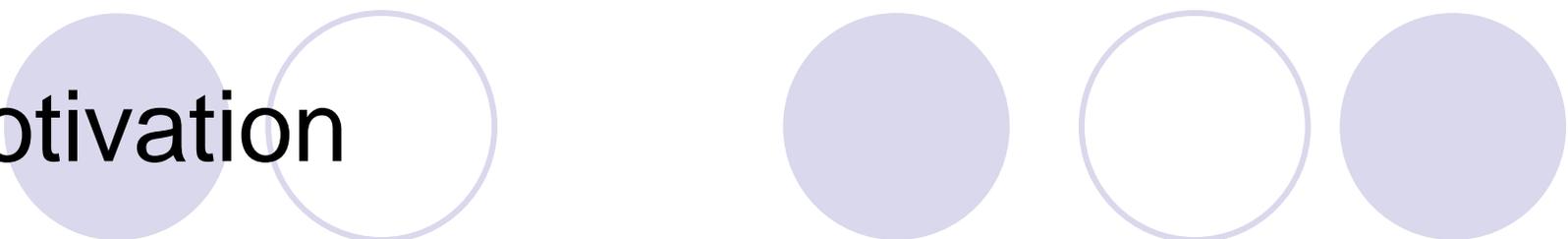
The slide features several decorative light purple circles. One circle is positioned behind the word 'Presentation' in the title. Another circle is behind the word 'scan' in the title. A third circle is behind the name 'Tao Xia'. Below the title, there are two more solid purple circles on the left side, and a fourth circle behind the date 'November 2, 2006'.

Presentation: CVSscan - visualization of code evolution

Tao Xia

November 2, 2006

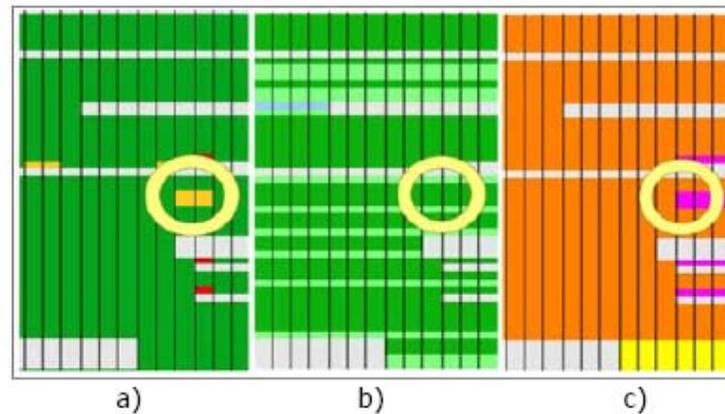


Motivation

- Help developers to better understand the status, history, and structure of code.
- Displays ownerships of the code.

Different color encoding

- Line status (constant, modified, deleted, to be inserted)
- Construct (block at different levels, comment, file reference)
- Author



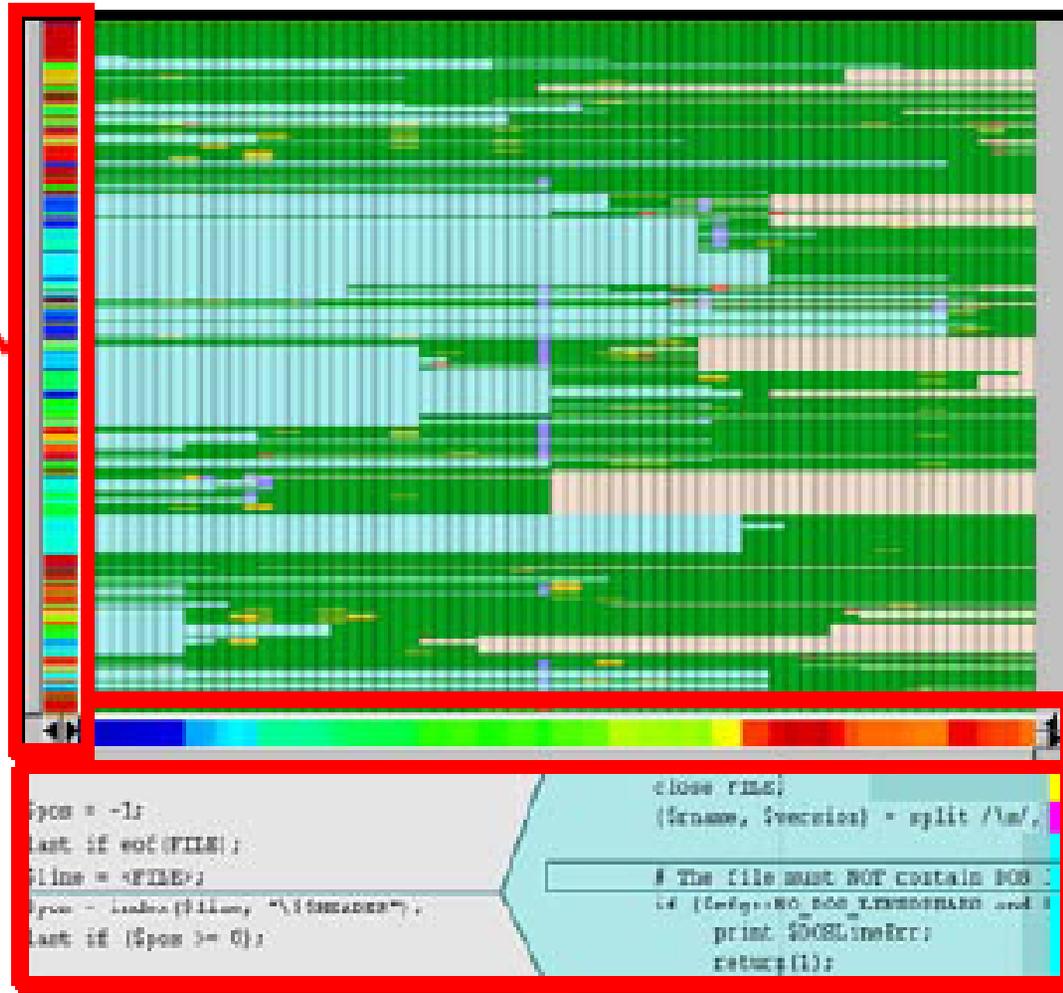
Multiple code reviews



- Displays multiple views in one screen
 - Number of lines in each revision
 - Author of each revision
 - Life time of each line

