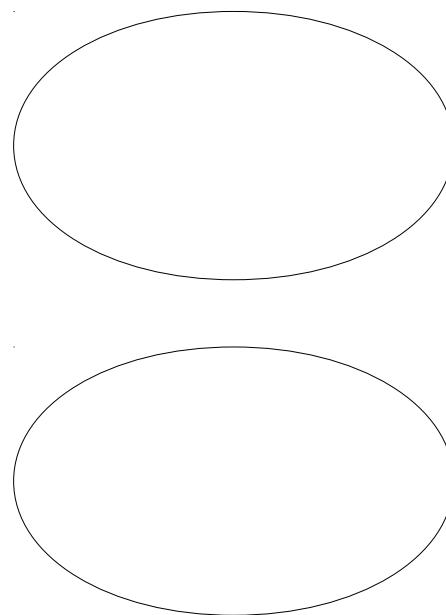
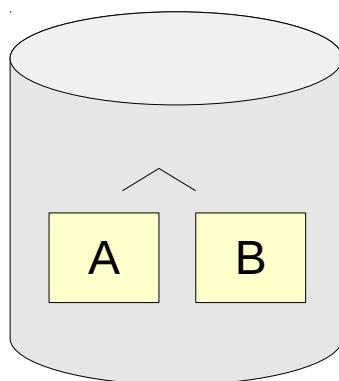
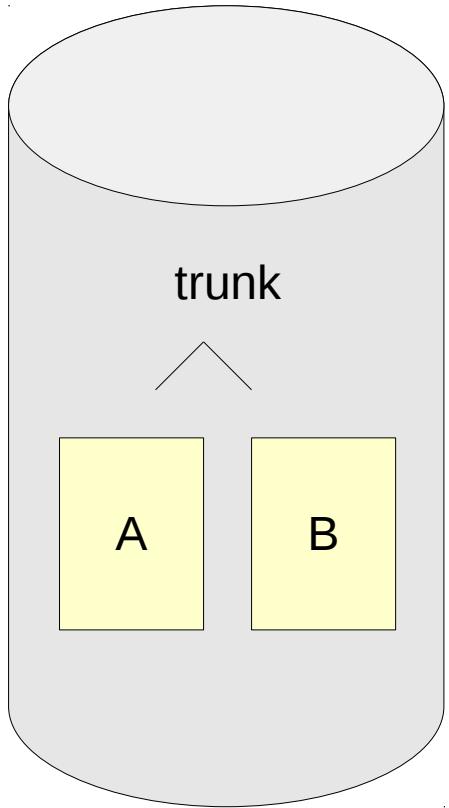


Subversion Usage Walkthrough

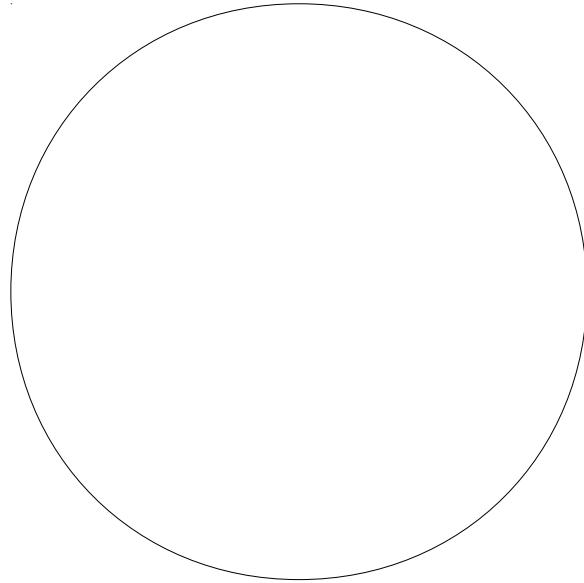
Illustrated conceptual diagram of multiple developers working in parallel from the same repository.



