Brain Enhanced Gaming Concepts





Mentally Unlocked Special Powers

Use special powers when mental state is achieved

Genre Arcade Multiplayer Action

Senses Attention / Relaxation

Controls Character Specific Powers



Character suggested to player based on current mental state or character creation process.

Chosen Hero

When certain mental state is achieved, the default offensive or defensive abilities are replaced with dazzling special moves that are much more effective and interesting.

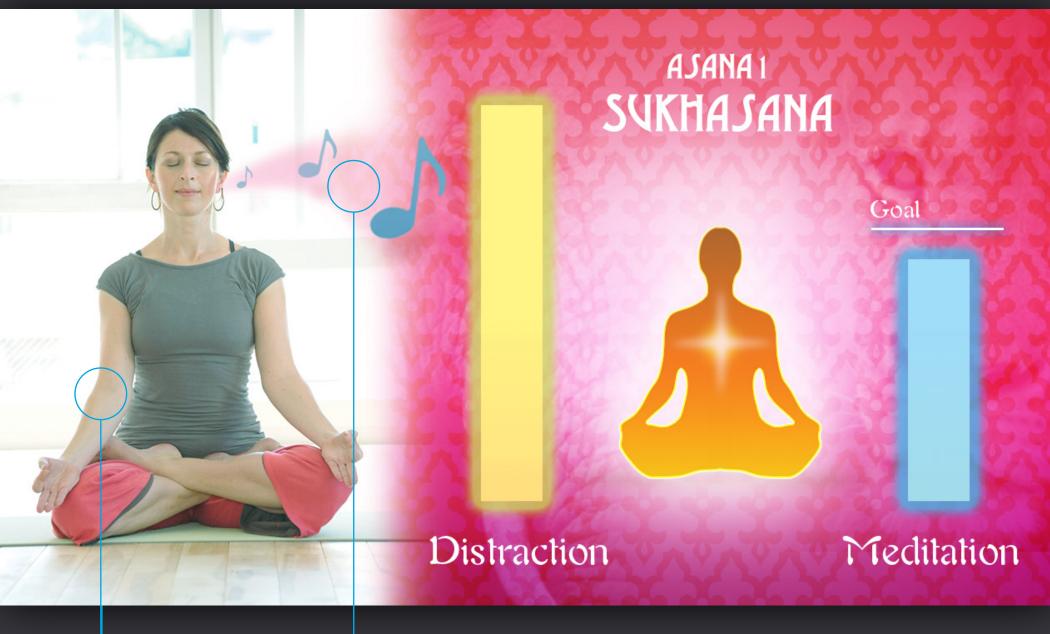
Mental Training with Game Feedback

Gaming prompts and guidance based on player mental state

Genre Casual Health and Wellness

Senses Relaxation / Breathing / Eye Blinks / EKG

Controls Audio Guidance and Rate of Advancement



Player (In front of television)

Audio prompts and adaptive music guide player to work on their breathing or how to attain a calm mental state based on their current state and difficulty level.

Mental Quick-Time Events

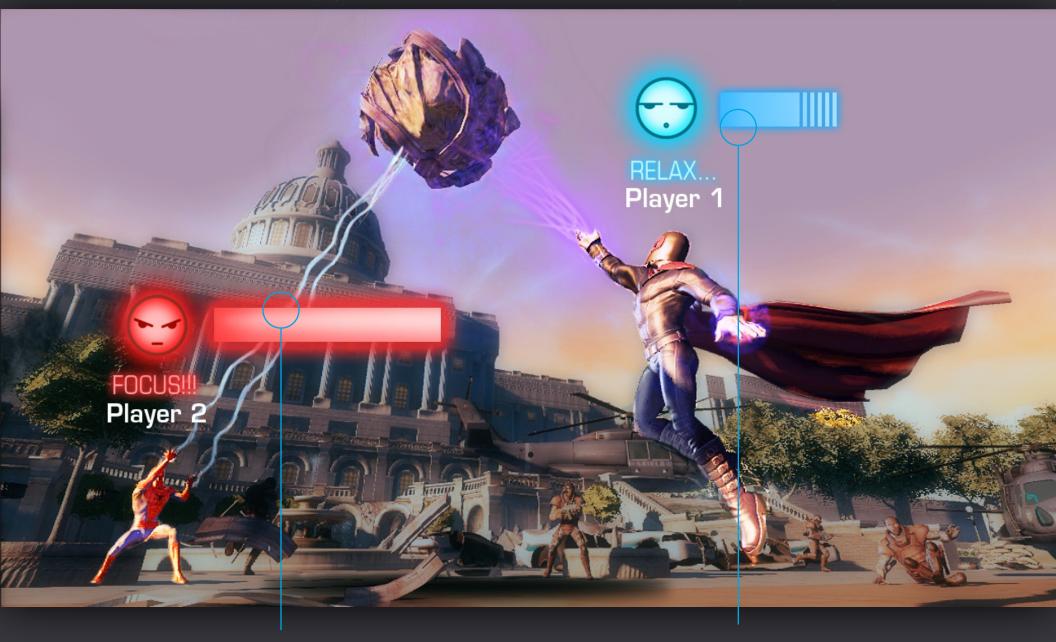
Quick-Time events that engage the player mentally

