

# Supporting Synchronous Software Development

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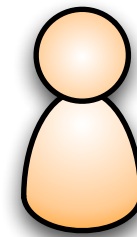
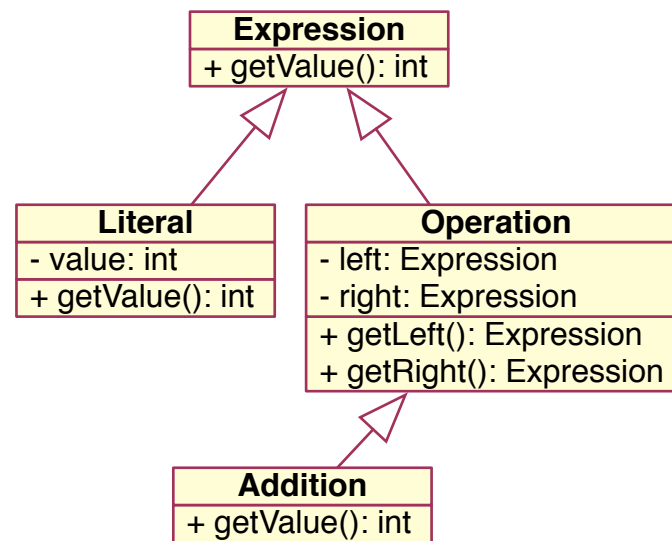
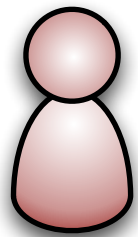


Augment collaboration among developers

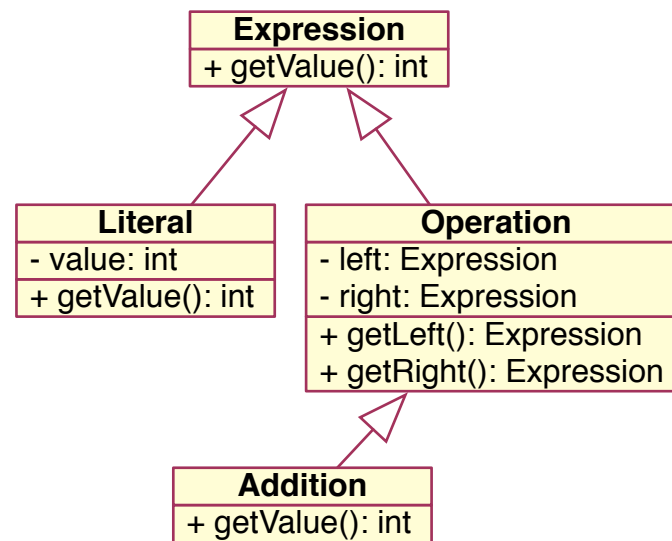
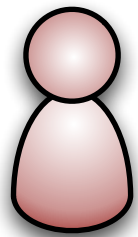
Syde is a tool support for  
collaboration