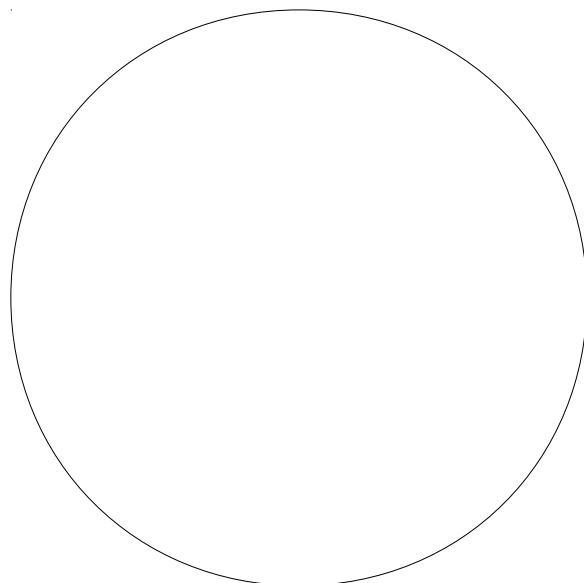


Repository r1

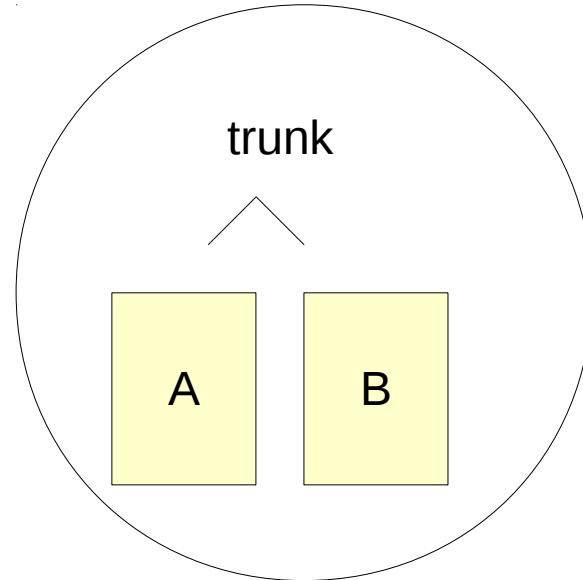
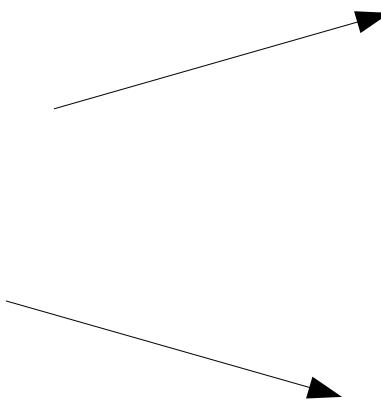
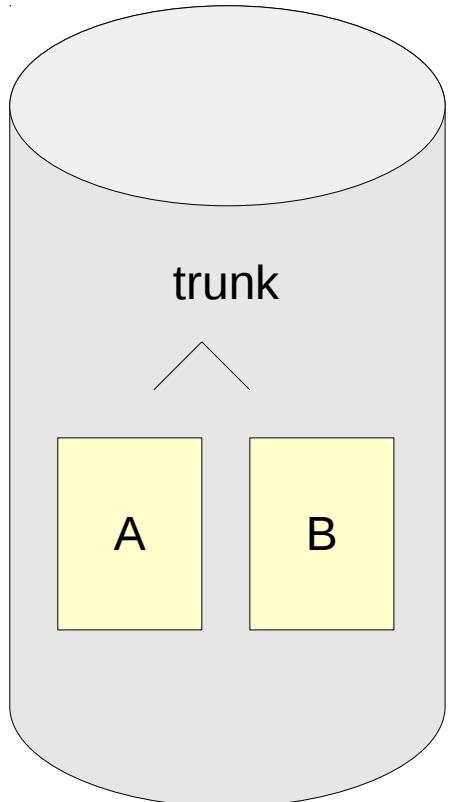
r1 – skeletons for modules A and B are added by the designer, Bob.



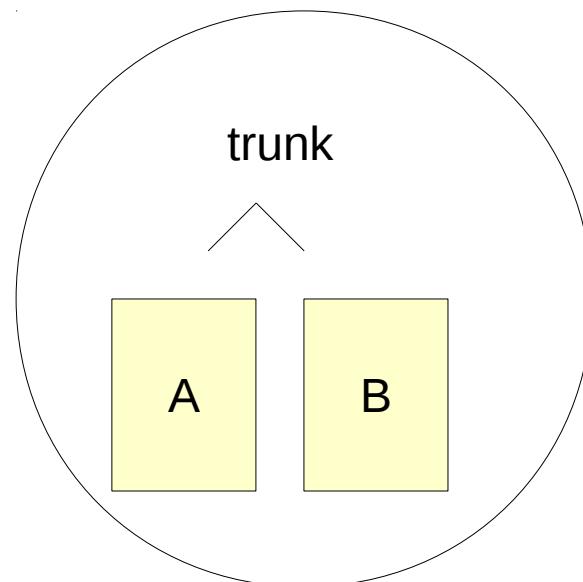
Joe's working directory



Sue's working directory

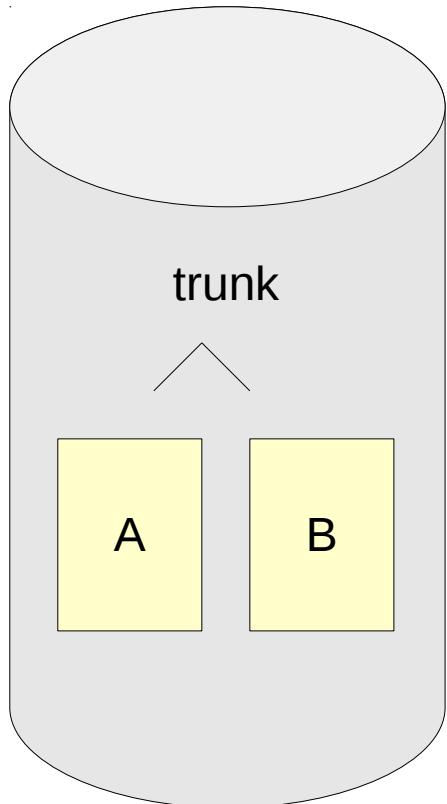


Joe's working directory



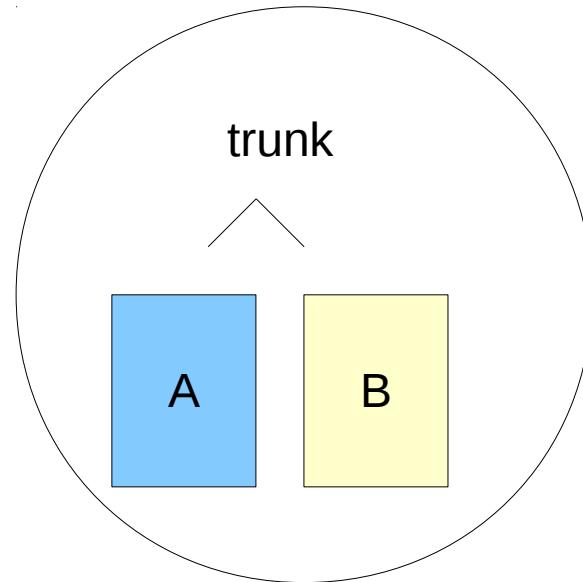
Sue's working directory

Joe and Sue checkout the repository to their working directories.