Genre Multiplayer Action RPG

Senses Attention / Relaxation

Controls Cooperative / Competitive Quick-Time Events

NeuroSky Confidential



This metal boulder will need to be moved by the team. If Player 1 (Magneto) wins the Quick-Time Event the boulder may be thrown at innocent bystanders without consideration. If Player 2 (Spider Man) wins it may be thrown clear, but also leave some enemies alive.

Whether the player Concentrates or Relaxes depends on the character they chose and the special ability being used.

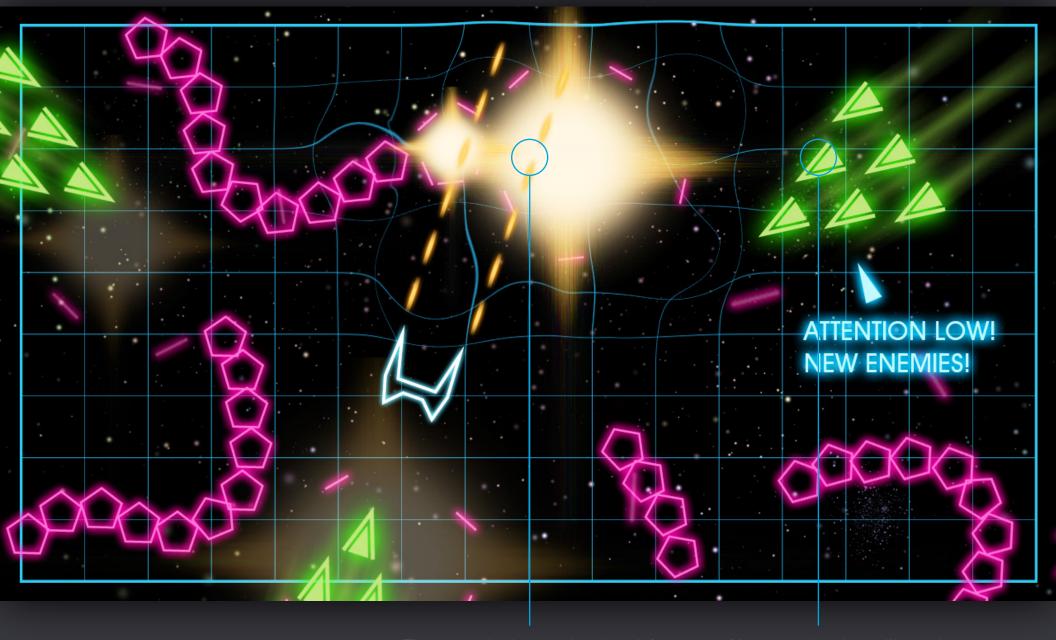
Adaptive Difficulty

Difficulty adjusts to maintain high player involvement

Genre Arcade Action

Senses Attention / Relaxation

Controls Frequency of Attacks, Enemy Selection



The player is devastating the pink enemies with ease. They have to pay little attention to the game.

New enemies that will require different tactics to fight are introduced to get the players attention.