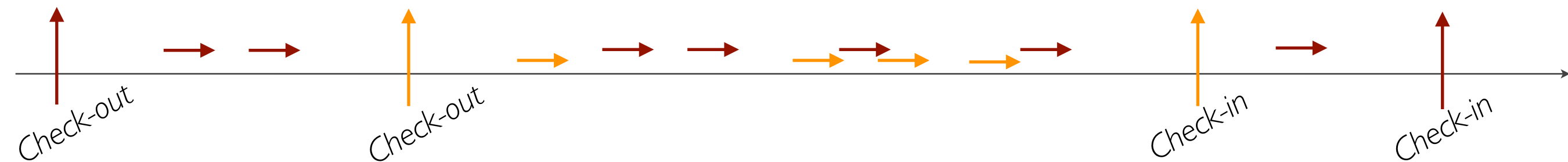
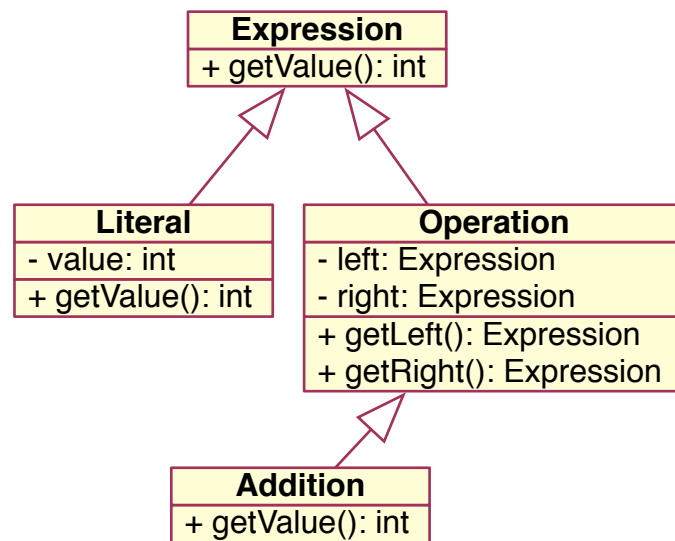
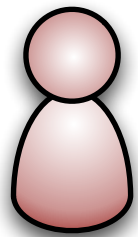
# Synchronization



