Objectives
✓ Simplify implementation of option-heavy user interfaces.

Differential Execution Algorithm
Allows any procedure to be executed repeatedly, retaining information from prior execution in a FIFO cache. It can run in these basic modes:
• SHOW mode creates objects and writes to cache.
• UPDATE mode both reads from and writes to cache, while updating objects.
• ERASE mode only reads from cache, and destroys objects.
• EVENT mode only reads from cache, and passes UI input events to proper object.
Conditional statements like IF—END create or destroy objects by temporarily entering SHOW or ERASE mode.

Comparison of UI Programming Paradigms:
Event-Based Object Oriented:
- Must declare all UI objects.
- Must create UI objects and construct object hierarchy of panels.
- Must write code to handle all events.
Differential Execution:
- Just "paint" the UI, not "build" it.
- all events handled automatically.

References