

SWEVO

Software Evolution Research Group

Fall Activities



SWEVO Researchers



Punit
Agrawal
M.Sc.
Navigation



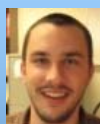
Barthélémy
Dagenais
Ph.D.
Documentation



Ekwa
Duala-Ekoko
Ph.D.
API Analysis



David
Kawrykow
Ugrad
API Analysis



David
Marple
Ugrad
Traceability



Tristan
Ratchford
Ugrad
Navigation

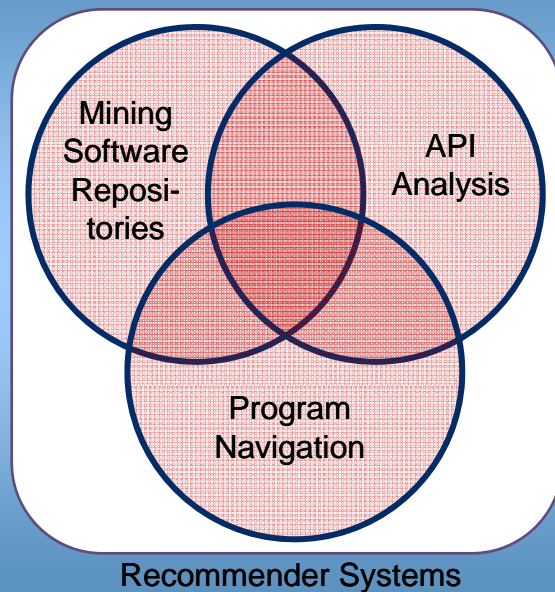


Jan
Rupar
M.Sc.
Security



Isaac
Yuen
M.Sc.
Refactoring

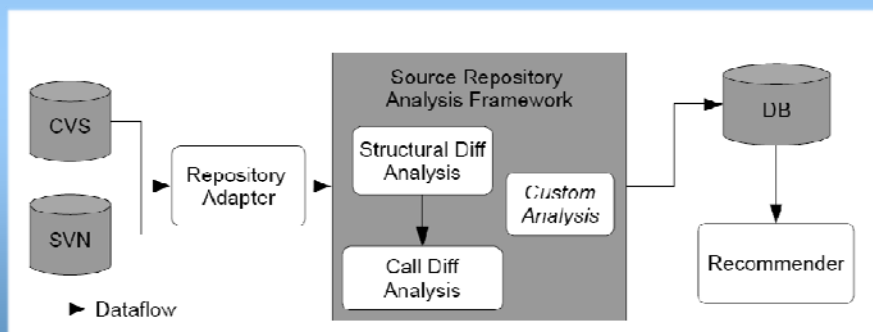
Flavors of the Year



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Mining Software Repositories

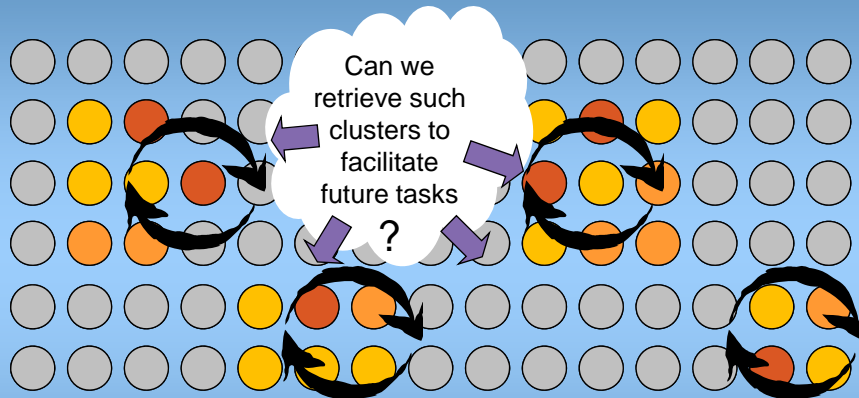
- SemDiff (Bart)
- Change Clusters (Martin & Bart)
- API Use and fault-proneness (Ekwa)
- Changes to bug reports (Dave M)