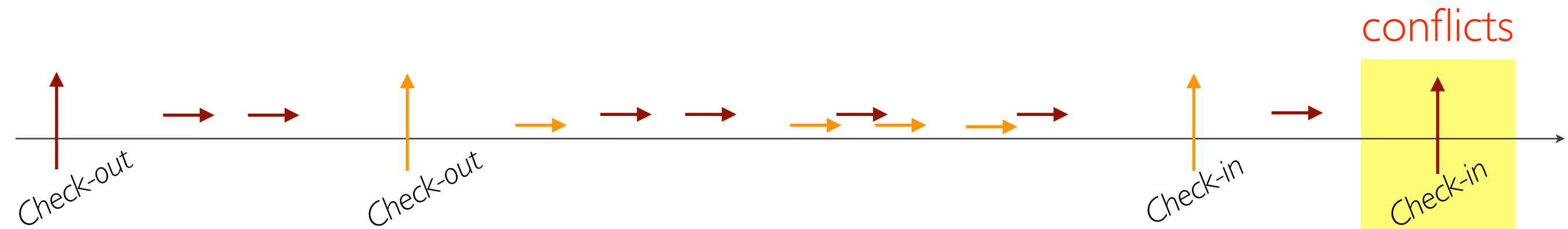
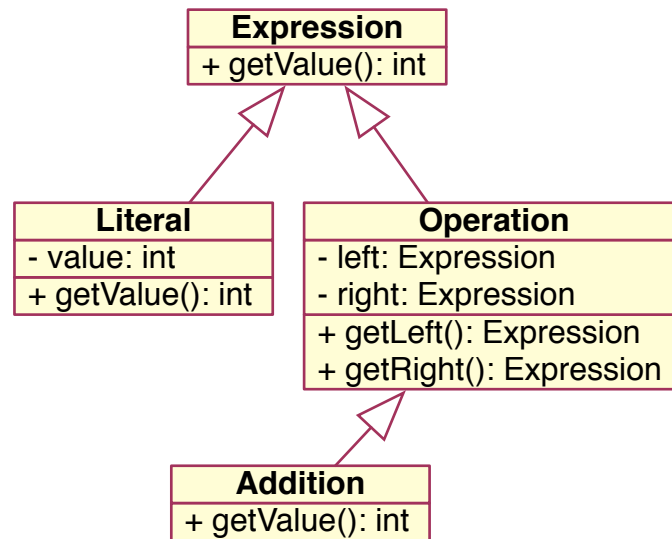
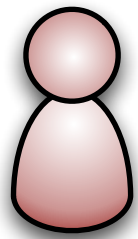
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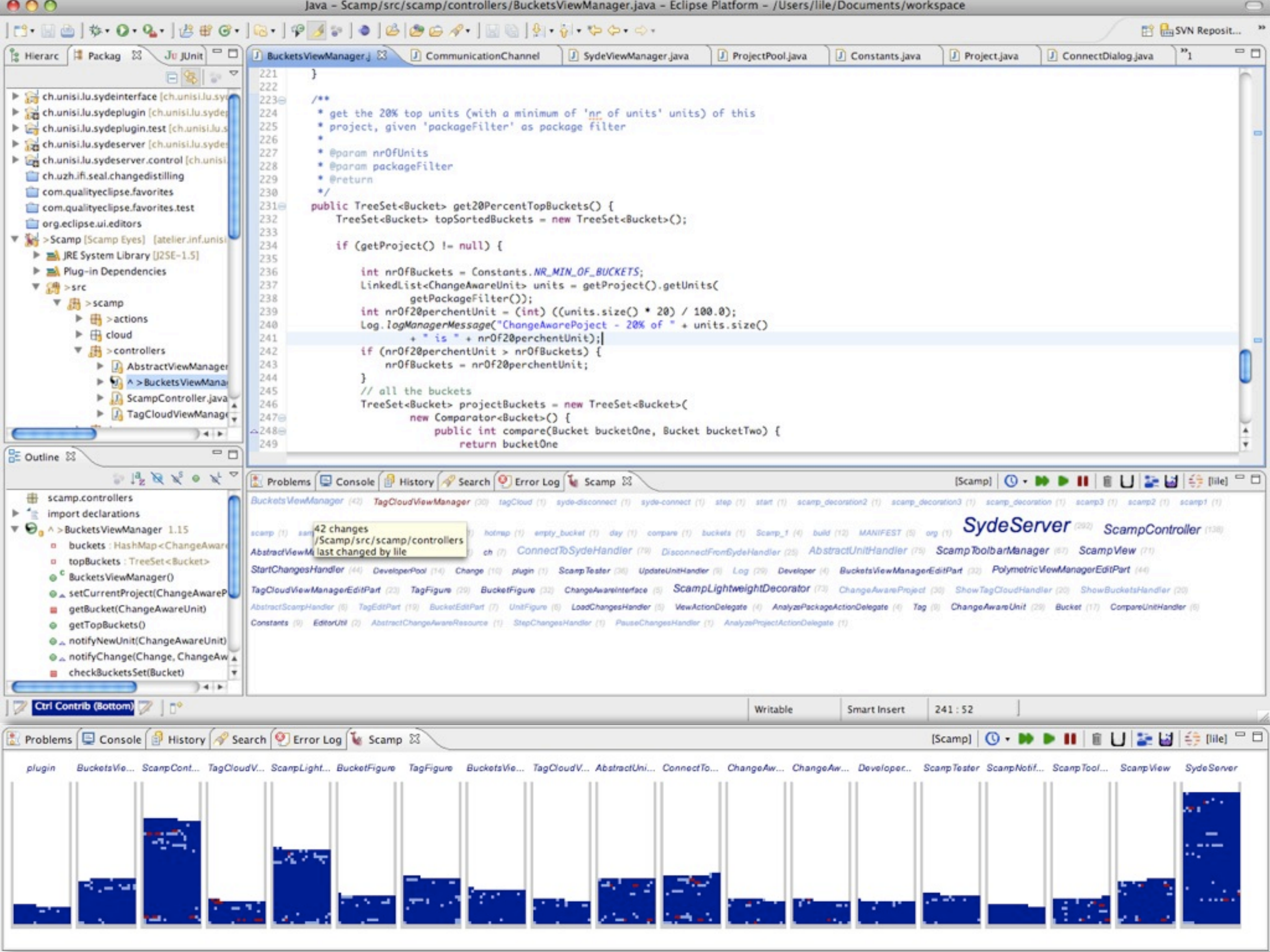


