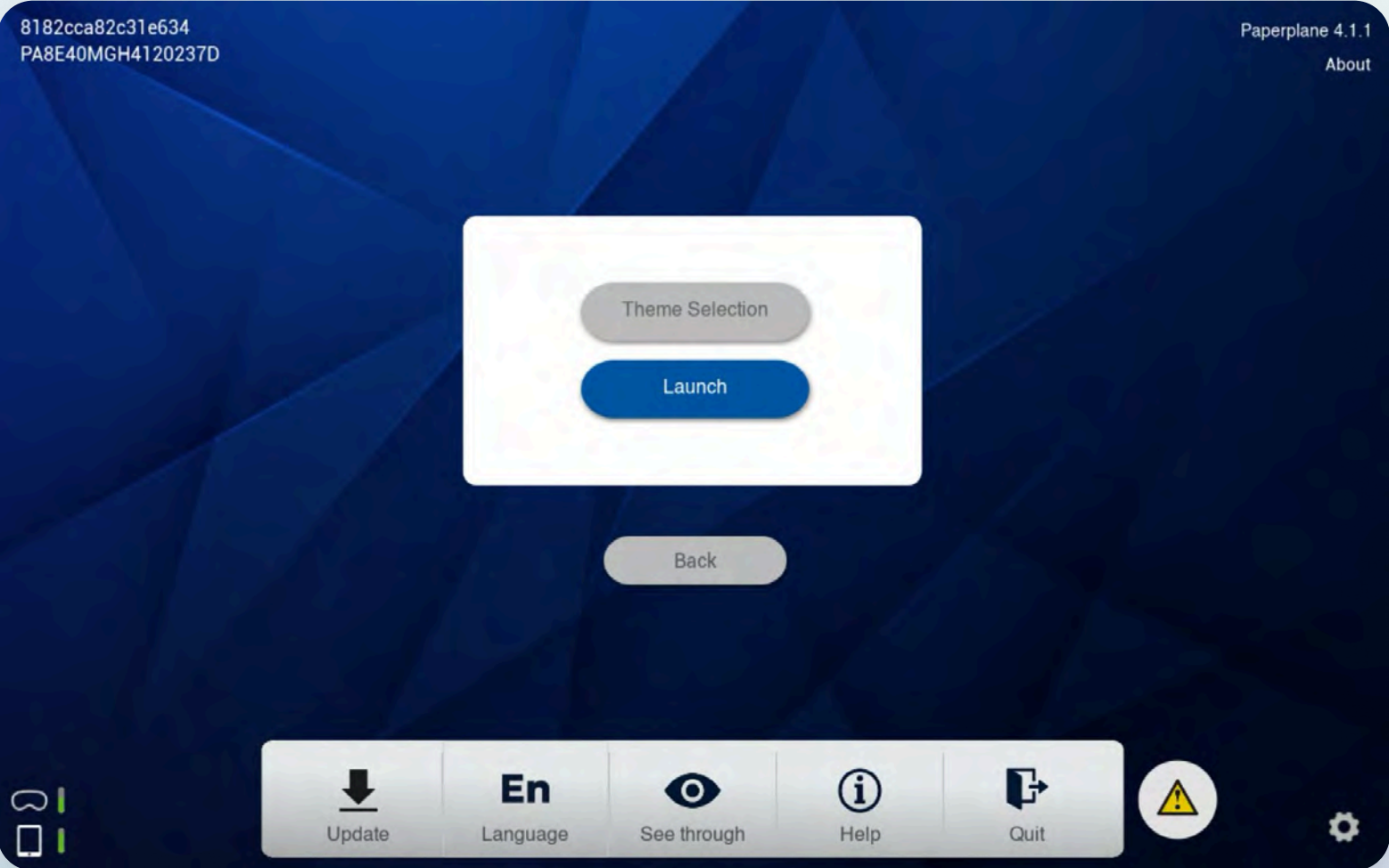


Pressed State

Before

DESIGN PROBLEM

01



After

01

Welcome!

Make sure the headset is turned on and not in sleep mode



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Update

En
Language

See Through

Help

Settings

Quit

< Back

Scene Selection

Select the scene(s) you want to play.

NATURE

CULTURE

SPACE

Make sure the patient is comfortably positioned

Launch

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Update

En
Language

See Through

Help

Settings

Quit

< Back

Scene Selection

Select the scene(s) you want to play.

NATURE

CULTURE

SPACE

Launch scene(s)

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Update

En
Language

See Through

Help

Settings

Quit



DREAM

Thrilling adventures to captivate



CALM

Scenes to relax



INSPIRE

Deep breathing exercises to reduce pain and anxiety



IMAGINE

MRI preparation and simulation

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Update

En
Language

See Through

Help

Settings

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CASTLE

PUZZLE

CANDYLAND

PIRATE

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Update

En
Language

See Through

Help

Settings

Quit

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FIXED HEAD

MOBILE HEAD

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Update

En
Language

See Through

Help

Settings

Quit

DESIGN PROBLEM

01

Redesign to improve the tablet interface, which felt outdated and was difficult for users to navigate smoothly.