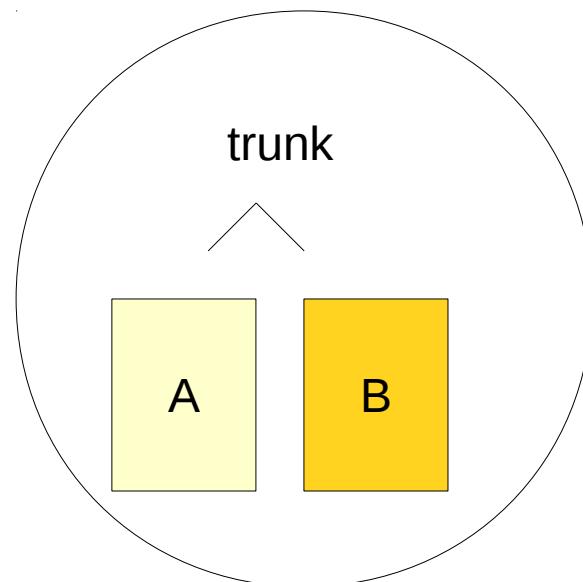


Repository r1

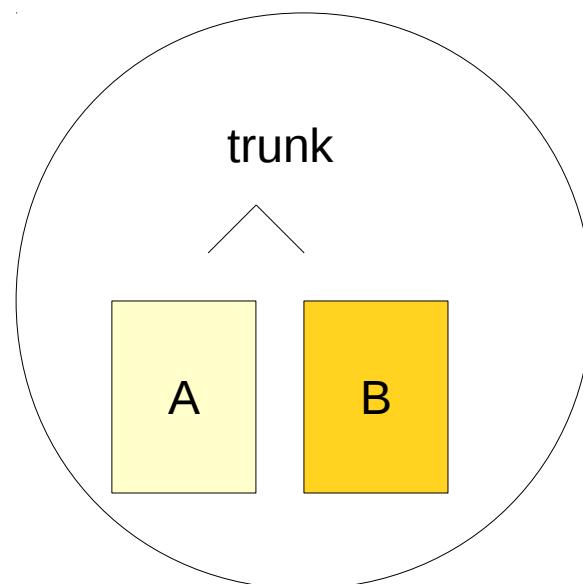
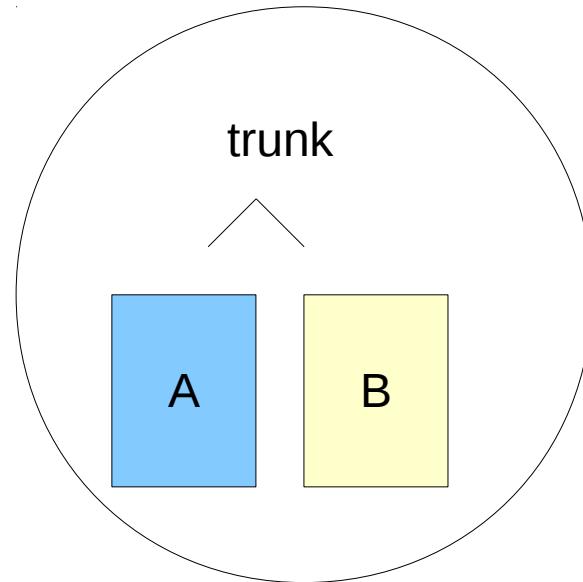
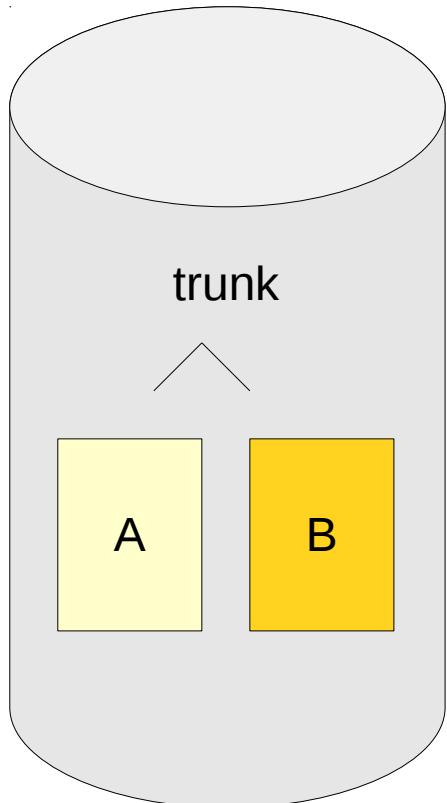
Joe implements module A,
Sue implements module B.