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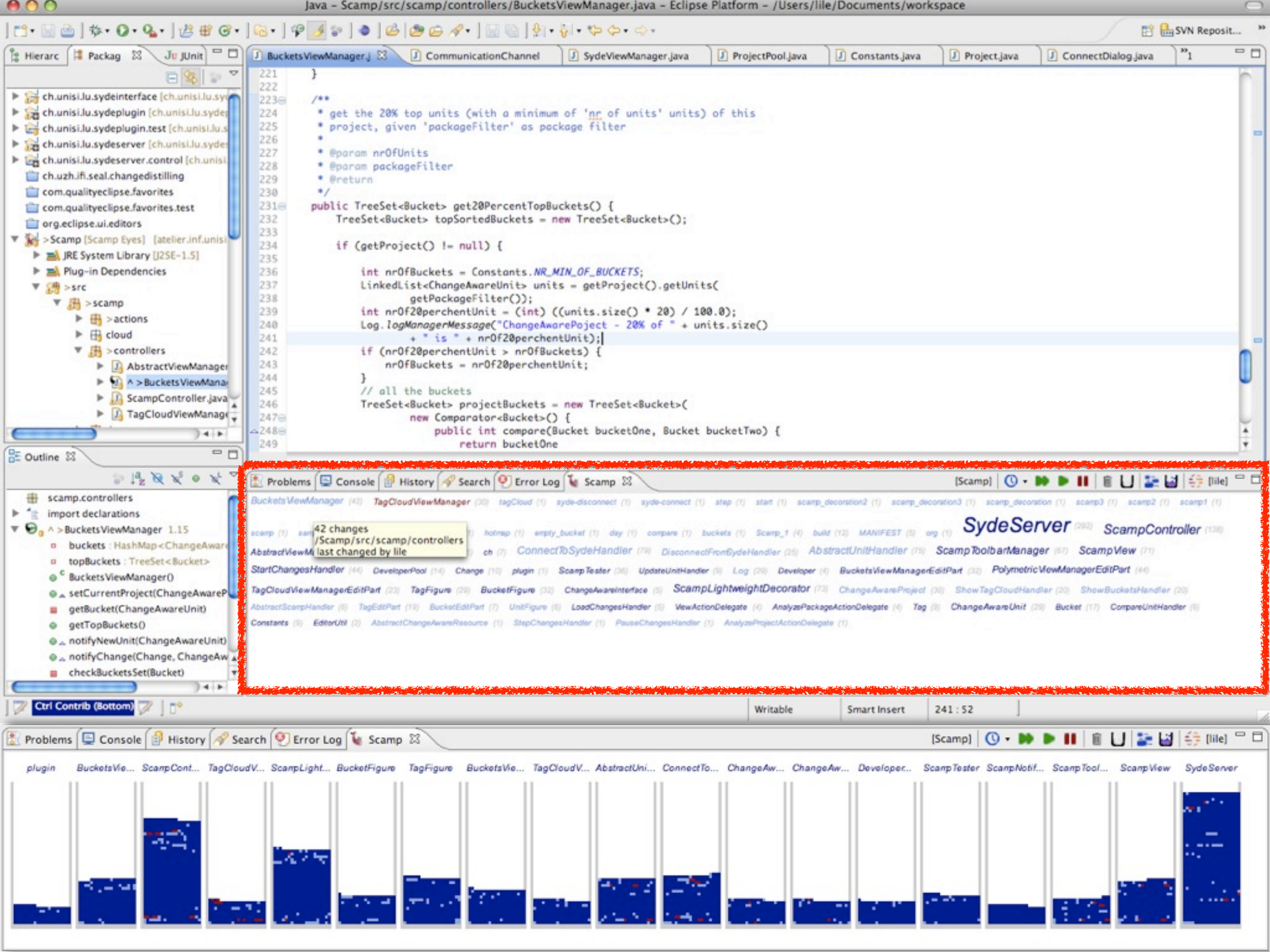