Multiple code reviews

metric
view



metric
view

code view

Visual Improvement

- It is difficult to show whole evolution of large file (cannot fit every line in one screen)
- Need to make more lines share the same screen pixel

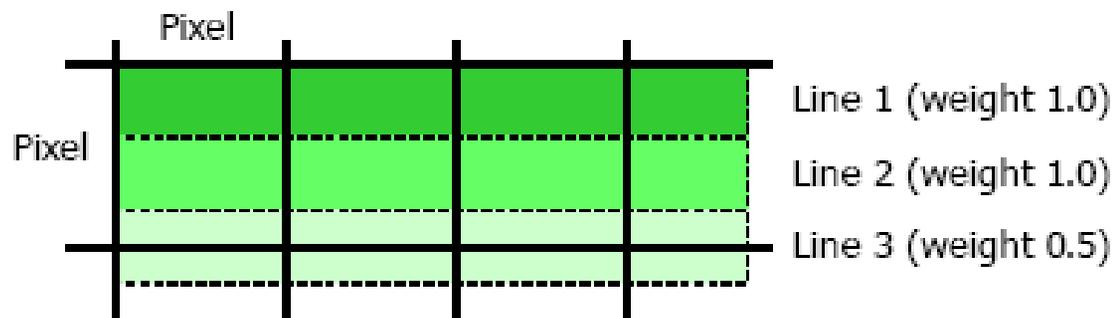
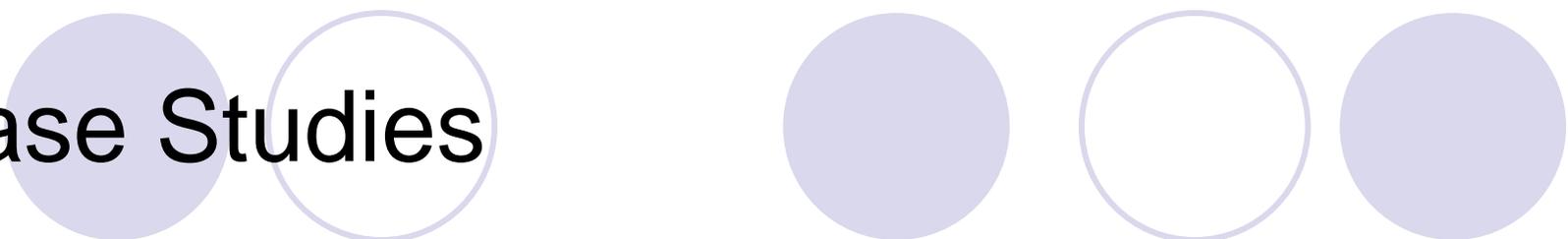


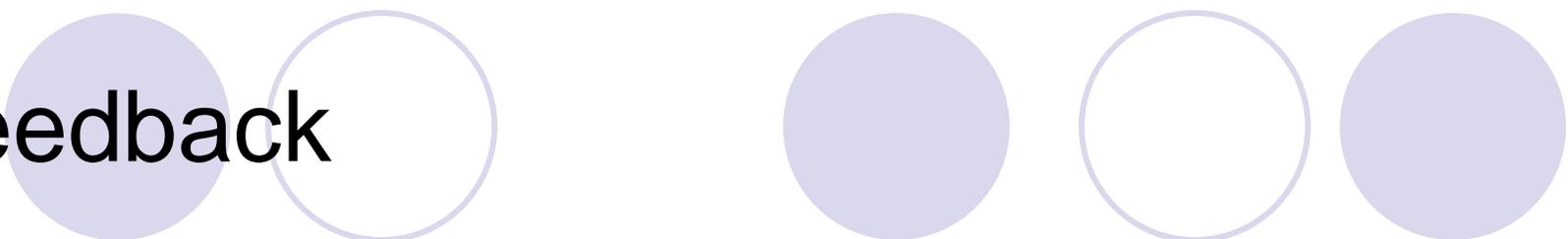
Figure 13: CVSscan antialiasing algorithm

Case Studies



- Let users to use this tool to navigate inside a file
- a Perl file and a C file
- Experiments show users get benefit from the tool to learn file organization and ownership.

Feedback

A decorative graphic consisting of two groups of three circles. The first group on the left has a solid light purple circle on the left, a white circle with a light purple outline in the middle, and a white circle with a light purple outline on the right. The second group on the right has a solid light purple circle on the left, a white circle with a light purple outline in the middle, and a solid light purple circle on the right.

- Positive

- Combines multiple reviews in one screen
- Different color schemes
- Shows great details for each file (ownership of each line, lifetime of each line)

- Negative

- Limited navigation ability between files. Only shows one file at a time
- Only 2 people case study. The case study limited to one file only.
- Some CVS info has been ignored (e.g. logs, files committed together)