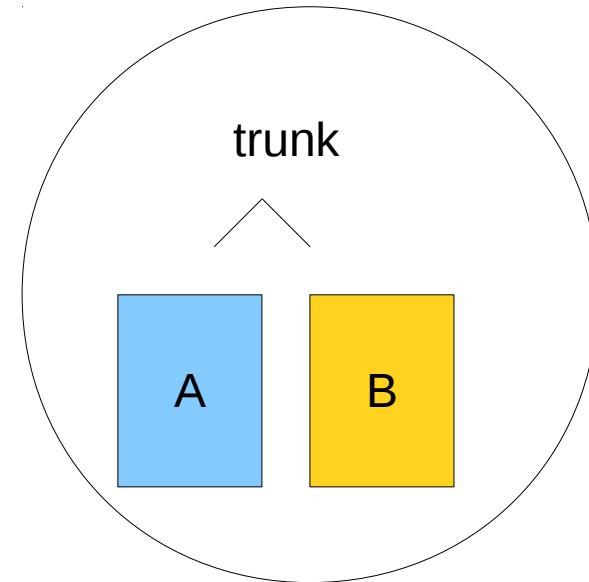
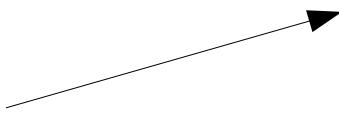
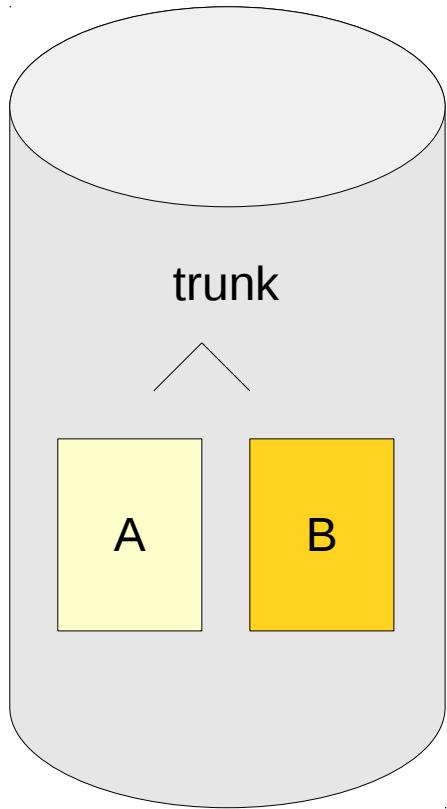
Joe's working directory



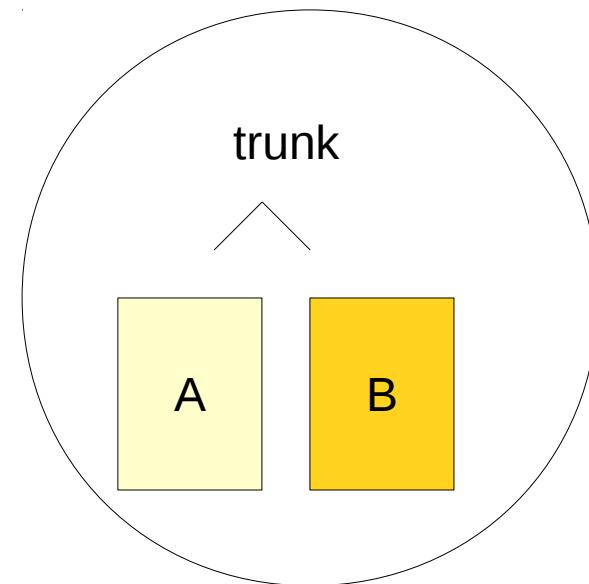
Sue's working directory



Sue updates, then commits module B.
r2 – module B compiled and unit tested.

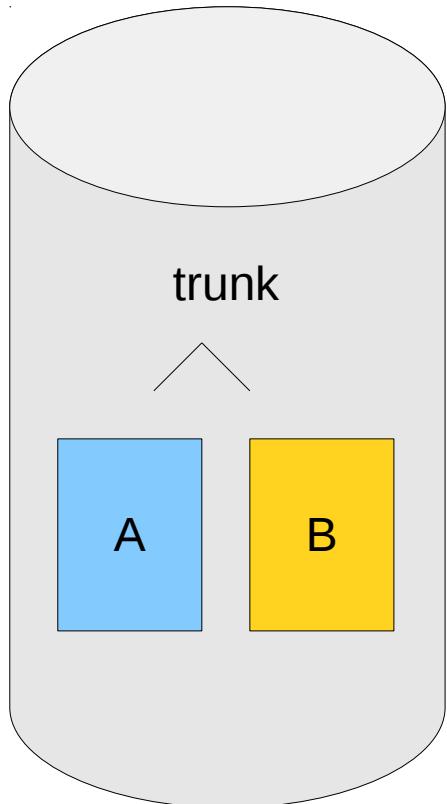


Joe's working directory

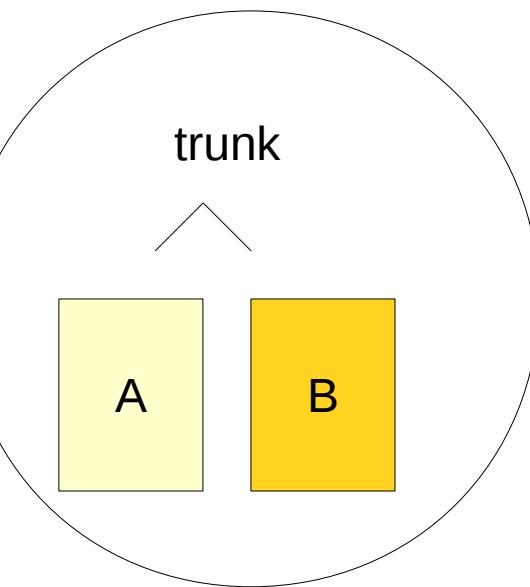
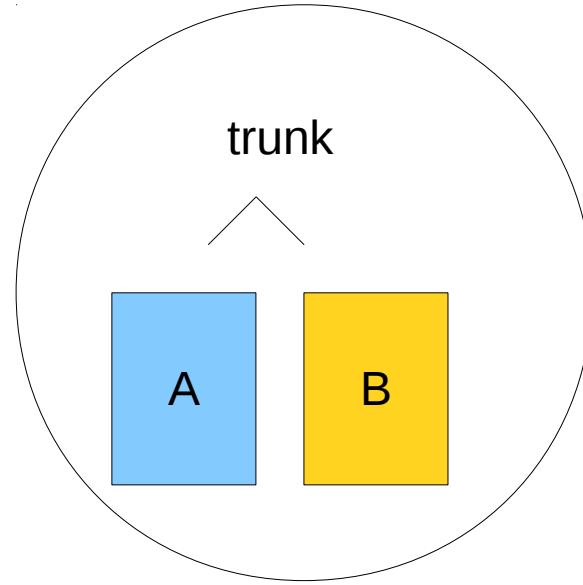