Adaptive Environments & Enemies

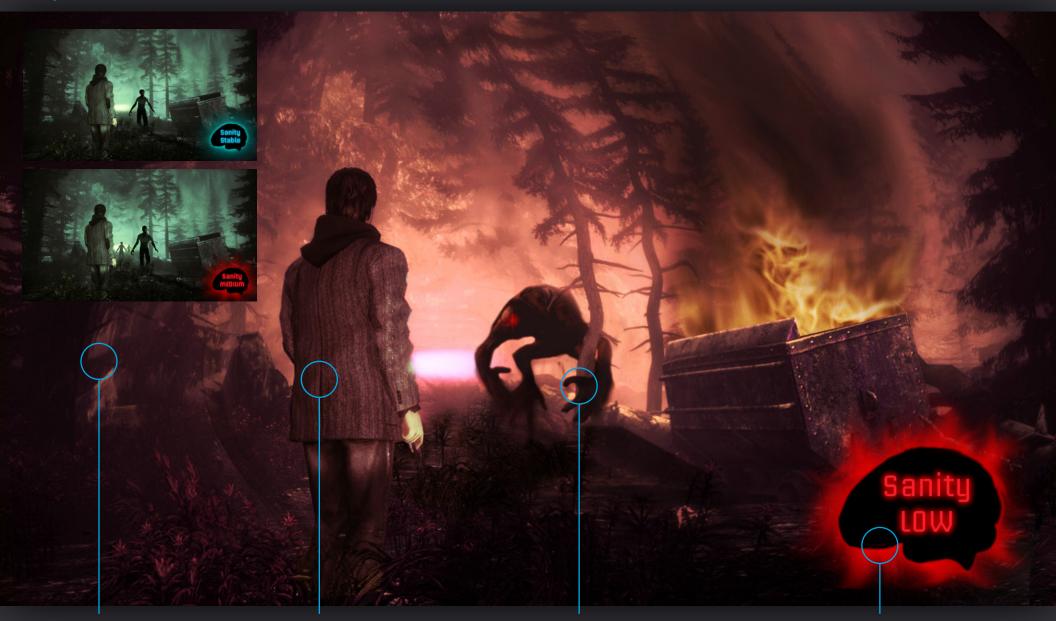
Game world changes based on player reactions

Genre Survival Horror

Senses Attention / Anxiety

Controls Which Enemies Spawn, Environment Appearance

Adaptive Environments and Enemies Genre Survival Horror Senses Attention / Anxiety Controls Environment / Enemies / Ai



Environment Morphs to create more compelling experience for player if attention drops. Player Character

Enemies spawn based on reaction of previous encounter. If player shows low reaction to a series of enemies, new types or surprising variations will spawn.

Certain areas or encounters may involve mental challenges in order to avoid dangers or unlock opportunities.
This players low sanity (not being able to maintain high levels of attention) will make this area much more difficult.

