

Individual Assignment

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1. Good Interface: Philips Sonicare DiamondClean 9000 Toothbrush

The Philips Sonicare DiamondClean 9000 is a good example of a well-designed physical interface. It shows how a daily product can combine simplicity, ergonomics, and feedback to create an intuitive and effective user experience.

Reasons why it is good:

- Clear purpose: The brush shape and bristle arrangement immediately indicate its function, and the ergonomic handle naturally guides the user's grip and brushing motion.
- Ergonomic handle: The handle is curved and coated with a non-slip material, making it comfortable to hold even when wet. The weight and balance are optimized for smooth brushing.
- Feedback and guidance: The brush provides visual signals with LED lights and audio cues, as well as different brushing modes and pressure sensors that alert the user if they brush too hard.
- Accessibility: The brush is suitable for users of different ages and abilities, with an easy-to-grip handle and simple one-button operation for switching modes.
- Advanced features: Charging is simplified with a glass cup or USB-compatible charger, and the interface clearly shows battery status and mode selection.



Suggestions for improvement:

- Customization: Include more pre-set brushing programs for specific dental needs, like whitening, gum care, or sensitive teeth.
- Tactile feedback: Add more distinct tactile cues on the handle to help users identify modes without looking at the display.
- Environmental impact: Offer replaceable parts and more recyclable materials to reduce waste.

2. Bad Interface: Hoover HWP 69AMBC/1-S Washing Machine

The Hoover HWP 69AMBC/1-S washing machine is a good example of a physical product whose user interface exhibits design issues that lead to usability problems.

Reasons why it is bad:

- The control panel is crowded with many small buttons and a dial, some of which are unlabeled or use small icons that are difficult to decipher quickly.
- Feedback from the machine is unclear: users may not easily see how long the cycle will last, or whether the machine has successfully started or ended — making it uncertain if they have executed the correct action.
- The layout lacks a clear visual hierarchy: important controls (start, stop, pause) are placed close to less-critical ones, increasing the risk of pressing the wrong button.
- Accessibility concerns: The text and icons are small and low-contrast, making operation difficult in dim environments or for users with impaired vision.
- Hidden states and error messaging: If an error occurs or the machine is paused, the indication is minimal — users won't necessarily know what went wrong or how to fix it quickly.

Suggestions for improvement:

- Simplify the control interface: reduce the number of buttons to the most frequently used functions (e.g., Start/Stop, Program Dial, Time Left).
- Improve visual feedback: include a clear display of remaining time, cycle progress, and status (Sleeping / Running / Completed).
- Enhance labelling: replace ambiguous icons with descriptive text (e.g., "Start", "Pause", "Quick Wash") and ensure sufficient contrast.
- Increase accessibility: use larger fonts, high-contrast colours, and slightly raised or textured buttons for easier tactile differentiation.
- Improve feedback when errors occur: provide informative error messages (e.g., "Door not closed", "Unbalanced load") and guidance on resolution.