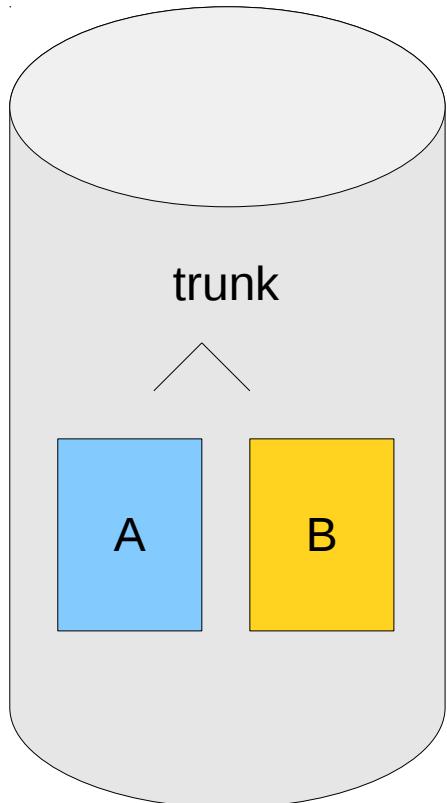
Sue's working directory

Joe finishes his work and before committing, does an Update, which brings down the most recent changes from the repository. There are no conflicts.



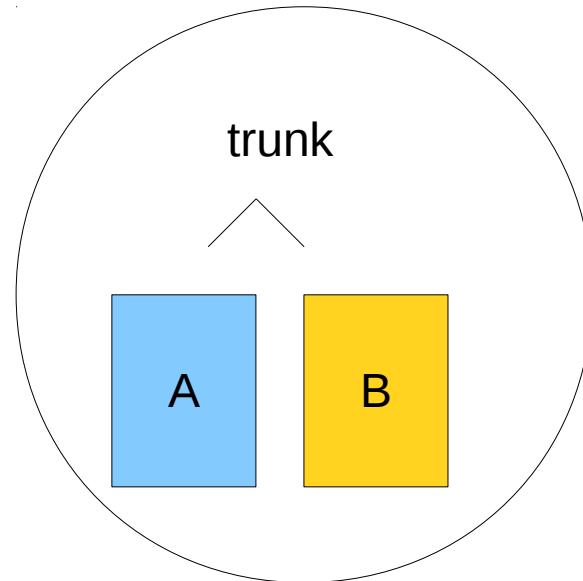
Joe commits module A.
r3 – module A compiled and unit tested.



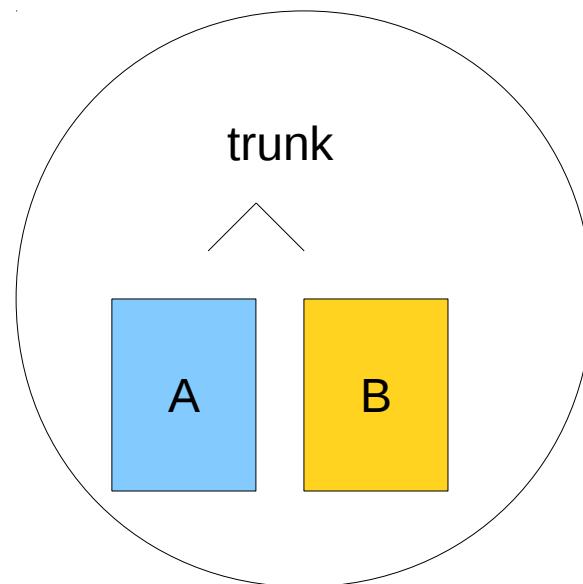


Repository r3

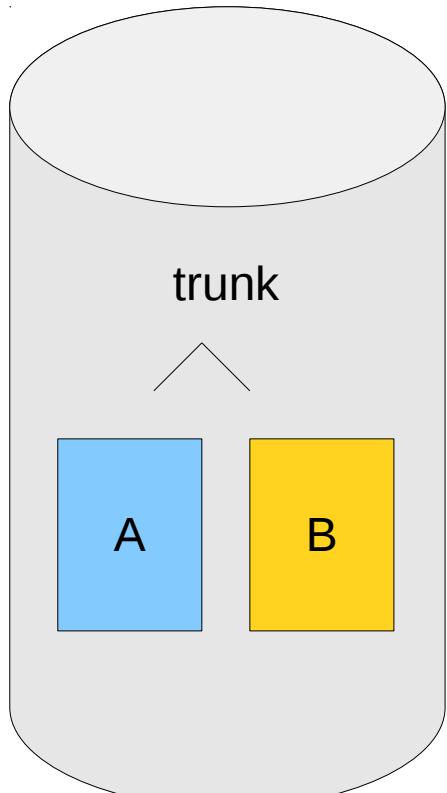
When Sue begins her next work session, she starts with an Update to grab the most recent versions from the repository. Now she has Joe's changes.



