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