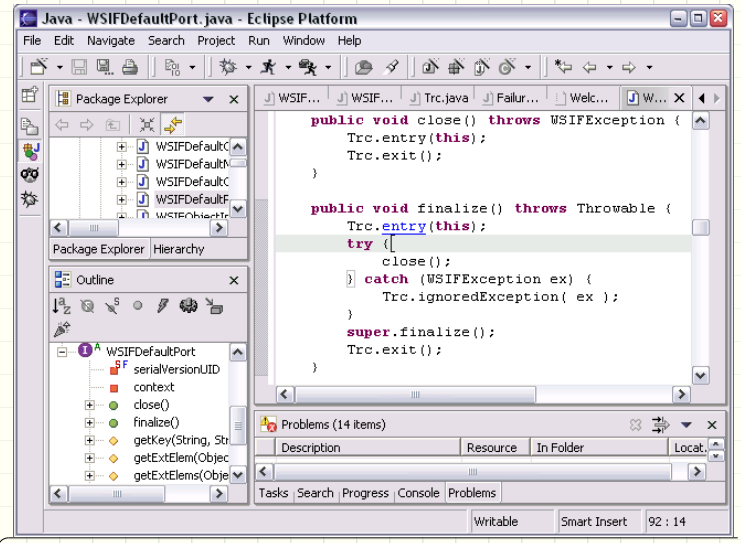
Too many views

Gutter is too crowded

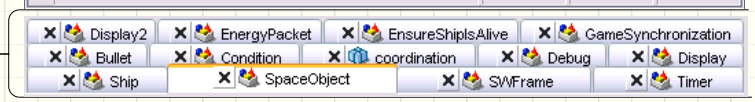
Too many nodes

Aspects make it worse

Problem with IDEs



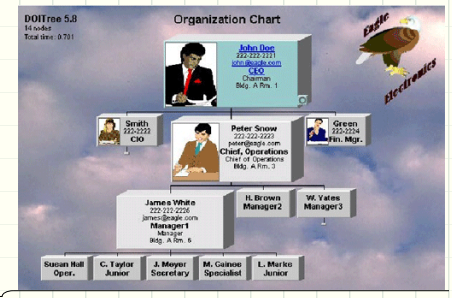
Tool little context



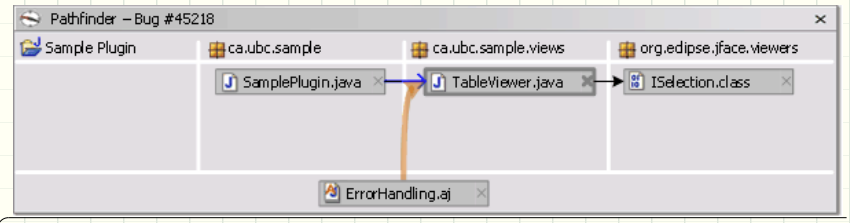
Motivation

Viz approaches haven't made it into current IDEs

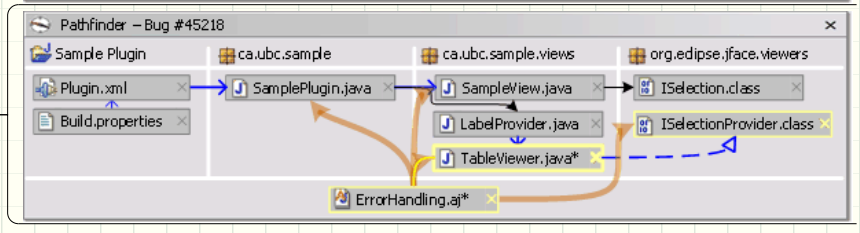
Degree of interest (Card)



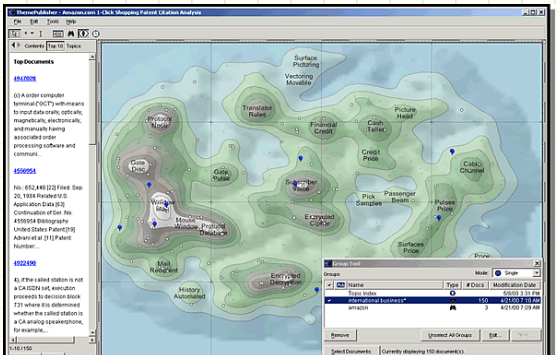
Make the paths evident



Nodes & edges



van Ham call matrices



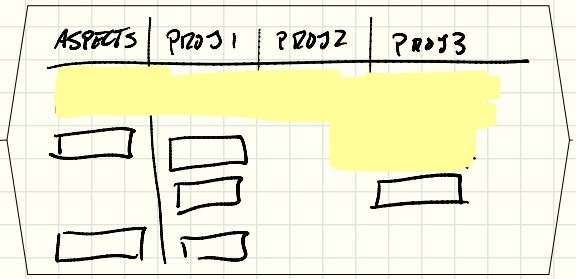
View ideas

Table & Regions

Pathfinder
by Mik Kersten

ThemeScape

Aspects vs. layering view



Context Model

- Relations
  - Object-oriented inheritance
  - References (e.g. method calls)
  - Component/package layering
  - Aspect-oriented crosscutting
  - JUnit testing
- Navigation/edit history states
  - Active
  - Has unsaved edits
  - Has compiler error
  - Recently edited
  - Recently viewed
  - Edited
  - Viewed
- Node
  - File
  - State
  - Revision
- Hierarchical structure
  - Project
  - Workspace
  - Multi-user
- Persistence
  - Per user & per project
  - Synchronization & revisions

Goals & directions

- Milestone status
  - March 9 (1 week): core plugin infrastructure; rudimental DOI model understands current, edited, and viewed files; simple table layout of open files.
  - March 23 (3 weeks): object-oriented relationships in DOI model; tree-style layout of nodes.
  - April 6 (5 weeks): aspect-oriented relationships in DOI model; support for model creation, multiple models, and externalization of model to file; relationships drawn as edges between nodes.
  - April 20 (7 weeks): tuning of DOI mode and visualization; hardening for real-world use to enable validation by SPL lab members; considerations for extending to higher-resolution displays.
- Validation of context model & DOI function
- Combining tree juxtaposer & DOI ideas
- Abstraction-based semantic zooming
- Multiple foci
- Dense displays
- Structured editor layout