Joe's working directory

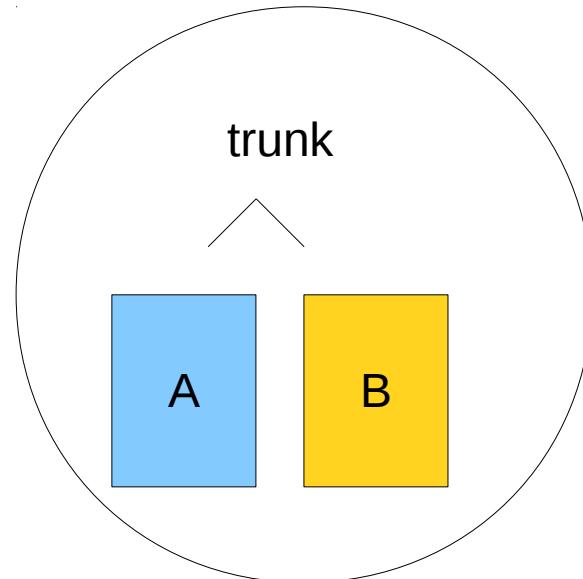


Sue's working directory

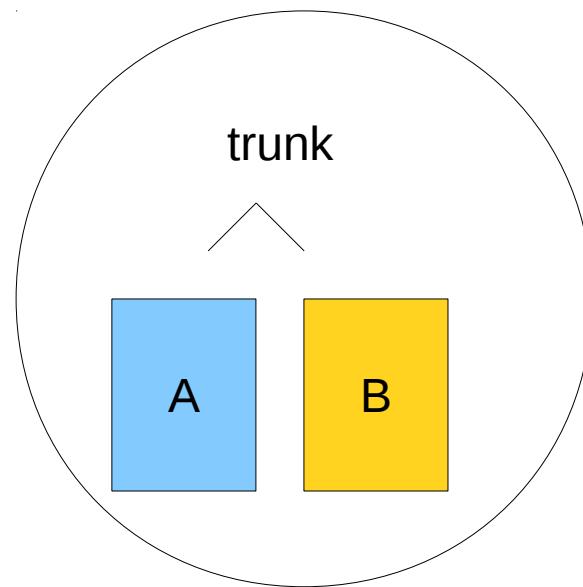


Repository r6

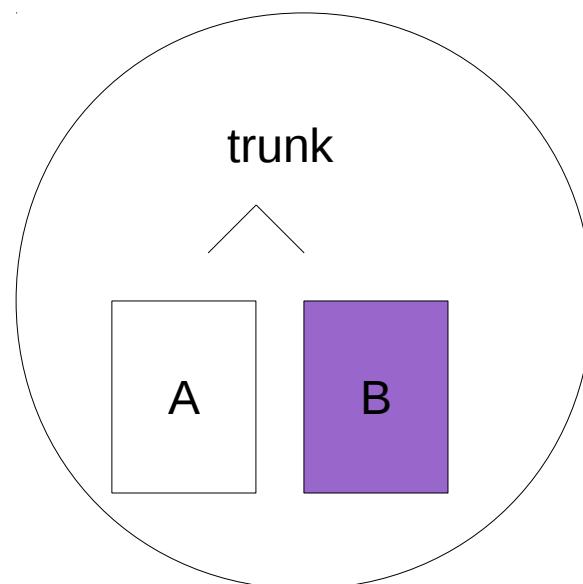
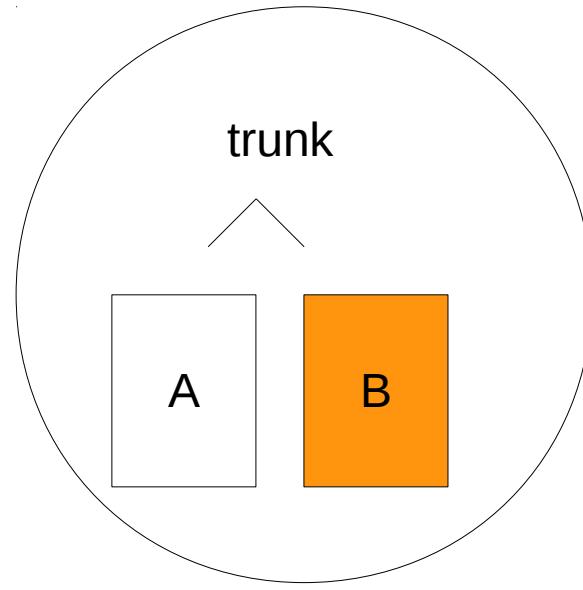
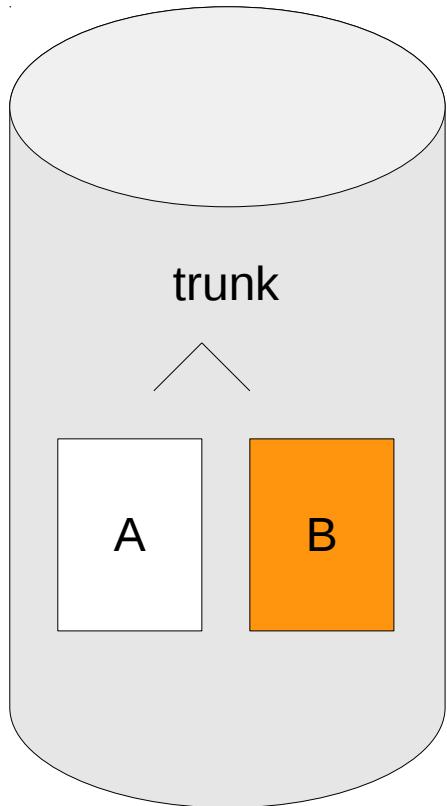
Both developers continue in this manner, maintaining their own modules.
r4 – module A fixed getTotal() method.
r5 – module B repaired calculation.
r6 – module B improved javadoc.



