

Player Interface

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Principles

- consistency
- feedback
- player in control
- limits steps to action
- able to reverse action
- minimize physical stress
- easy on short-term memory
- cluster related items
- provide shortcuts for experienced players
- Heads-Up Display (HUD)

HUD from an FA18 Fighter Jet



Videogame HUD



Player Needs to Know = Feedback

- where am I?
- what am I doing now?
- what challenges am I facing?
- did my action succeed or fail?
- do I have what I need?
- am I in danger of losing?
- am I making progress?
- what should I do next?
- how did I do?

Player Wants to Do = Inputs & Controls

- move
- look around
- interact with NPC's
- pick up & put down objects
- manipulate fixed objects
- construct & demolish objects
- conduct negotiations, financial transactions, set parameters
- give orders to units/NPC's
- customize entities
- pause & save game state & end
- login
- set game options

Common GUI components

- **Action Bar**
 - A UI element consisting of a box or strip of icons (or menu items) corresponding to actions which can be performed.
- **Attract Mode**
 - Animation that plays when no one is actively playing the game. Typically a splash screen with a prominent Start button.
- **Gauges**
 - Vehicle speed, temperature, battery power, fuel remaining
- **Hot Bar**
 - A row of user-configurable buttons, usually located near the bottom or top of the screen.
- **Idle Animation**
 - The animation that is displayed when a character, especially an avatar, is just standing around.
- **Meters**
 - Life or Health meter
 - Stats, such as skill or experience points
 - Resources, such as Ammo or Power meters
 - Score
 - Usually shown together in a Status Line
- **Mini map**
 - Indicates player position in the world

Common GUI components

- Portraits
 - Show the avatar and other characters in the game. Used a lot in MMO games.
- Possessions
 - A display window of the tokens the player has collected
 - Weapons the player can use
- Radar
 - A mini map that shows the location of enemies that are not in the current world view.
- Ring Menu
 - An interface element where a list of possible actions are displayed in a ring or circle, often around a character.
- Leader Board
 - A display of high scores of players of the game.
- Scrolling Text
 - Used to display dialog
- Shell screens and menus
 - Save/Pause game
 - A/V controls
 - Help screens
 - Alerts
 - Login
 - Credits
- Vanity Pane
 - Small window displaying the game's logo

Anatomy of a GUI

Simoleons Playfish cash to Social Points to Level meter. Fill it
buy special items buy special items up and you level up!
Energy to accomplish tasks

9,530 4 13,35 11 22

Sim's action queue

"Happiness". If you fill it up to the brim, you get "Inspired" state and you earn x 2 money (aka Simoleons)

Make telephone calls and/or visit neighbors (and do something there) to increase level

Play game and browse the Internet using your computer. Play musical instruments for fun, watch television, etc.

My Sim

64K Classic Condo

Quests/Tasks

Level up all items to reach "Inspired" state

The image shows a top-down view of a virtual apartment. At the top, a status bar contains icons for Simoleons (9,530), Playfish cash (4), Social Points (13,35), and a level meter (11). Below this is a row of icons for Sim's action queue. On the left, a vertical list of Sim portraits is labeled 'Quests/Tasks'. In the center, a Sim character is circled in orange and labeled 'My Sim'. A green smiley face icon is labeled 'Happiness'. At the bottom, a row of icons for 'CLOTHES', 'SHOP', and 'CRAFT' is shown. Below that is a row of 'Bella' neighbor portraits, with one labeled 'Add Neighbor'. The bottom left corner shows '64K Classic Condo'.

Star Wars



World of Warcraft



Legend of Grimrock



Heavy Rain




Thematic Design: Long Island Museum Exhibit

CREATE YOUR OWN
CARRIAGE
GAME

Created by the Long Island Museum
of American Art, History & Carriages

Touch the Screen  To Start the Game

CHOOSE A VEHICLE TO BUILD



THE HAY WAGON



THE PARK DRAG


THE ROCKAWAY

THE CUTTER

THE PARK DRAG

Park drags are the perfect vehicles for elegant parties in the country. They often have features specially designed for picnics, such as trunks to hold food, wine, glassware, china, and silverware ... that can even be used as tables to boot!



Let's Start Building! 

THE PARK DRAG.



Replay 

Build Another Carriage 

Thematic Design: Long Island Museum Exhibit



Types of UI Representations

- **Diegetic**
 - Interface that is included in the game world -- i.e., it can be seen and heard by the game characters.
- **Non-diegetic**
 - Interface that is rendered outside the game world, only visible and audible to the players in the real world.
- **Spatial**
 - UI elements presented in the game's 3D space with or without being an entity of the actual game world (diegetic or non-diegetic).
- **Meta**
 - Representations can exist in the game world, but aren't necessarily visualized spatially for the player; these are meta representations. Example is effects rendered on the screen, such as blood spatter on the camera to indicate damage.