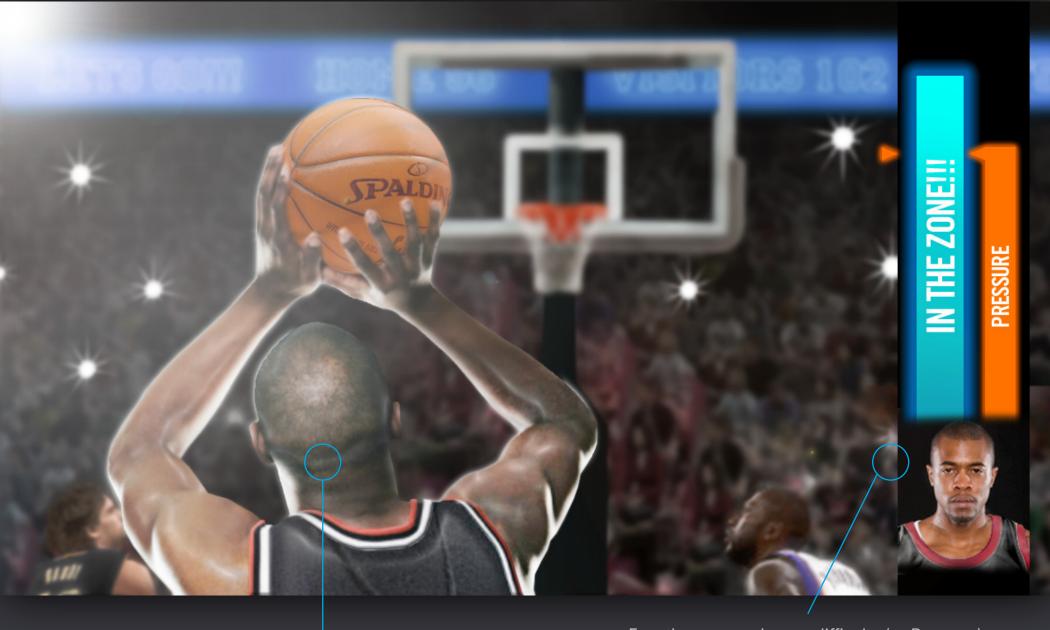
Sports Mental Challenges

Mental challenges at suspenseful points in the game

Genre Sports

Senses The Ready Zone

Controls Shot Success Chance, Player Performance



Player Character

Free throws may have a difficulty (or Pressure) rating based off the game conditions (score, home or away, player). They player must be sufficiently in the Zone to overcome the mental pressure and make a clean shot.

Player Adaptive NPC Interactions

NPCs reactions and dialogue change with player mental state

Genre Sci-Fi Action RPG

Senses Attention / Relaxation

Controls NPC Behaviour and Dialogue Options

Alien Teamate: Typical Human. Your fear of the task ahead is obvious. Pathetic.



Player Character

The dialogue choice wheel features lines that will require a test of mental fortitude. If the player cannot relax sufficiently to calm their teammate down or maintain focus while intimidating them to fall in line, the NPC may leave their party. Further engages the player's emotion in suspenseful interactions.

NPCTeam Member

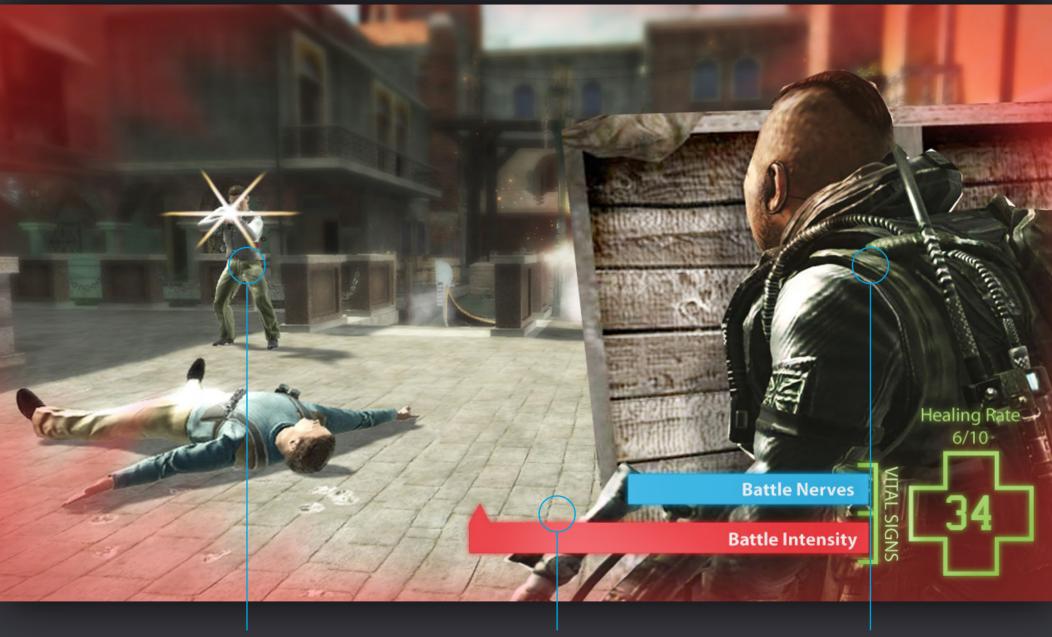
Context Sensitive Mental Challenges

Player must meet mental challenges to fight more effectively

Genre Military Shooter

Senses Relaxation

Controls Healing Rate Behind Cover



Enemy NPC

Player must calm themselves sufficiently to overcome the battle intensity and fog of war. The more calm they are, the faster they heal or gain additional performance benefits.