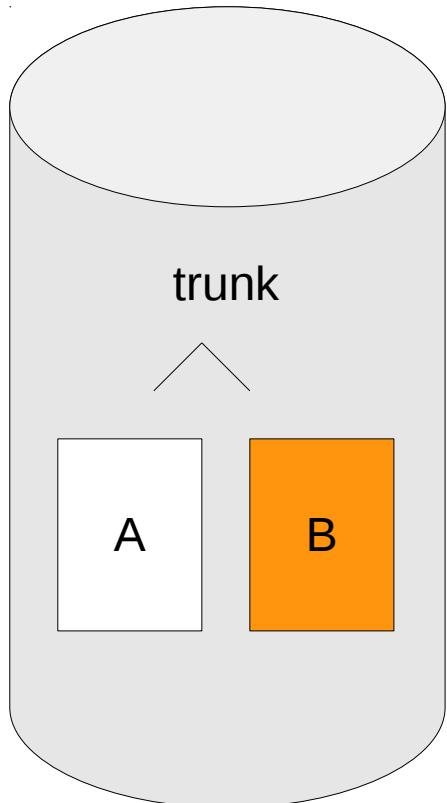
Joe's working directory



Sue's working directory

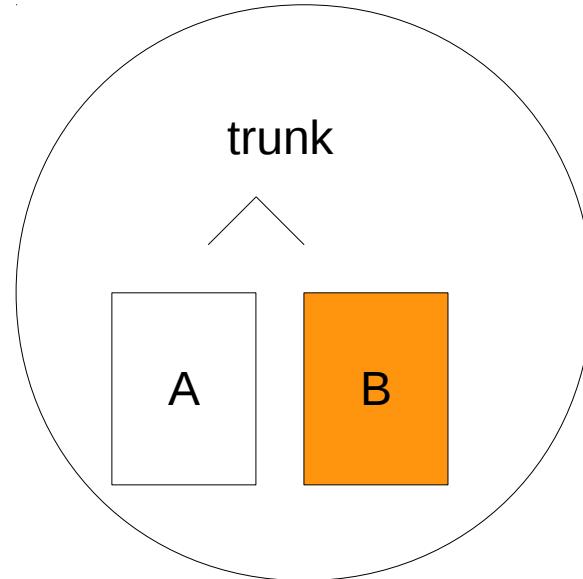


While Sue is working on an enhancement (purple), Joe fixes a defect in her code (orange). His repair is located in the same method Sue is modifying.
r7 – fix defect in module B.

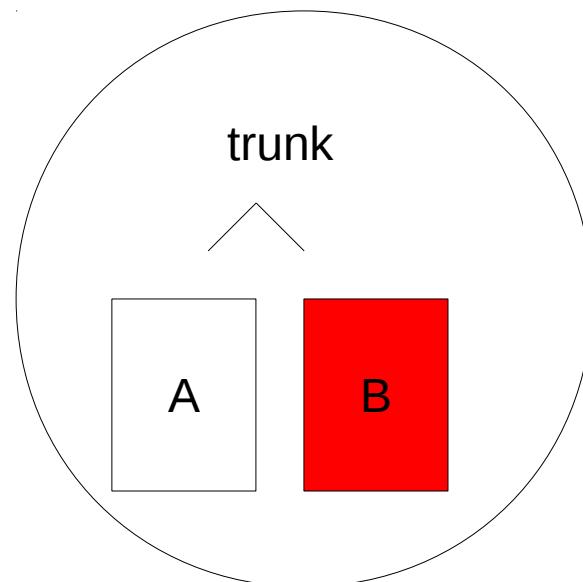


Repository r7

Sue finishes her enhancement. When she does Update, SVN warns her of a conflict (red).



Joe's working directory



Sue's working directory

Name	Revision	Rep. Rev.	Author	Status	Prop
.	6	2	john.dalbey		
resources	6	2	john.dalbey		
Card.java.mine				unversioned	
Card.java.r11				unversioned	
Card.java.r12				unversioned	
AboutBox.form	6	2	john.dalbey		
AboutBox.java	6	2	john.dalbey		
Card.java	12	12	john.dalbey	conflicted	
ComputerPlayer.java	6	2	john.dalbey		
ComputerPlayer.r11	~	~	~	~	~

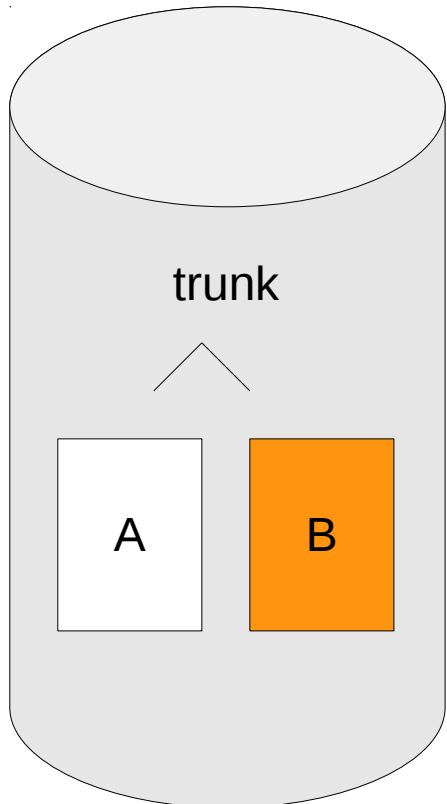
Update conflict as it appears in RapidSVN client.

.r11 is the original version.

.mine has my most recent work.