Syde **notifies** developers of who is editing which parts of the system

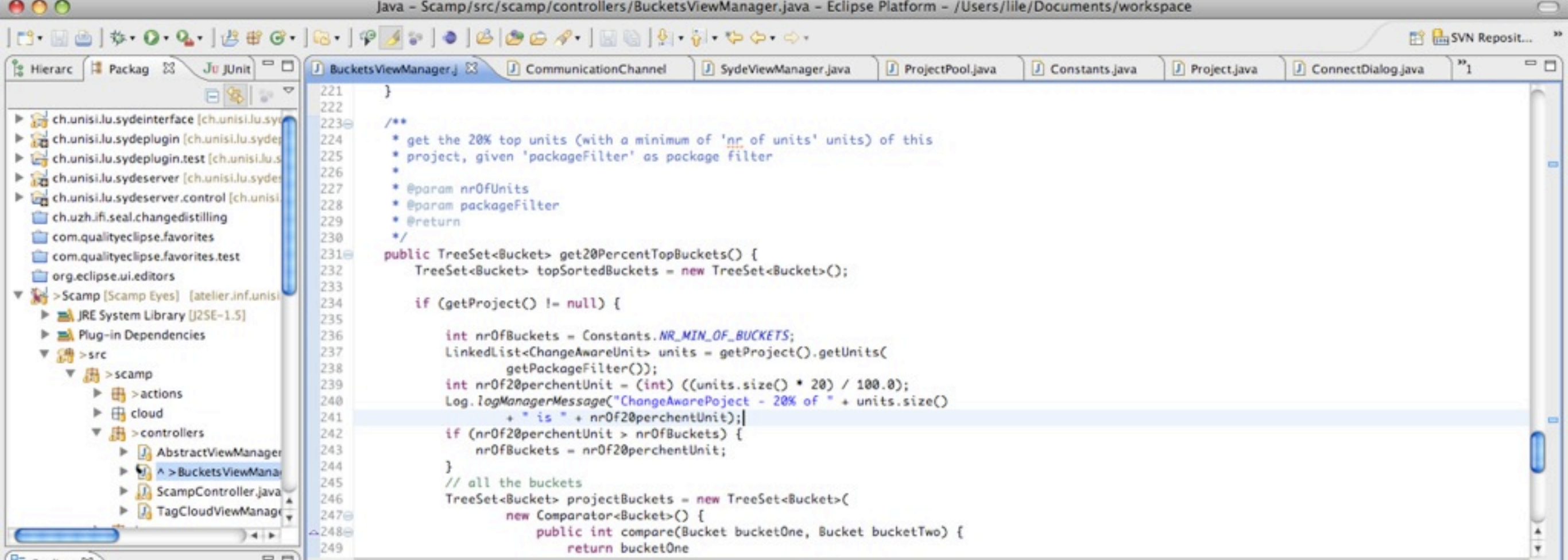




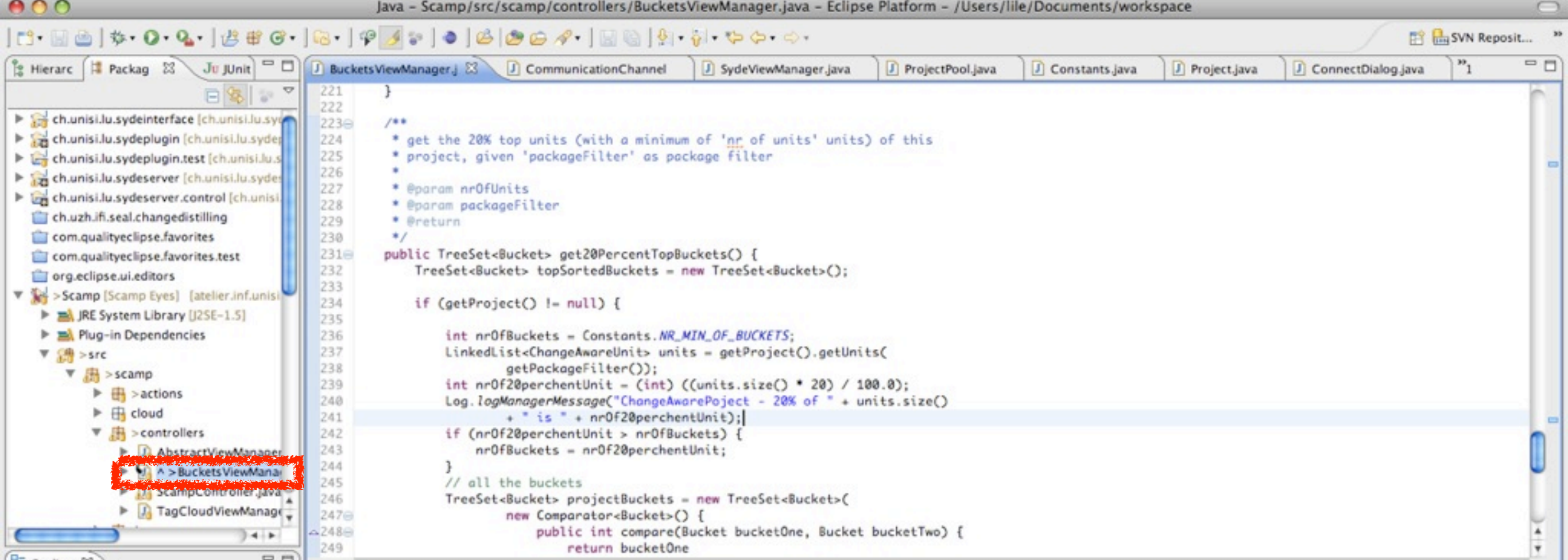








