



TACIT

Halves Presentation

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Consultant

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GOAL

A coherent VR experience with emotional moments shaped by haptic glove sensations and audio visual contexts, explored and discovered through rapid prototyping and playtesting.

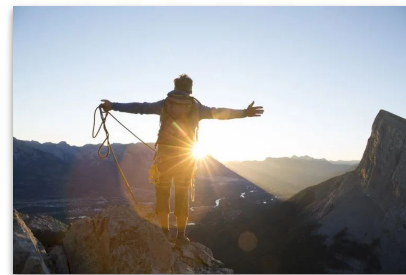
Exploration to Demonstration



Haptic Pattern

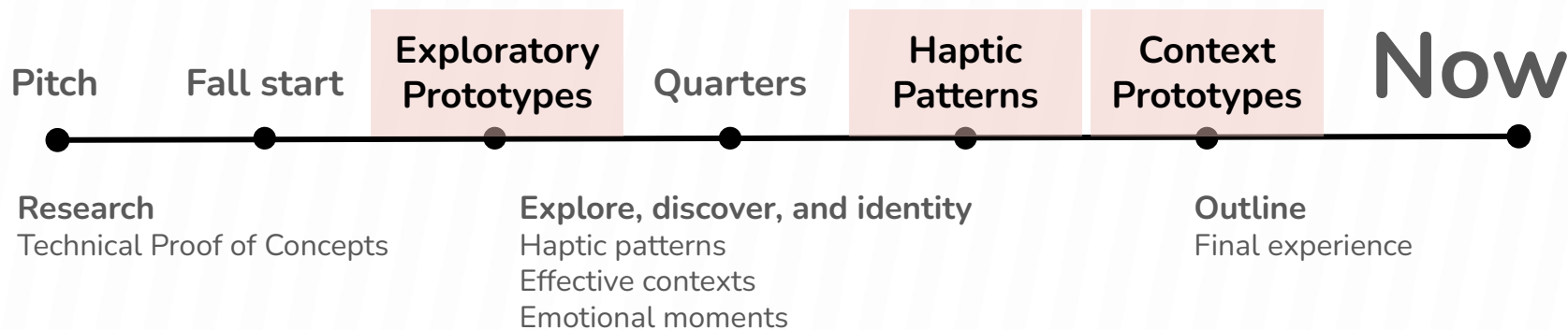


Context Design
(Visual + Audio)



Meaningful / Emotional Experience

Timeline

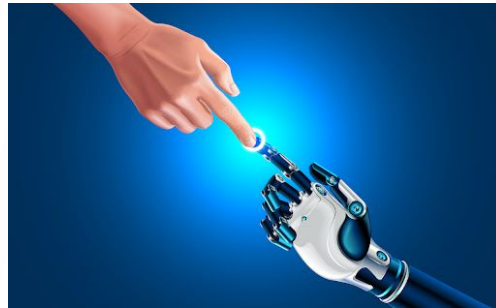


Research

Psychology



HCI

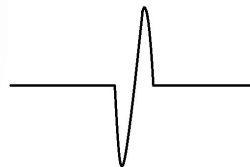


Experience design



Haptic Pattern Parameters

Transient



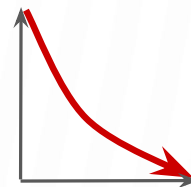
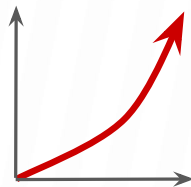
Continuous