Player Character: Behind cover attempting to recover enough nerve to finish the intense battle.

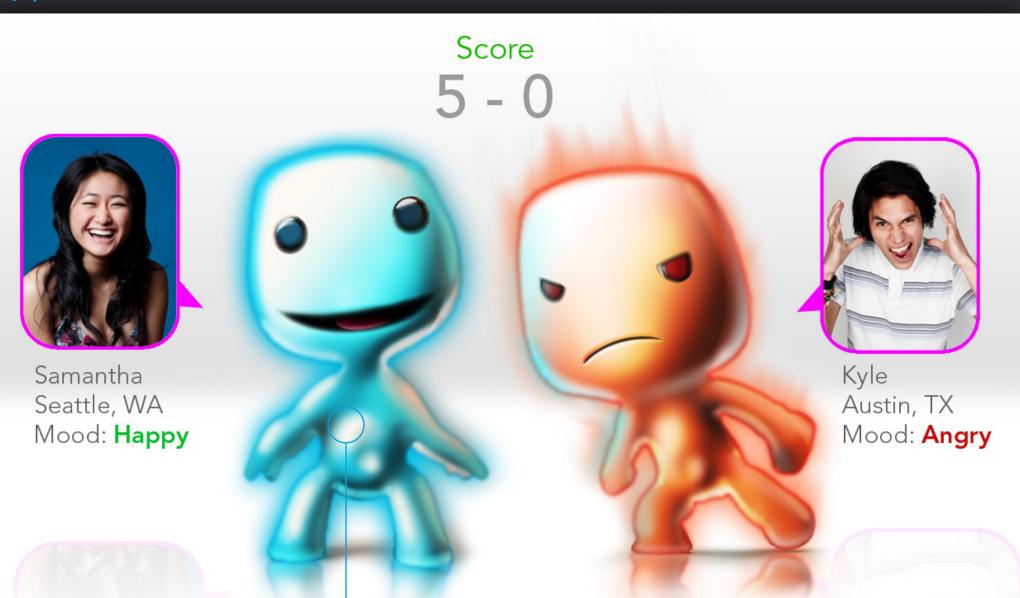
Sympathetic Avatars

Game avatars visually mimic player mental state

Genre Social / Casual

Senses Eye Blinks, Attention/Relaxation, Etc.

Controls Avatar Emote States



Two players competing online can show their feelings about the game directly through their avatars. Gives game characters more personality and provides a greater connection to the players personalized avatar.

Mentally Influenced Player States

Player mental state effects strategic game modes

Genre Third-Person Action

Senses Attention / Relaxation

Controls Effectiveness of Stealth



Enemy Vigilance score indicates how difficult they are to sneak past.

Stealth effectiveness based on how calm the player is. If they cannot calm themselves enough to sneak they may have to go into a direct fight or find another less guarded route.

Brain Powered Multiplayer Bonuses

Special events unlocked if players mentally synch up

Genre Multiplayer Party Game

Senses Relaxation / Attention / Distraction (Blinks)

Controls Special Bonuses



The R.A.D Score is based on player Relaxation, Attention, and Distraction (Blinks). If both players R.A.D is similar then they are in synch with each other and the music.

Huge bonus scores given for as long as they stay in synch.

Mentally Triggered Scripted Events

Special scripted events triggered with certain mental states

Genre Story Driven First Person Shooter

Senses Attention / Relaxation / Blinks

Controls Triggers Scripted Ambush Event



The player entered an area with a scripted event that triggers differently based on their level of attention. Low attention causes their squad to be taken by surprise ambush. High attention may have allowed them to take the enemy by surprise, or spot an alternate route.