Bart's SemDiff Recommender – ICSE 2008

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The Idea of Change Clusters



WCRE 2008

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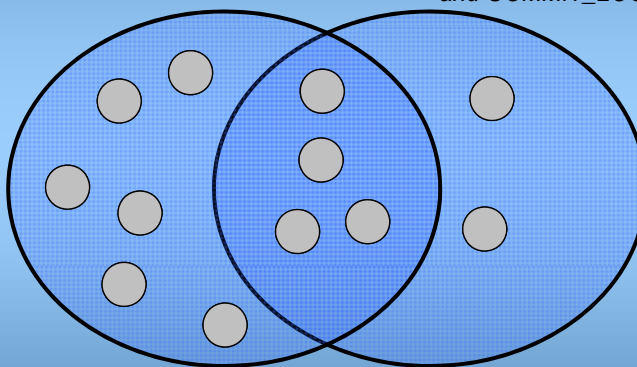
Locking in Lucene

August 2003:
added ability to wait on any Lock...

1005

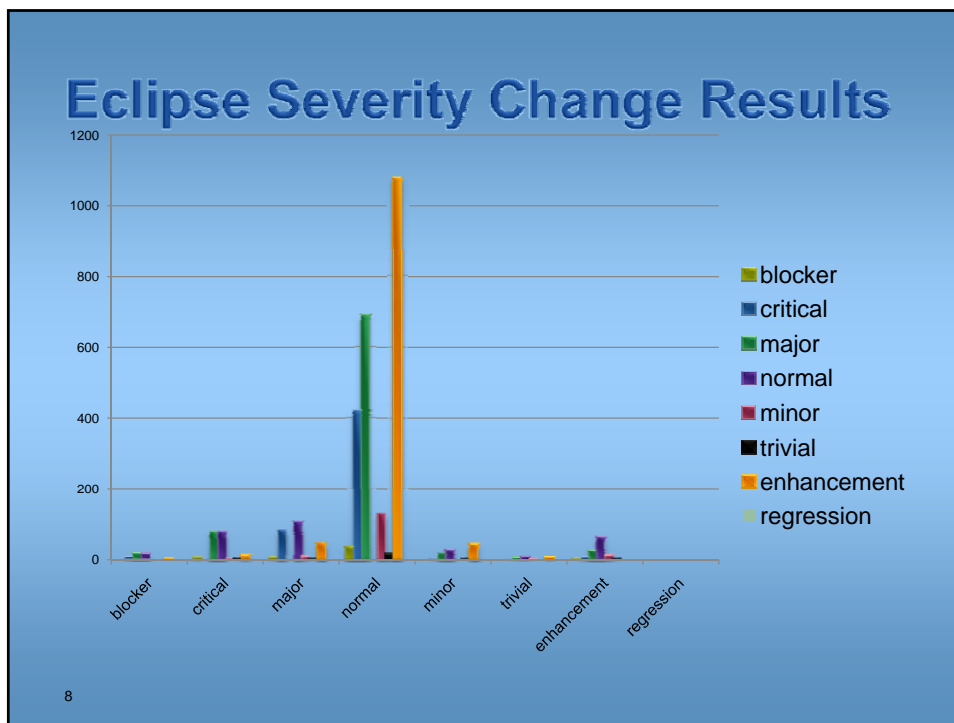
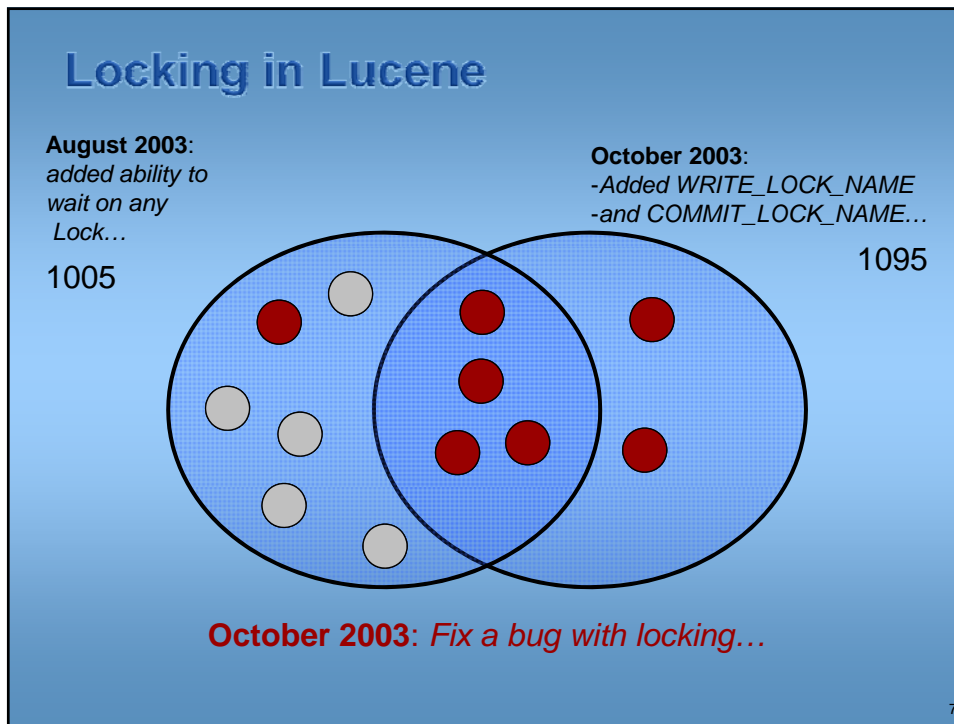
October 2003:
-Added `WRITE_LOCK_NAME`
-and `COMMIT_LOCK_NAME...`