Whole hand



Single point

Increasing



Decreasing

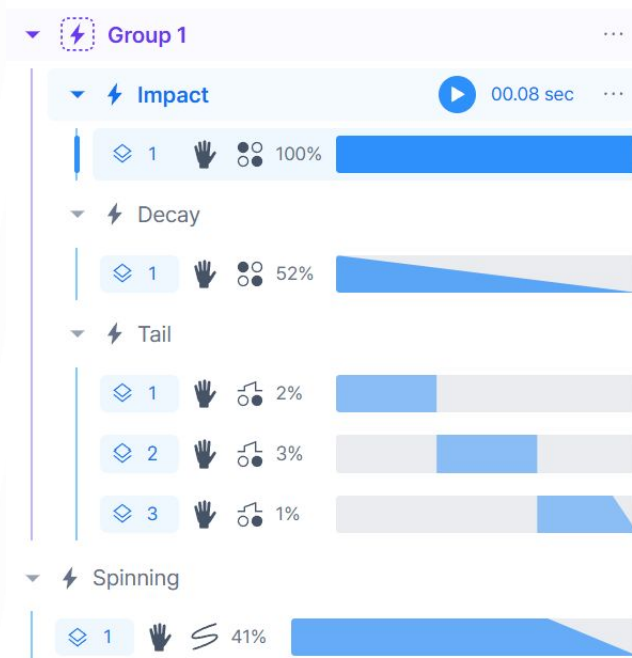
Pitch



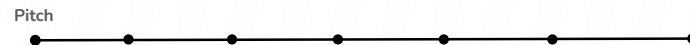
bHaptics TactGlove



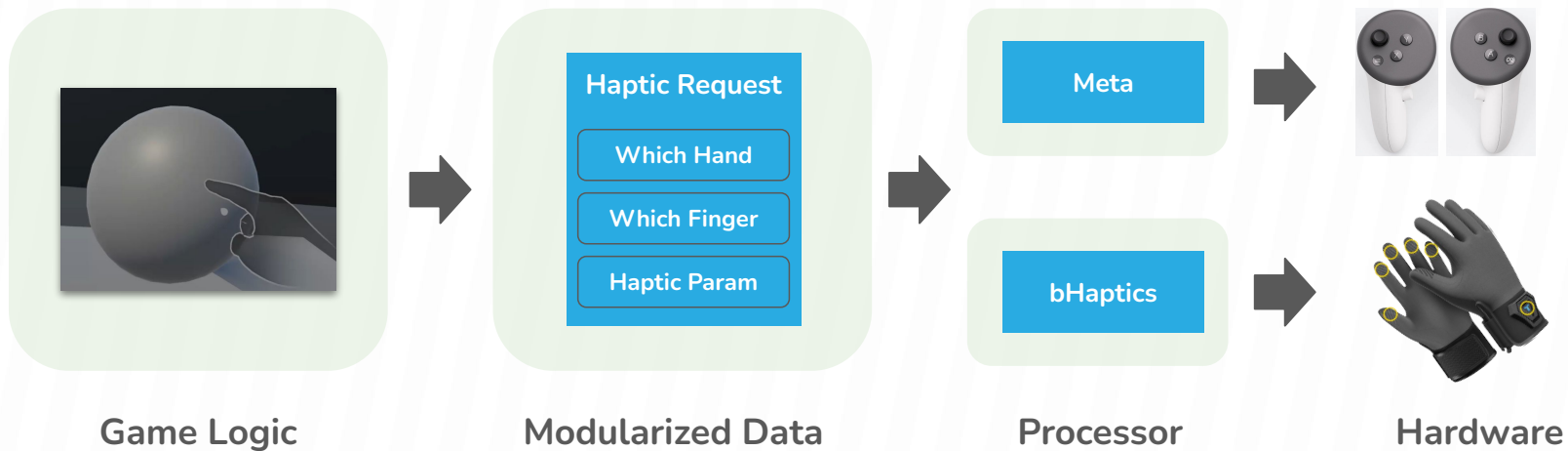
6 Vibrotactile Feedback Points



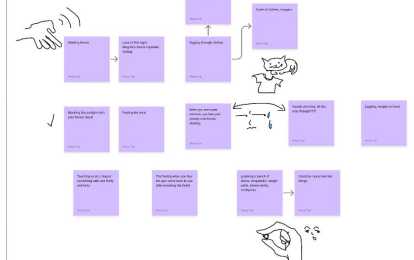
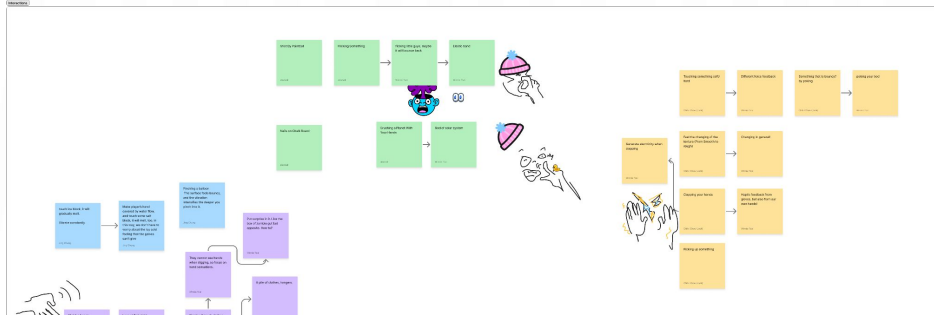
bHaptics Designer Interface



Code Architecture



Brainstorming



opportunities for surprise

random event

magical cool effects

You feel your feelings just by looking

depending on what context we made

very imaginable just by the description

abstract / magical feelings

our project cool in context allows for magical to realistic mappings

