Somability
An interactive art experience to improve self-confidence and fitness
HELLO
Somability
An interactive art experience to improve self-confidence and fitness

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Somability

Inspiration

- Animation
- Interactive Arts/Exertion Games
- Co-Creation/Positive Design
- Design Principles
58,000 people with complex needs in England do not have access to digital innovation
By 2030 this figure will more than double*
Article 30 of the United Nations (UN) Convention on the Rights of Persons with Disabilities States that it is the right of persons with disabilities to take part in cultural life on an equal basis with others; furthermore they should have an opportunity to organize, develop and participate in disability-specific sporting and recreational activities.
The technologically adept and those with the most complex needs are not well connected....
Interactive art is defined through co-creation. The artist may be the originator but the artwork is something that needs to be actuated by a “user”. If the user “does nothing”, it remains unrealised potential.

Huhtamo, 2007
Exertion Games

The Exertion Games Lab, RMIT
Exertion Games

making physical gaming more accessible to non gamers
Interactive Arts

...are not bound by rules, interaction is emergent, rather than scripted as in a game scenario.

In describing the principles of interaction as emergent we are able to design for open-ended, creative, unpredictable, and ambiguous encounters, thus accommodating a wider range of participant interaction.

“Videoplace” Myron Kruger
Interactive Art

• Interactive art is potentially a unique, emergent medium, distinct from sculpture, graphic art or music.

• In order to respond intelligently the computer should perceive as much as possible about the participant’s behaviour.

• The participants should be aware of how the environment is responding to them.

• The visual responses should not be judged as art, nor the sounds as music. The only aesthetic concern is the quality of the interaction.

Myron Kruger
Co-Creation

collaboration in making propositions
Positive Design

designing for possibility
focus on the effect on subjective wellbeing

Desmet, Jimenez & Pohlmeyer, 2014
Propositions not Solutions
Design Principles

Make IT*Simple

* information technology/inclusive technology?
Leave out Everything Except the Magic
Go with the Flow
Make it Irresistible
Leave out Everything Except the Magic
Leave out Everything Except the Magic

• cause and effect: causality - action = reaction

• pause and effect

• force and effect

• phenomena: elasticity, inertia, momentum, magnetism, velocity, acceleration

• pressure: tap, push, squeeze, stretch

• space: up, down, high, low, left, right
Leave out Everything Except the Magic

Try out ReacTickles Magic
Go with the Flow
Go with the Flow

- clear goal [personal]
- total energised focus [attention]
- actions and awareness merge [skill appears effortless]
- lose awareness of self [increased following flow state]
- sense of control over actions
- time goes by unnoticed
- intrinsically rewarding
Go with the Flow

Try out Somantics
Make it Irresistible
Make it Irresistible

- discover a theme [Laban]
- stimulate the senses [visually engaging]
- interaction should be palpable [easy to observe]
- social interaction [empathy]
- memorable [positive emotions override negative]
- holistic
- exciting
“Successful experiences are those that people find unique. They want to repeat them, build on them, they are enjoyable and sustainable over time”.

Desmet & Pohlmeyer, 2014
Make it Irresistible

Try out Somability
Positive Design requires a blend of top-down theories and frameworks with bottom up insights, anecdotes and stories
Methods

- Immersion
- Inspiration
- Ideation
- Visualisation
- Proposition
- Reflection
Immerse yourself in the user’s world
Recruit Lots of Different People
Identify Key Themes and Sources of Inspiration
Towards Independence

Towards Independence provides a framework of activities through which personal, social and independence skills can be developed and accredited for those with severe learning difficulties (SLD) and profound multiple learning difficulties (PMLD).

Towards Independence offers formal recognition for small steps of achievement towards a larger goal. Modules can be used separately and accumulated to build a record of personal achievement.
Obtain Consent to Record
CONSENT FORM FOR SERVICE USERS

I........................................ Would like to take part in the Somability project. SERVICE USER or STAFF TO PRINT NAME

Please tick ✓ or cross X on the

YES smiley you can take my photograph

YES smiley you can take a video of me

YES smiley you can show it to other people SERVICE USER or RCT STAFF

Please use this space to tell us anything about you that may affect your enjoyment of this project.

Thank you.
Personas
About Me:
Things I respond well too - things that could help at difficult times.

Physical characteristics:
About my body and senses - I might need assistance with these

Friends and family, pets:
About my relationships with others - I have an older sibling, my best friend is...

Likes and Dislikes:
Tv, Games, Food, Sport.....Sounds, Colours, Materials.

Communication:
This is the best way to communicate with me.