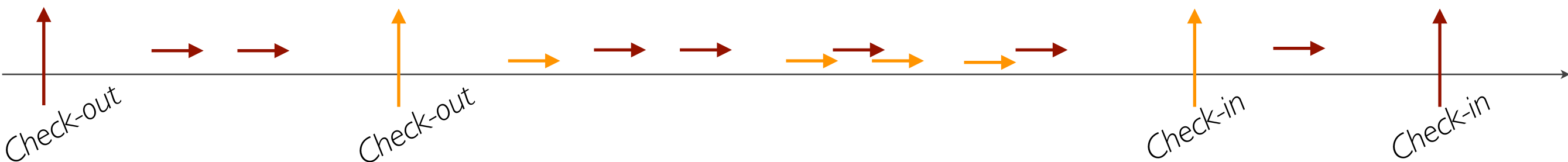
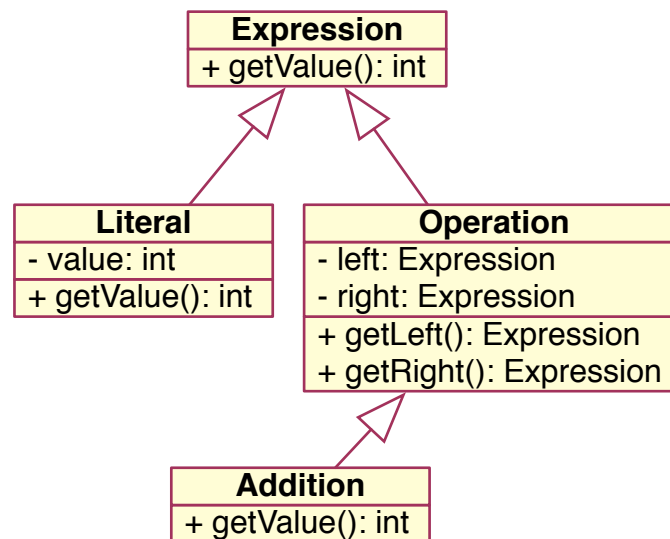
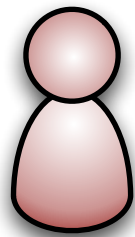