1095

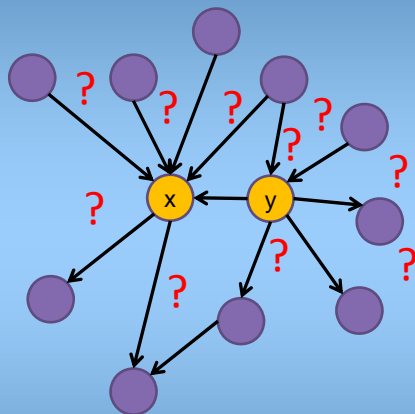


October 2003: Fix a bug with locking...

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The Scenario



```

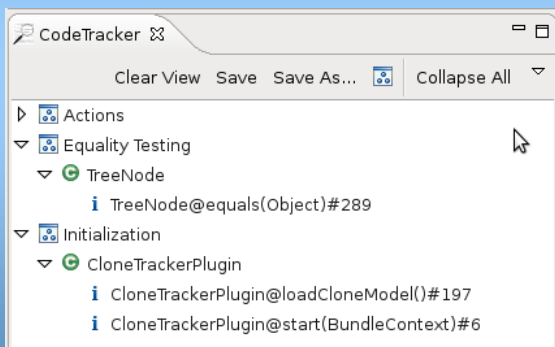
org.gjt.sp.jedit.textarea.JEditTextArea.getPainter() ~ 29 references in workspace (no JRE
org.gjt.sp.jedit.gui - src - jedit-4-3-pre3
  CompleteWord
    CompleteWord(View, String, Completion[], Point, String)
    completeWord(View) (2 matches)
org.gjt.sp.jedit.textarea - src - jedit-4-3-pre3
  ChunkCache
  lineToChunkList(int, List)
  Gutter
  MouseHandler
    mousePressed(MouseEvent)
    paintComponent(Graphics) (2 matches)
    paintLine(Graphics2D, int, int)
  JEditTextArea
    userInput(char)
  MouseHandler
    doDoubleClick(MouseEvent)
    doSingleClick(MouseEvent) (2 matches)
    doTripleDrag(MouseEvent)
    mouseDragged(MouseEvent)
    mousePressed(MouseEvent)
    showCursor()
  StructureMatcher
  Highlight
    paintHighlight(Graphics, int, int, int, Match) (2 matches)
    paintValidLine(Graphics2D, int, int, int, int)
  TextAreaDropHandler
    dragOver(DropTargetDragEvent) (2 matches)
org.gjt.sp.jedit - src - jedit-4-3-pre3
  EditPane
    handleBufferUpdate(BufferUpdate)
    MarkerHighlight
      getToolTipText(int, int)
      paintValidLine(Graphics2D, int, int, int, int)
      propertiesChanged() (2 matches)
  View
    hideWaitCursor()
    showWaitCursor()
  
```

Software development tools can find these methods automatically, but...

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Program Navigation

- Evaluating Context-Sensitive Rankings (Tristan)
- Program Navigation Analysis Using Machine Learning (Punit)
- CodeTracker (Dave M)



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