Blink Triggered Events

Player blinks are detected and used as feedback in-game

Genre Action

Senses Involuntary Blinks / Flinches

Controls Boss Battle Special Events



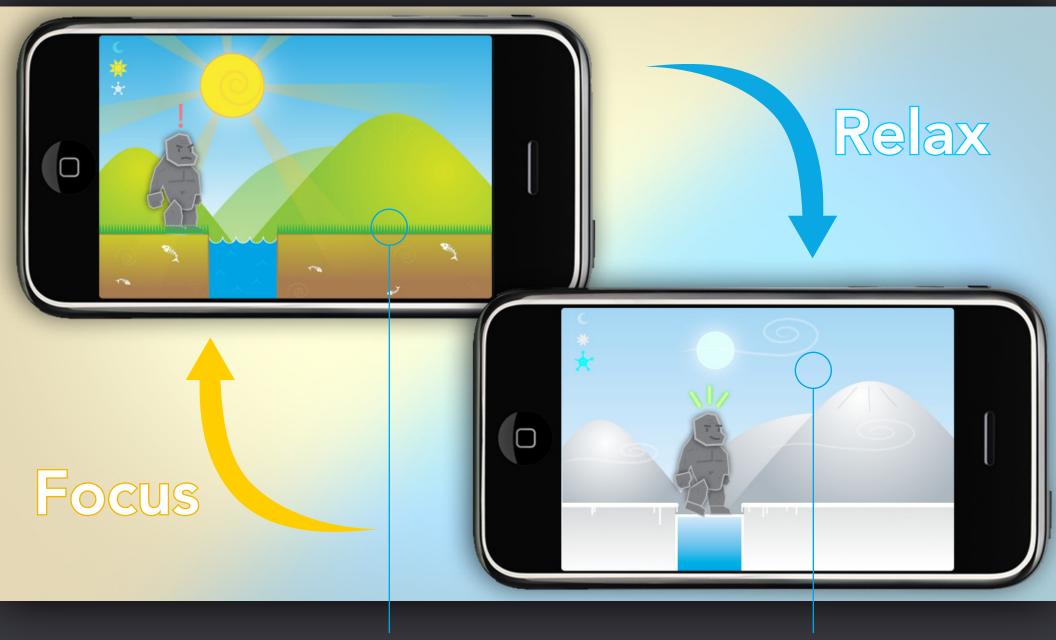
Mental Influence Over Environment

Change mental state at will to cause changes in game world

Genre Mobile Puzzle

Senses Attention / Relaxation

Controls State of Environment, Object States



Player Character: Controls environment state by concentrating or relaxing to solve situational puzzles. Environment willed to be frozen by player. Golem can now walk across the ice which was previously uncrossable water.

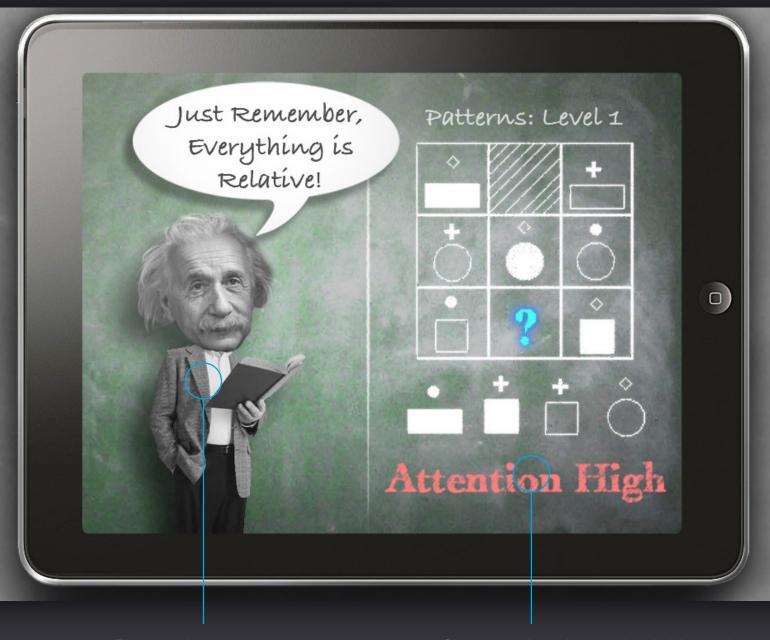
Beneficial Brain Training

Tracks player involvement in tasks to help guide and train

Genre Beneficial Gaming

<u>Senses</u> Attention / Relaxation

Controls Rate of Progression, Custom Challenges



Einstein character acts as guide and instructor for player. Mental state determines if he encourages, chides, suggests another challenge etc. Since the player's attention is high, this may be too difficult for them now. More challenges like this may be given to increase their skill or easier stepping stones.