Possibly by visual or sound already scary

How to distinguish / test context vs haptics

particular system

particular system - reactive mesh, finger tracking, cool use of technology

player's CROW

superhero

superhero is a character that is a crowd of people

Time related changes

haptic patterns to change wrt time

Bouncy

poking

Pinching

Putting hands together

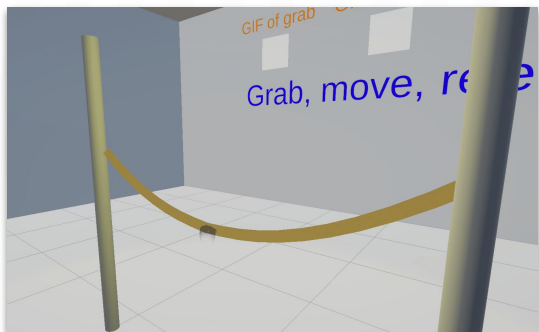


**We can do
anything, but we
can't do
everything.**



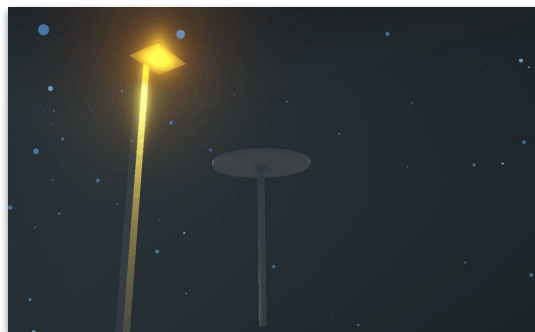
Exploratory Prototypes

Elastic Band



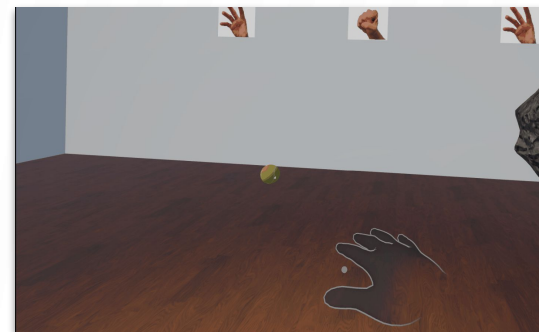
Resistance

Rain



A/B Testing
(with/ without context)

