Making Computers Suck Less

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Overview

• Obsolete UI Models
• New Concepts
• Étoilé Design Overview
Files

- Saving state to a disk
- Good in memory-constrained systems
  - Pre-date virtual memory
  - Pre-date multi-tasking
- Useful for interchange
Applications

- Originate with single-tasking systems
- Modes - very bad
- Duplicate functionality - inefficient
New and Modified Concepts
Stateful Workspaces

- Project as a top-level object
- Documents inside the project
- State maintained on exit
- Flash mock-up
Indexed Data Store

- Based on PostgreSQL or SQLite
- Full automatic undo
- ‘Checkpoint’ and ‘Publish’ - no ‘Save’
- Indexed for fast searching
- Intermediates cached if possible
Data Store: Different Approaches

• Unique Data Store, separated from the rest of the system (e.g., a big database)

• Multiple Data Stores (for each project, or each document): multiple databases (SQLite) or Documents Bundles

• Data Store as a FileSystem: HFS+, BeFS
Component Design

- Components manipulate objects
- Components can be loosely associated
- Components may use other components
Menus?

- Encapsulate all commands in an application
- Global to an application
- Standard interface
Vertical Menus

- Scalable to big screens
- Excellent for customising the environment using tear-off menus
Circular Menus

- Pop-up menus
- Similar to mouse-gestures
- Good motor-memory
Tabbed shelf

- A place where you can drag-and-drop objects -- not just files
- Tabbed interface
- Optionally:
  - Populated automatically
  - Display objects spacially
Floating Shelf Later

• Inspired by Apple’s Dashboard
• Assign a shelf to be “floating”
• Shelf floats above desktop, and can be hidden with a key press (e.g. F12)
• Arbitrary objects can be placed on the shelf, as with any shelf
Étoilé Architecture
Built On GNUstep

- GNUstep is an Object-Oriented development environment
- Provides proved API and development tools
- Very powerful and flexible
- Rapid development
- Provides Smalltalk-like development environment
- Based on Objective-C
Built On GNUstep

- New Theme, Nesedah
- Services
- Distributed Objects
- Scripting
Étoilé Generic Desktop related Frameworks
without involved dependencies on Étoilé Core Frameworks

- ApplicationKit
- Foundation
- Camaelon
- IconKit
- BookmarkKit

Related Frameworks:
- Etoile Generic Desktop
- User Interface Facilities
  - PreferencesKit
  - ServicesBarKit
    - StatusBar
    - inspired

- User Interface Decoration
  - IconKit
  - Camaelon

Clone
- AddressesKit
  - AddressBook
  - clone

Clone
- BookmarkKit
Étoilé CoreObject Framework

*persistency, distribution, operations* *(move, copy, store, restore, do etc.)*

Virtual Object System (like a VFS for objects)
- Object with UUID
- URL based interaction
- Persistent object related operations (like store, restore, move, copy etc.)
  - Written in C

CoreObject

**Local Memory Abstraction**
*Process memory or distributed objects, pipes, shared memory*

Languages bundles like:
- Objective-C
  (GNUstep Distributed Objects)
- Ruby
- Smalltalk etc.
- XML-RPC

**Local Storage Abstraction**
*Most of time POSIX compatible VFS-like implementation*

Various backends and language bundles

**Distant Abstraction**
*Local network, Internet*

**XML-RPC**
backend

**Freedesktop VFS**
backend
Étoilé Core Frameworks

*persistency, indexing, search, distribution, operations (move, copy, etc.)*

Étoilé Foundation-like framework
- CoreObject Objective-C wrapper and extension
  - Persistent objects interaction
  - Metadatas interaction
  - Indexing and search driver (known as FogVision)

```
ExtendedWorkspaceKit
↓
PersistentObjectKit
↓
Foundation
CoreObject
```

```
LuceneKit
```

*delegates*
Étoilé Services Frameworks

involves Étoilé AppKit replacement with components, services etc.
Questions / Discussion