Interfaces 1970's

Saachi Junagade

Magnavox odyssey

Analog Controllers: The Odyssey used paddle controllers with knobs to control on-screen elements.

Game Cartridges: Users could insert different cartridges to load various games, though these were limited compared to later consoles.

Physical Overlays: The system used plastic screen overlays to create game visuals on the TV screen, as the console could only generate simple on-screen objects.

Affordance

- The analog controllers had clear affordances, with knobs that suggested rotation.
- This physical affordance made it easy for users to understand how to interact with the game.

Signifier

- The physical design of the knobs signified their function—users had to turn them to control the game.
- The overlays provided additional visual context, signifying the game environment and objectives.
- Lack of on screen graphics

Mapping

- The mapping could be noticed between the controller's movement and on-screen action
- Turning the knob directly moved the on-screen paddle, providing a one-to-one mapping that was easy to grasp.
- Mapping and control of knobs changed for each cartridge

Feedback

- Feedback was immediate and visual.
- When users turned the knob, the paddle moved correspondingly on the screen, offering real-time feedback. This direct feedback loop made the interaction engaging and intuitive.
- Different games provided different feedback

Interface

Physical-Digital Interaction: The Odyssey blurred the lines between physical and digital interaction with its use of physical overlays and analog controls. This hybrid interface concept influenced future gaming systems and the evolution of game design.

User-Centered Design: The system was designed to be accessible to a broad audience, including those unfamiliar with video games, by leveraging intuitive controls and immediate feedback.

Atomic design- atoms

Switches: The console had physical switches for power, game selection, and screen overlays. These switches are the most basic interactable elements.

Cartridges: Each game was represented by a separate cartridge. Though simple in function, these can be considered individual atoms, as they represented distinct elements within the system.

Screen Overlays: Transparent sheets that users placed on the TV screen to simulate graphics (as the console itself did not generate detailed visuals). These overlays are another example of atomic elements.

Knobs: The console included dials and knobs on the controllers, which players used to control the game, making them essential atoms in the system.

Molecules

-**Game Setup**: The combination of a cartridge, a screen overlay, and the relevant switches creates a molecule that defines a particular game's setup.

Controller Interface: The controller’s knobs and buttons worked together as a molecule,

Each controller combined several atomic components to form a functional unit for user interaction.

organism

Complete Game Interface: When a user inserts a cartridge, sets up the screen overlay, and configures the knobs, it forms an organism that represents the entire game interface. This organism is the complete setup needed for gameplay.

Console Unit: The entire console, including the cartridge slot, switches, and output to the TV, is another organism that facilitates the interaction between the user and the game environment.

Pages

Game Session: A full game session, where a player interacts with the console, switches between games, and uses different overlays, represents a page in the atomic design system. This page encompasses the user’s entire experience with the device during one session.