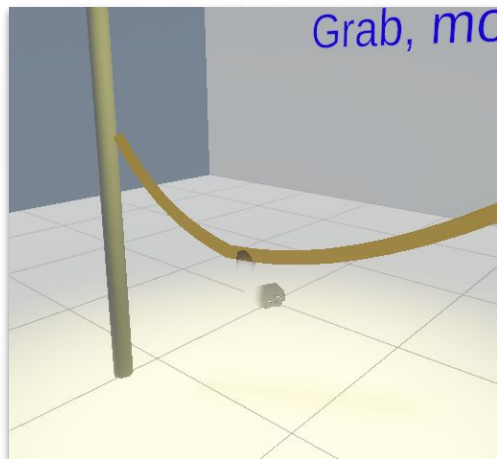
Telekinesis



Abstract Interaction

Playtesting Round 1

Exploratory Prototypes

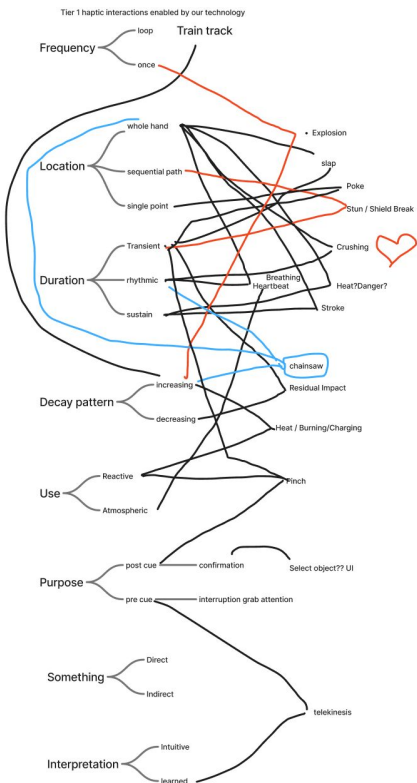


Interactivity must match haptic patterns



Spatial positioning matters

Patterns from Parameters



Patterns

- Poke
- Explosion
- Breathing
- Crushing
- Heartbeat
- Stun
- Heat
- Select
- Tension
- Slap
- Residual Impact
- Pinch
- Train track
- Chainsaw
- Stroke