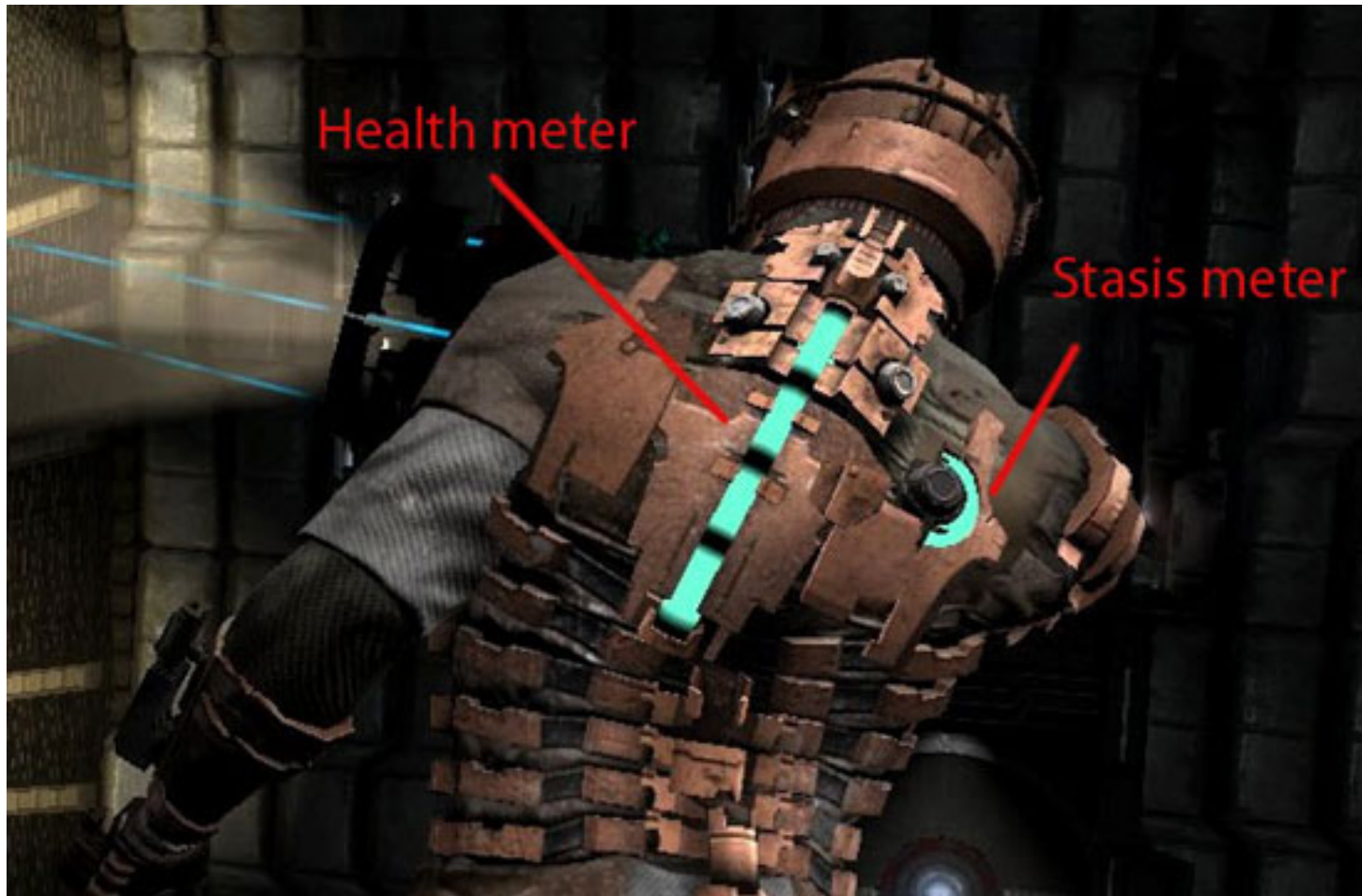
		Is the representation visualized in the 3D game space?	
		no	yes
Is the representation existing in the fictional game world?	no	non-diegetic representations	spatial representations
	yes	meta representations	diegetic representations

Fagerholt, Lorentzon (2009) "Beyond the HUD – User Interfaces for Increased Player Immersion in FPS Games"

Diegetic Interface from Far Cry 2



Diegetic Interface from Dead Space



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