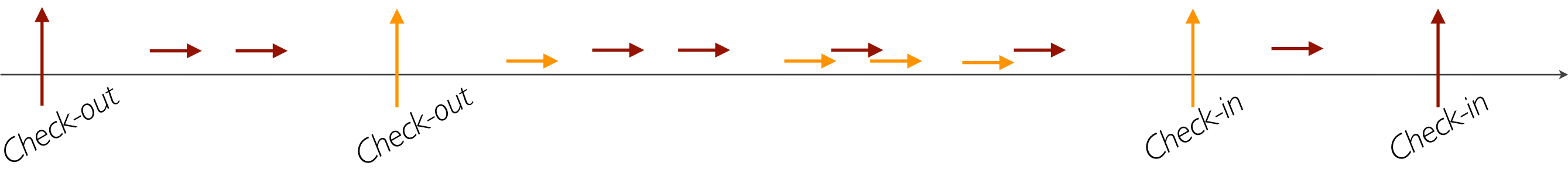
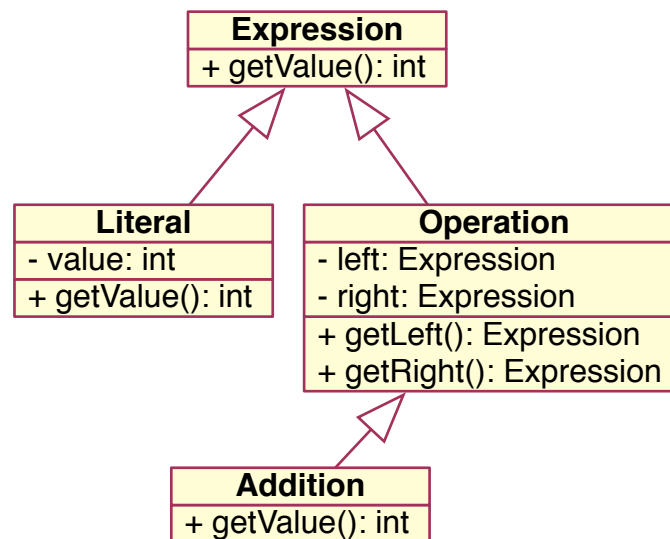
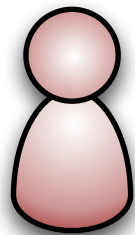
Awareness is the understanding  
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It provides a context for one's  
activities



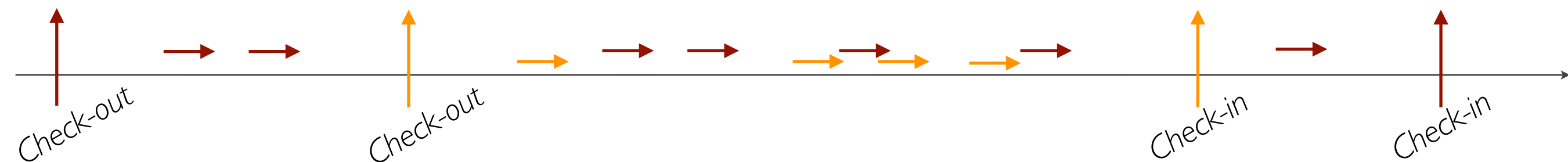
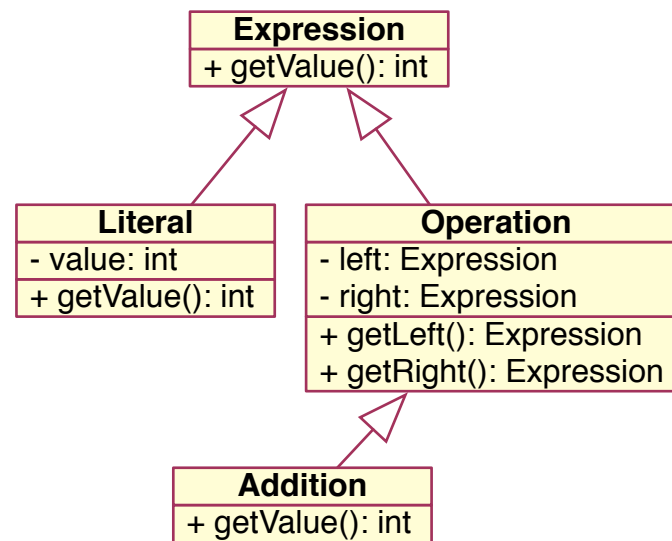
coordinate,  
communicate