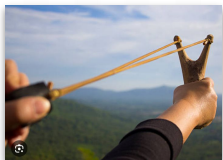
Haptic Pattern Testing



Explosion



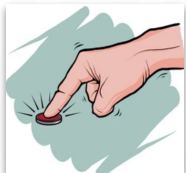
Stroke



Tension



Heat



Poke



Chainsaw



Slap



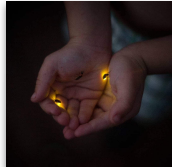
Train Track



Breathing



Crushing



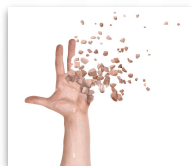
Fireflies



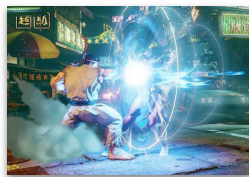
Heartbeat



Stun



Hand Dissolving



Releasing Power



Haptic Patterns



Playtesting Round 2

Haptic Pattern Testing



Mean only one thing



Mean multiple things



Gesturing enhances understanding

Haptic Patterns to Prototypes



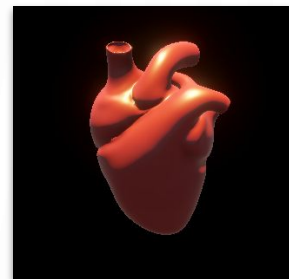
Selected Prototypes



Slap



Pinch



Heart beat



Breathing



Stroke



Crushing

Context Prototypes

Slap



Audio Difference

Pinch



Text Difference

Heartbeat



Pattern Difference

Playtesting Round 3

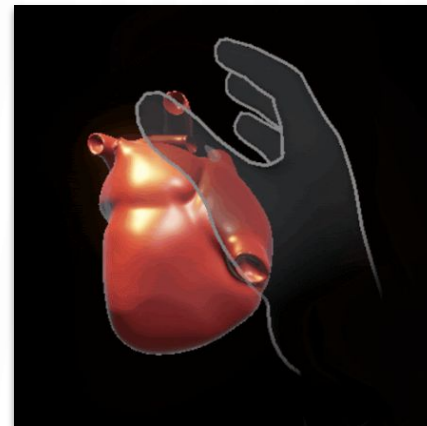
Context Prototypes



Context amplifies haptics



Tough haptic interactions make tough



Changing patterns changes emotions

Continued playtest

Energy



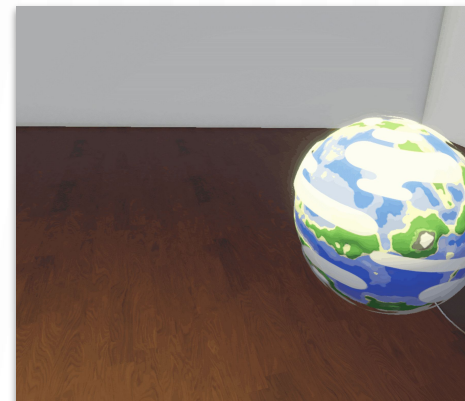
Haptic Difference

Stroke



Object Difference

Crushing



User Interaction

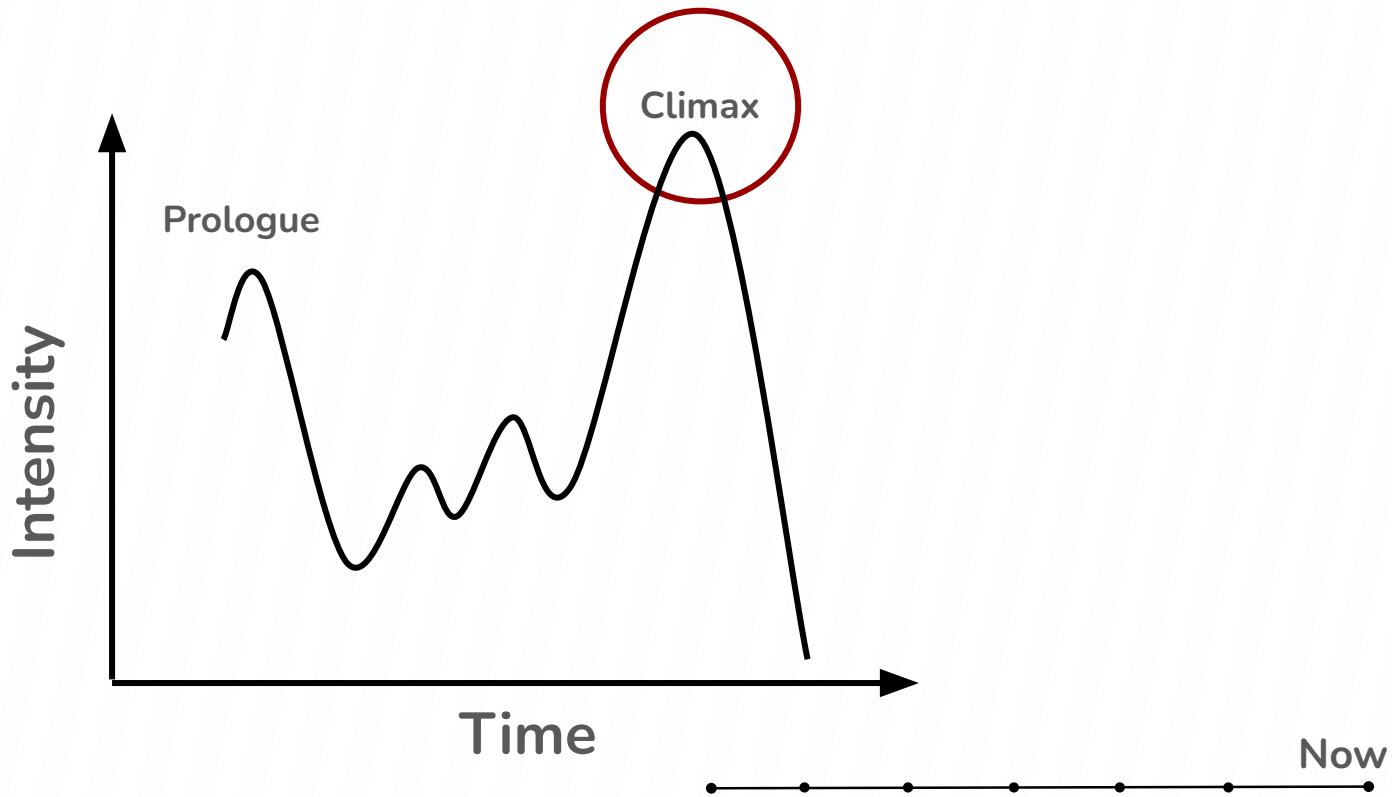


Experimentation into design

Guiding questions

Pattern	Emotion
Climax	Theme

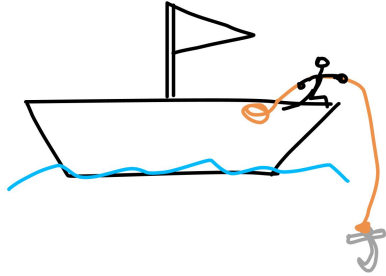
Final Experience





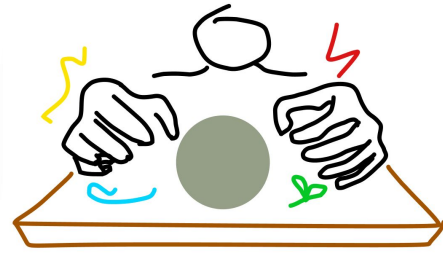
Ideas

Powerlessness



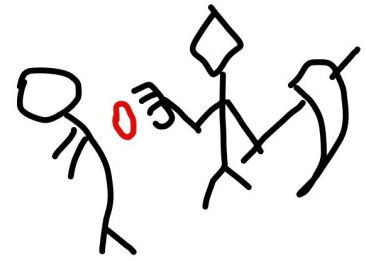
A shipwreck salvager pulling ropes

