Lesson 3 Summary – Prototyping (Chapter 12)

This summary distills the key concepts from Chapter 12 (“Design, Prototyping, and Construction”) of Interaction Design: Beyond Human–Computer Interaction (5th ed.) and highlights what the slides emphasized about prototyping and reporting.

1. Why Prototype?

- Prototypes turn abstract ideas into tangible things people can react to and evaluate through design–evaluate–redesign cycles.
- Early prototypes can be rough (paper, cardboard, video) and become more polished over time as the concept matures.

2. What Is a Prototype?

- Any manifestation of a design to explore suitability with stakeholders (from a paper storyboard to a working software/hardware mockup).
- Typically emphasizes some characteristics while intentionally de-emphasizing others to answer specific design questions.

3. Fidelity & Manifestation Dimensions

- Low-fidelity: quick, cheap, and easy to change; ideal for exploring alternatives (e.g., sketches, storyboards, paper flows).
- High-fidelity: closer look/feel and interaction of the final product; useful for realistic tasks and “in the wild” trials—but can set false expectations.
- Manifestation dimensions help scope a prototype: Material (medium/tools), Resolution (detail/sophistication), and Scope (breadth of what is covered).
- Horizontal vs. Vertical: breadth with little depth vs. depth of a narrow slice.

4. Common Low-Fi Techniques

- Sketching & Storyboarding: visualize user tasks/scenarios step-by-step.
- Wizard-of-Oz: a human secretly simulates system responses to test interaction concepts before the system exists.

5. Choosing Fidelity

- Trade-offs: speed and flexibility vs. realism and robustness.
- Use low-fi to explore many alternatives; use higher-fi when timing, inputs, or contextual constraints matter.

6. Process Emphasized in Slides

1. Make a prototype
2. Test it
3. Change it
4. Test again