MY SPECIAL INTEREST FOR THE WORKSHOP (CIRCLE)
MUSIC & SOUND | MOVEMENT & DANCE | TECHNOLOGY & DESIGN
About Me:
Things I enjoy and do - things that could help or make me feel better:

When people talk calmly
- Friendly people
- Smiley people

Physical characteristics:
About my body and senses - I might need assistance with these:

- My hands do not work very well.
- Painful when people touch my hands.
- Need help with cutting and opening things
- I understand most things, but do not speak as well.

Friends and family, pets:
About my relationships with others - I have or prefer making friends:

- I live with my mom and dad.
- I am going to Singapore next week for a wedding.
- I have 2 brothers, Robert (older) and Ashley (younger).
- I have lots of friends.

Likes and Dislikes:
TV, games, food, sport, sounds, culture, music:

- I like dance and drama.
- I like going to tea, cinema and the theater and out for tea times.
- I like cola and coke.
- I like pastas.
- I like to watch "Glee" and the Voice on TV.
- I do not like dogs and cats.

Communication:
This is the best way I communicate with you:

- Speak clearly and don't use complicated words.
- I understand things very well, but people might find it difficult to understand me and I sometimes lack confidence in speaking to people.

MY SPECIAL INTEREST FOR THE CLIVE WORKSHOP (PLEASE CIRCLE):
- Music & Sound
- Movement & Dance
- Technology & Design
Ideation
ECHO

1. Tracee tracks play back

2. MOVE LOOP

3. Start record. Idea is to return to original starting spot to see full loop.

4. Background removal

5. Record sequence. Presents both as separate images. May use one or two actions.

6. Objects fall from sky you sort into left and right means.

WALK IN trigger

Movement trigger record. Play back on exit from frame. Background removed. Play you back from...
EFFECT


2. Proximity fringes.

3. Starts with floating bubbles. Reduce size by popping till all gone.

4. Shapes fall from top. Soft left and right.

5. Touch the shape that shines.

6. Touching recall.

FGT.
PROXIMITY

1. 5 second video loop
   - trim speed

   As I get closer the loop gets shorter.

   OR

2. 5 sec
   - proximity of bodies

3. Ball fired into scene
   - Common ball

   Outer of frame is boundary.

   OR

4. Each person takes turn to fire ball
   - body is angle 45° deflecting angle.
Use this storyboard to plan out how your interaction will work.

Description:

Description:

Description:

Description:
Collecting Things
Choose shapes to fill the screen with layers of miniature versions.
Rhythm

First interaction - "Stamping" to trigger visual shock waves and sound.

Second interaction - "Simon says" style interaction.
Togetherness

One person fires the ball by shouting or making a noise.
One person catches.
Stillness

Tracing rails of movement behind you.
With different effects as the lines get older.
Modes

Mirror

Silhouette

Skeleton
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Your Turn!
Make things together
About Me:
Things I respond well to - things that could help at difficult times.

Physical characteristics:
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Use this storyboard to plan out how your interaction will work.

Name:

Description:

Description:

Description:

Description:
Reflection & Review
SOMABILITY ENGAGEMENT DIARY

Please use this to record Service User experience of using Somability.

YOUR NAME: __________________________

SERVICE USER: ________________________

DATE: ________________________________

LOCATION: ___________________________

DURATION OF SESSION __________________

INTERACTION MODE
Culminate Evaluation: ASDAN Using a Sensory Environment
On a scale of 1-10 could you rate service user development using Somability.

EXPECTATION
1. Awareness of activity:
   ○ Where they aware that the activity was going to happen?
   ○ Did they freely go the space where the activity took place?

Extra Notes:

CONTROL
2. Choosing:
   ○ Where they able to choose when to start or join in?
   ○ Did they recognize when the application or mode changed?

Extra Notes:

ADAPTATION
3. Working with others:
   ○ Did they show awareness of other people sharing the application?
   ○ Were they able to respond to others?

Extra Notes:

ANYTHING YOU WOULD LIKE TO ADD
Have Conversations
Your Interactive Art

collaborate in designing something magical and irresistible

• Think of a setting, who are the people in the setting?
• Think of a person, what makes them special?
• How could something magical happen?
• Draw 4 stages of the interaction
• Act it out
• Make things together
• Perform
• Review
Somability

THANK YOU

Somability has been co-designed with
Rhondda Cynon Taf
Skills for Independence
Artis Community
Cardiff School of Art and Design
Cariad Interactive
Somability

THANK YOU

Somability was generously funded by the Rayne Foundation, Rhondda Cynon Taf LEA and Microsoft Creative Evangelist Group

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