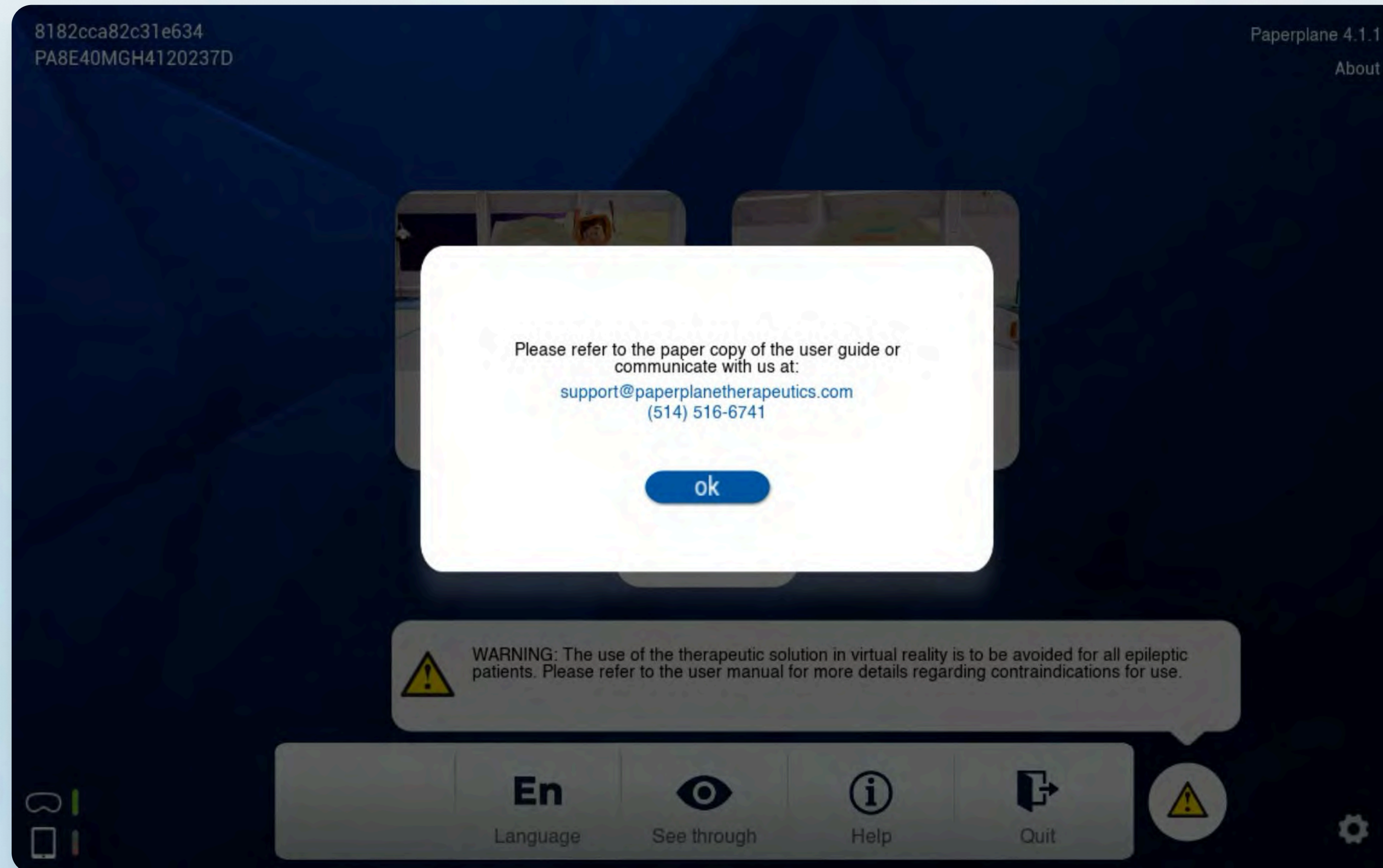
02

Design a help section to provide users with clear guidance and support when needed.

Before

DESIGN PROBLEM

02



After

✕ Exit

PAPERPLANE
THERAPEUTICS

How can we help?


GET STARTED


USER GUIDE


TROUBLESHOOTING

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CONTACT US
support@paperplanetherapeutics.com | (514) 516-6741

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PAPERPLANE
THERAPEUTICS

Therapies

Get Started

How to use VR

Which therapy is right for you?



DREAM
An immersive, non-invasive, and drug-free CBT solution that reduces pain perception and anxiety.
Ideal for: venipuncture, catheter insertion, vaccinations, dressing changes, cast removal, hemodialysis, and dental treatments.
[See more](#) ▾



CALM
A meditation-based VR experience designed to promote relaxation during procedures. Patients can travel around the world for a truly immersive and soothing experience.
Ideal for: chemotherapy, psychiatry, hemodialysis, geriatric care.
[See more](#) ▾



INSPIRE
A meditation-based VR experience using sensor-guided deep breathing to reduce stress, anxiety, and isolation during sessions, promoting relaxation

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PAPERPLANE
THERAPEUTICS

Therapies

Get Started

How to use VR

Which therapy is right for you?

1
Power on

2
Install patient

3
Launch

4
Clean

Launch the therapy of your choosing on the tablet



Warning & Contradictions

Pauses the session; Patient can see through

Quit Button: Select at the end of the session

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PAPERPLANE
THERAPEUTICS

Therapies

Get Started: Which therapy is right for you?

How to use VR

Which therapy is right for you?

Please select the procedure you would like to perform on your patient

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THANK YOU!



Selina Kang



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