PERVASIVE GAMES

BRINGING COMPUTER

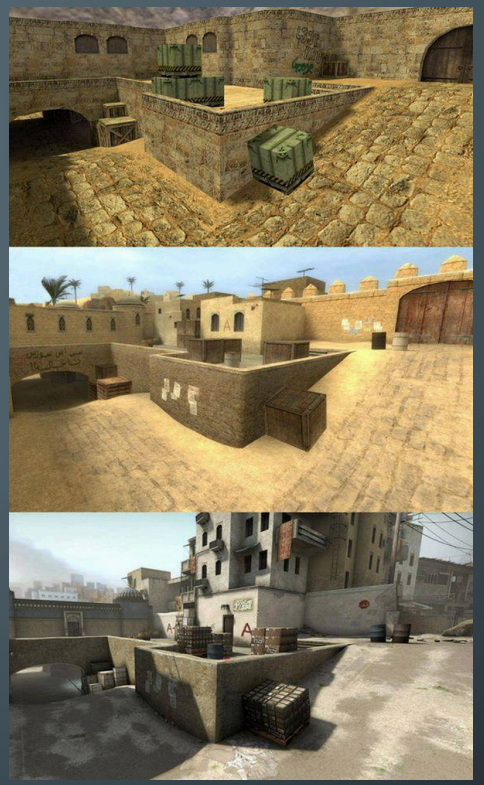
ENTERTAINMENT BACK TO THE REAL WORLD

TRADITIONAL GAMES

- Games played in Physical World
- Based on perception of space and spatial relations
- Human-To-Physical-World and/or Human-To-Human interaction
- Examples: Chess, Go, Tag etc.

MODERN GAMES

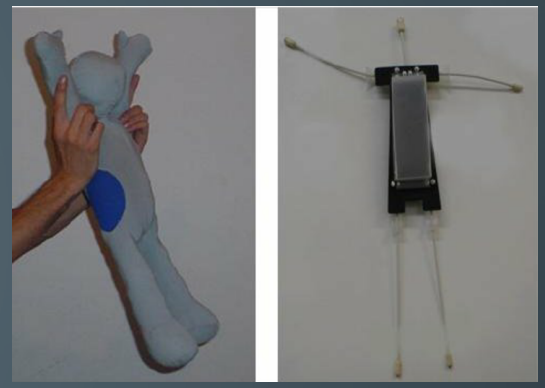
- Utilizes Computer Technology
- Popular because of:
    1. Immersion through sound and graphics
    2. Goals more interactive
    3. Complex enough for players
- Limited Physical and Social interactions



PERVASIVE GAMES

- Wants to combine modern and traditional games
- Combining computer technology with social and physical aspects of real-life
- Usually involves sensors, cameras etc.
- Five main categories:
  - Smart Toys, Affective Gaming, Augmented Tabletop Games, Location-Aware Games and finally Augmented Reality Games

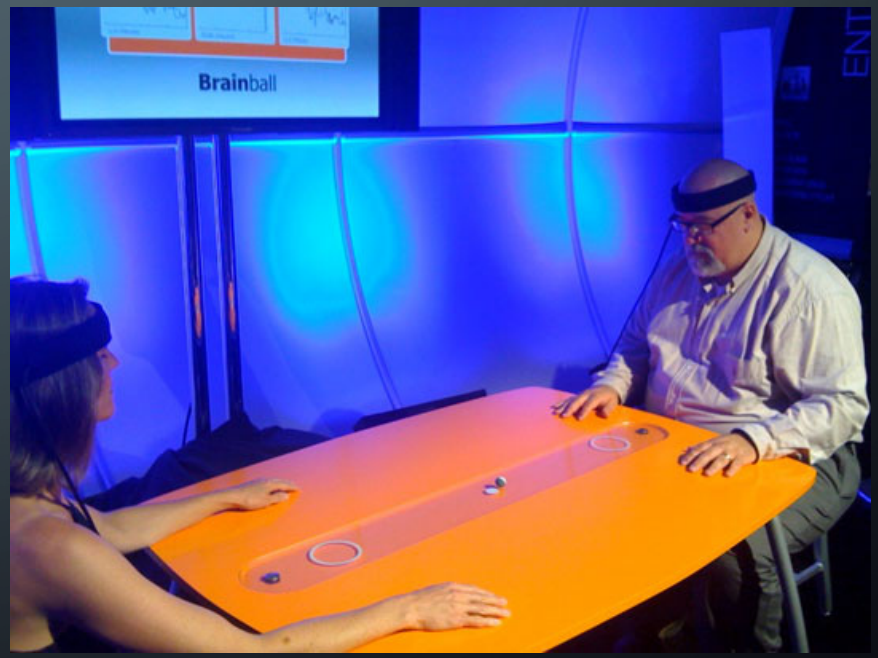
SMART TOYS



- Like regular toys, but with computer technology
- Still able to play with it like a regular toy
- But also allows interaction with computer logic
- Examples: SenToy, Zowie Playsets, etc.

AFFECTIVE GAMING

- Tries to incorporate players behavior/emotions into the game
- Through:
  - Sensors
  - Thermal Cameras
  - Voice Analysis
  - Facial analysis
- Examples: Brainball, Affquake, etc.



AUGMENTED TABLETOP GAMES

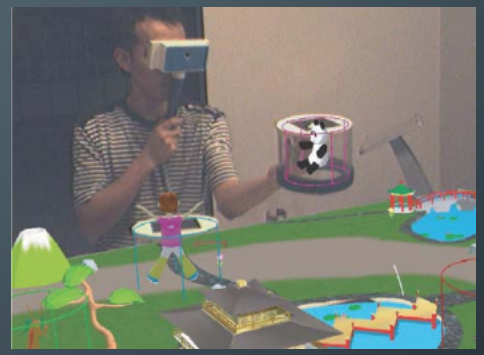
- Attempts to combine traditional tabletop games with computer technology
- Adding computer interactivity to tabletop game elements
- Examples: STARS Platform, Smart Jigsaw Puzzle, etc.

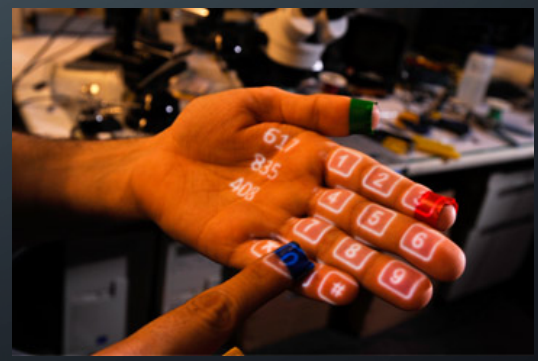
LOCATION-AWARE GAMES

- Real-world is game board
- People themselves are the proactive and unpredictable playing pieces
- Player locations tracked through: GPS, WIFI, Satelite Signals, GSM Signals or proximity sensing technologies
- Examples: Treasure, Uncle Roy All Around You, etc.

AUGMENTED REALITY GAMES

- Draws virtual objects in the real-world
- Three possible ways:
  - Headmounted display with camera
  - 2D projected image/video
  - Handheld devices with cameras
- Examples: Human Pac-Man, MagicLand, etc.





CONCLUSION