Powerful



A deity creating a new world

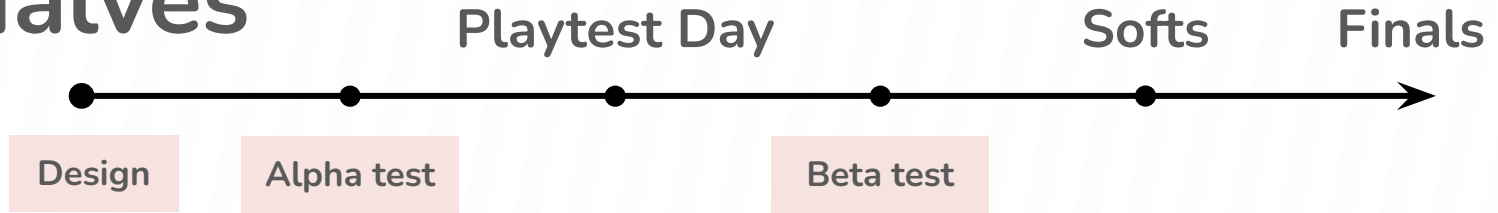
Mourning



A reaper bringing people to the other side

Looking Forward

Halves



Documentation

Research Notes

Because we are working with novel technology, we always make sure insights came from sufficient research in the fields of Human-Computer Interaction, Psychology, and more. We also created a one-page summary of the playtesting insights we gained.

RESEARCH

INSIGHTS

Experience

☰
 bHaptics
🏠 🛒 🗨️

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🔍

🔑 Platform ▾
TactGlove ▾
Support Type ▾
Genre ▾

9 items
↕ Most Played

Native bHaptics Player

🌀 Meta Quest

TactSuit Pro & Air TactSleeve

TactVisor TactGlove

Tactosy for Feet Tactosy for Hands

Native Synth Riders

🌀 Meta Quest 🎮 Steam VR 🎮 PS VR2

TactSuit Pro & Air TactSleeve

TactVisor TactGlove

Tactosy for Hands

Native bHaptics TactGlove Demo

🌀 Meta Quest

TactSuit Pro & Air TactVisor

TactGlove

Native Galactic Repair

🌀 Meta Quest

TactSuit Pro & Air TactVisor

TactGlove

Native Touchly Volumetric VR Vide...

🌀 Meta Quest

TactGlove

Native PathCraft

🌀 Meta Quest

TactSuit Pro & Air TactSleeve

TactVisor TactGlove



Thank you

TACIT - haptic gloves exploration to create emotional VR experience

Deliverable - exploration documentation + demonstration experience



Questions?

TACIT - haptic gloves exploration to create emotional VR experience

Deliverable - exploration documentation + demonstration experience