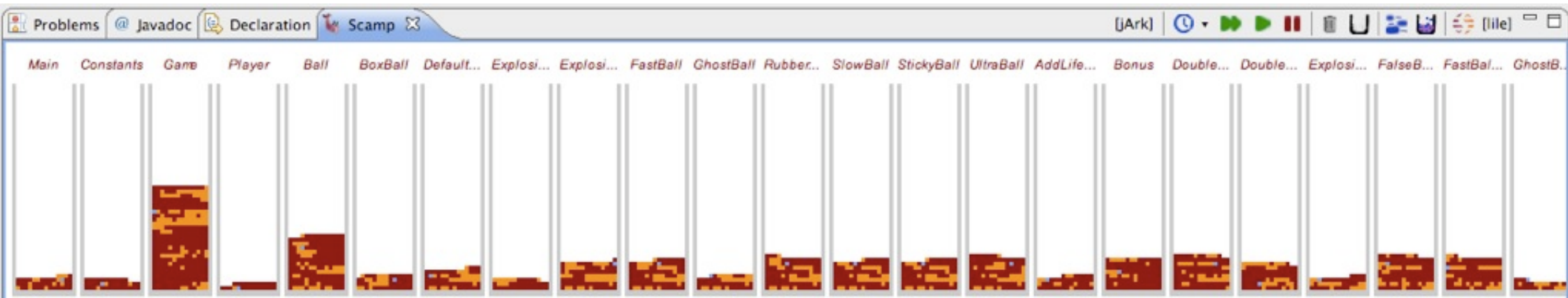


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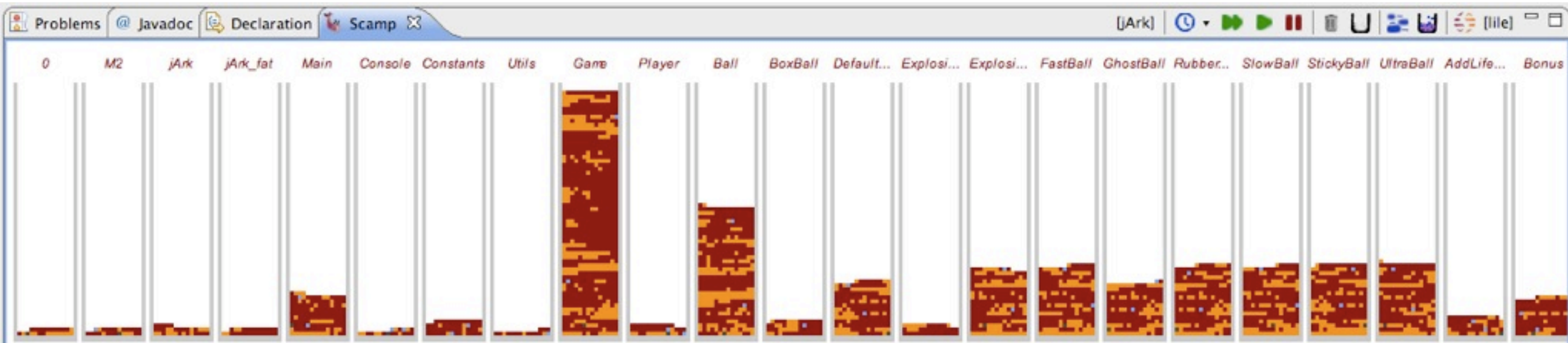
resolve  
conflicts



one week



three weeks



We can use the **fine-grained** change data to analyze the evolution of the system

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*Mining the history of synchronous changes to refine code ownership*  
Lile Hattori and Michele Lanza, MSR 2009



I want more





I want to assist developers on the fly

I want to assist developers **on the fly**

ownership

conflicts

interaction