State & Test Stubs

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Opening Discussion

- Questions about projects?
- Did you read the Slate article?
- Which of these do you see as most likely?
 - Matrix/Terminator
 - Wall-E
 - Modern Dark Ages
 - Singularity
 - Alternate Utopia

State Pattern

- This is another compositional pattern. (This will be a trend.)
- Thing that varies: behavior based on some state.
- Make an abstract type with proper methods for behaviors.
- Create implementations of that abstract type.

Examples

- Settings for elements in SwiftVis.
- Transforms in 1321 drawing program.

Indirect Inputs

- Values that can't be provided directly by testing code (or other calling code).
 - Book uses example of clock.
 - Anything from hardware would qualify.
- The term *Depended-on Units* (DOU) represents aspects of the code that a test depends on.

Test Stubs

- These are replacements for DOUs that can be provided by test code.
- This gives tests direct control.
- Ideally you use Strategy pattern to provide the DOU implementation that you want.

Closing Remarks

 Can web apps rule the Earth? (What are the challenges to Google's dream of making all apps be web apps?)