

# AniMatrix

## A Matrix-Based Visualization of Software Evolution

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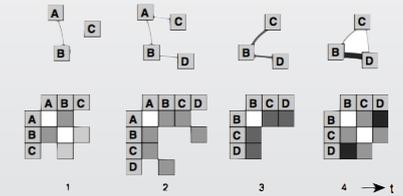
## Problem

- Software changes over time
- Hard to keep track of those changes
- Software engineers need tools to analyse it

## Technique Taxonomy

- Small Multiples
- Difference Maps
- Animations
- Glyphs

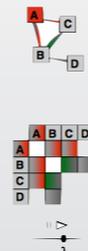
## Small Multiples



## Difference Maps



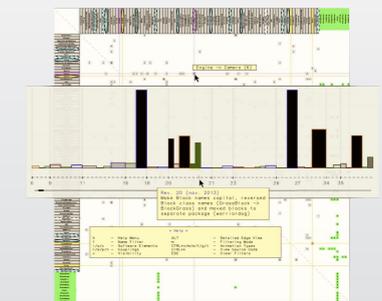
## Animations



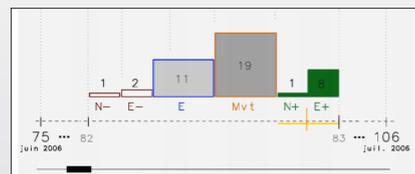
## Glyphs



## Animatrix



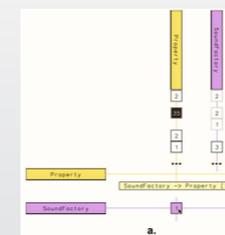
## History Navigator



## History Navigator

- Show changes between revisions
- Color indicate the type of change
- The orange line indicates the position in the animation step

## Matrix View



## Matrix View



## Matrix View

- Show the difference map of the current revision
- Allows to identify Usage, Design Stability and Restructuring of the software.

## Strengths

- Allows to easily identify anomalies in the evolution
- The History Navigator provides a way to quickly identify when the software changed
- The use of glyphs in the matrix allows an in-depth analysis

## Weaknesses

- Hard to compare two revision if they are not consecutive
- Lack of small multiples prevents to observe multiple difference at the same time
- Key-binds are not intuitive.

## Thank you

