Case Study Software Change

1. Example of Software change
   1. Objectives
      1. Finding the significant concepts of the change request
      2. Concept location by dependency graph
      3. Impact analysis
      4. Actualization by creation of a new component
      5. Testing the changed code
2. Example: Drawlets
   1. Application framework Drawlets
      1. Adds graphical display to a host application
   2. Drawing canvas
      1. Lines, free-hand lines, rectangle, rounded rectangles, triangles, pentagons, polygons, ellipses, text boxes, images
3. Drawlets – features
   1. More than 100 classes, 25 interfaces and 40000 lines of code
      1. Originally implemented by Kent Beck, Ward Cunningham
      2. Later proted into Java
      3. Perfect API
      4. Original case study
4. The Host application
   1. Responsible for providing an instance of the drawing canvas, toolbars, and tool buttons
   2. Class SimpleApplet is a host application
      1. Is a part of the Drawlet library
      2. SimpleApplet runs in any browser
5. Change Request
   1. Implement an owner for each figure
      1. An owner is the user who put the figure onto the canvas, and only the owner should be allowed to modify it.
      2. At the beginning of a session, the users input their ID and password and they are the owners of all figures that were created during the session
   2. This change will make SimpleApplet more versatile and useful
      1. Support for cooperative work
6. Concepts
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