A Brief History of Version Control
Why?
Real-world example of no version control
diff
diff  -u
diff  -q
diff  -r
diff -u
diff -q
diff -r
Delta compression
The Prehistoric Era
sccs - 1972
rcs - 1982
• per-file
• delta compression
Locking
The Classical Era
cvs - 1990
• wrapper around rcs
• managed repositories
• client-server architecture
Changeset
• no atomic commits
Branching and Merging
The Middle Ages
• uses locking
• heavily centralized
• similar to SVN
svn - 2000
“CVS done right”
• atomic commits
• history tracks files and directories
• fast branching
svn checkout
svn status
svn add
svn commit
svn log
svn blame
svn checkout
svn status
svn add
svn commit
svn log
svn blame
svn checkout
svn status
svn add
svn commit
svn log
svn blame
svn checkout
svn status
svn add
svn commit
svn log
svn blame
svn checkout
svn status
svn add
svn commit
svn log
svn blame
The Renaissance
What is a distributed version control system?
• branching / merging is good
• users have whole repo
• different way of thinking
bitkeeper - 2002
• used for the Linux kernel until 2005
• drama caused it to fall out of favor
git - 2005
• directed acyclic graph
• generally fantastic
darcs - 2002
hg – 2005
plastic - 2006
bzr – 2008