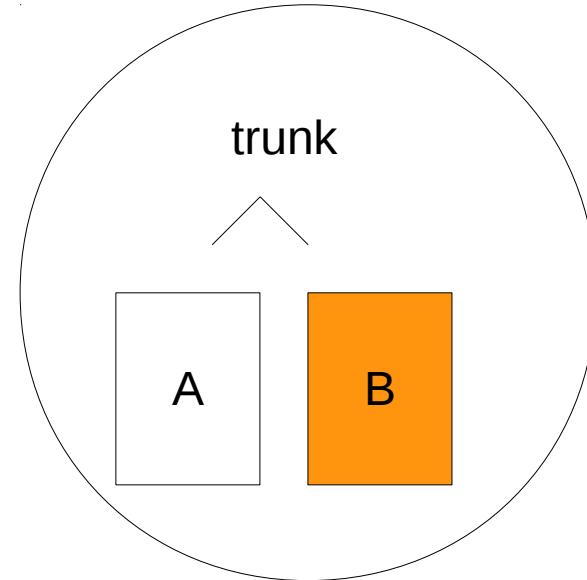
.r12 has someone else's changes that conflict with mine

.java contains annotations for each conflicting line. No longer compilable source. Must be edited to restore to a compilable state by fixing conflicts.

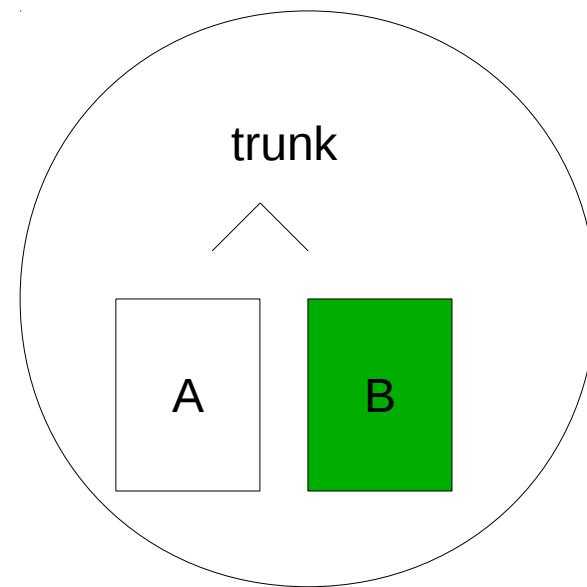


Repository r7

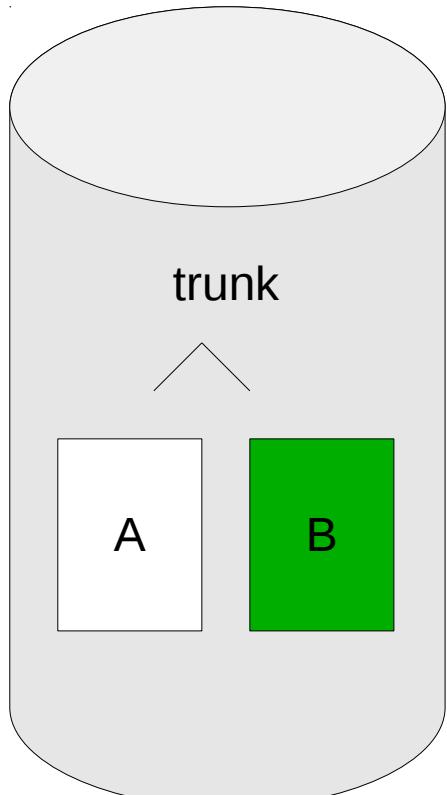
Sue and Joe consult to determine how to merge their changes. Sue edits the file then tells Subversion the conflicts are resolved (green). Joe apologizes and buys Sue lunch.



Joe's working directory



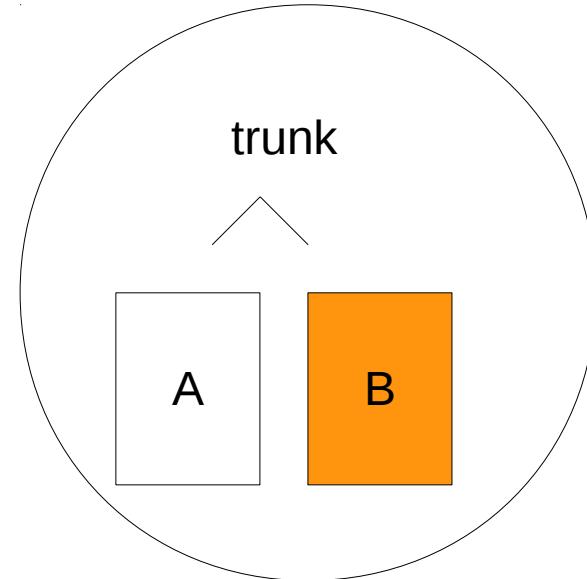
Sue's working directory



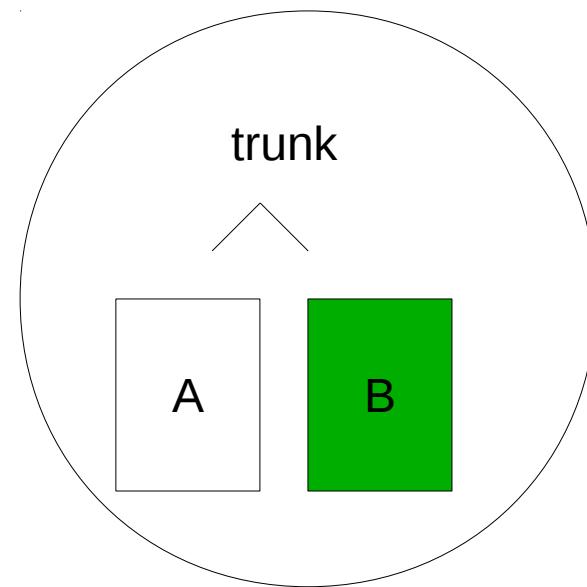
Repository r8

Sue commits her enhancements.
r8 – enhanced module B.

What should Joe do as he begins his next work session?



Joe's working directory



Sue's working directory