

# **Heuristic Evaluation: How To Do It**

# Nielsen's 10 Heuristics

- 1. Visibility of system status**
- 2. Match between system and the real world**
- 3. User control and freedom**
- 4. Consistency and standards**
- 5. Error prevention**
- 6. Recognition rather than recall**
- 7. Flexibility and efficiency of use**
- 8. Aesthetic and minimalist design**
- 9. Help users recognize, diagnose, and recover from errors**
- 10. Help and documentation**

# Heuristic Evaluation

- **A “Discount” UX Research method**
  - Cheap
  - Fast
  - No users!
- **An “Inspection” method**
  - A systematic “close read” of a user interface
  - Apply heuristics to find and explain problems



# How it works

- **Choose a set of screens/interactions for focus**
- **Step through, applying heuristics to find potential problems**
  - **Be sure to test error cases**
  - **Be sure to look at help system (if any)**
- **Write down all violations, big and small**
  - **And the heuristics they violate**
- **Assess the severity of each problem**
- **Create prioritized list of problems to fix**

# Assessing Severity

**1 = cosmetic problem; no real usability impact**

**2 = minor usability problem; fix if there is time**

**3 = major usability problem; important to fix**

**4 = usability catastrophe; imperative to fix**



# Example Finding

**Finding 1:** The total duration/time remaining is not displayed for a video.

Severity: 3/4

Heuristic Violated: *Visibility of system status*

The videos in both the courses in Praktio do not have the total duration and remaining time displayed. This is a violation of Nielsen's first heuristic, "Visibility of System Status". There is not feedback from the system about the status of the video apart from the indication that some part of the video is over. This is not enough amount of feedback for the user.



Fig: No indication of total duration/remaining time for video

**Recommendation:** The total time and remaining time for a video should be displayed as shown in the image below.



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# Prioritizing

- **Highlight top 5-10 problems**
- **Ranked in decreasing order of severity**
- **Use heuristics to explain why they matter**

# Multiple Evaluators is Better

- One evaluator finds 35% of “true” problems
- Five evaluators find 75%
- Ten evaluators find 85%
- Sweet spot between 3-5
- Solo evaluation can be very valuable



# Heuristic Evaluation vs User Testing

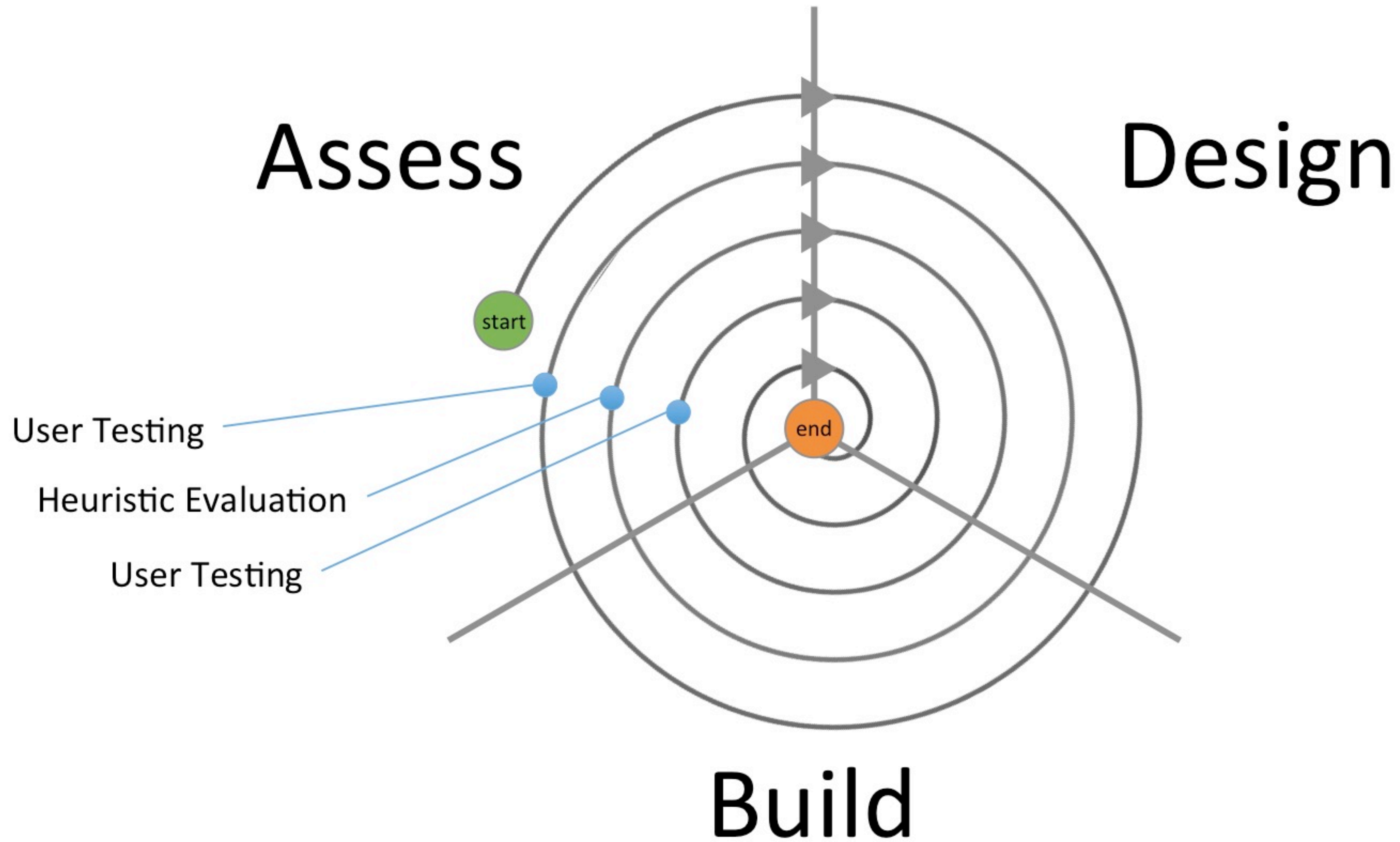
- **Heuristic Evaluation**

- Cheap
- Fast
- Don't "use up" potential users

- **User Testing**

- More realistic
- Find more problems
- Assess other UX qualities beyond usability

# Using Multiple Methods





# Summary

- **Heuristic Evaluation is a quick and inexpensive method to find significant flaws in a user interface**
- **Use Nielsen's heuristics**
- **Inspect each screen, including erroneous inputs**
- **Document each violation and assess severity**
- **Prioritize and document**