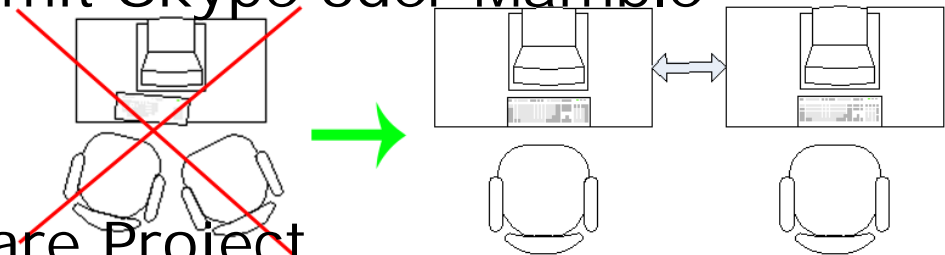


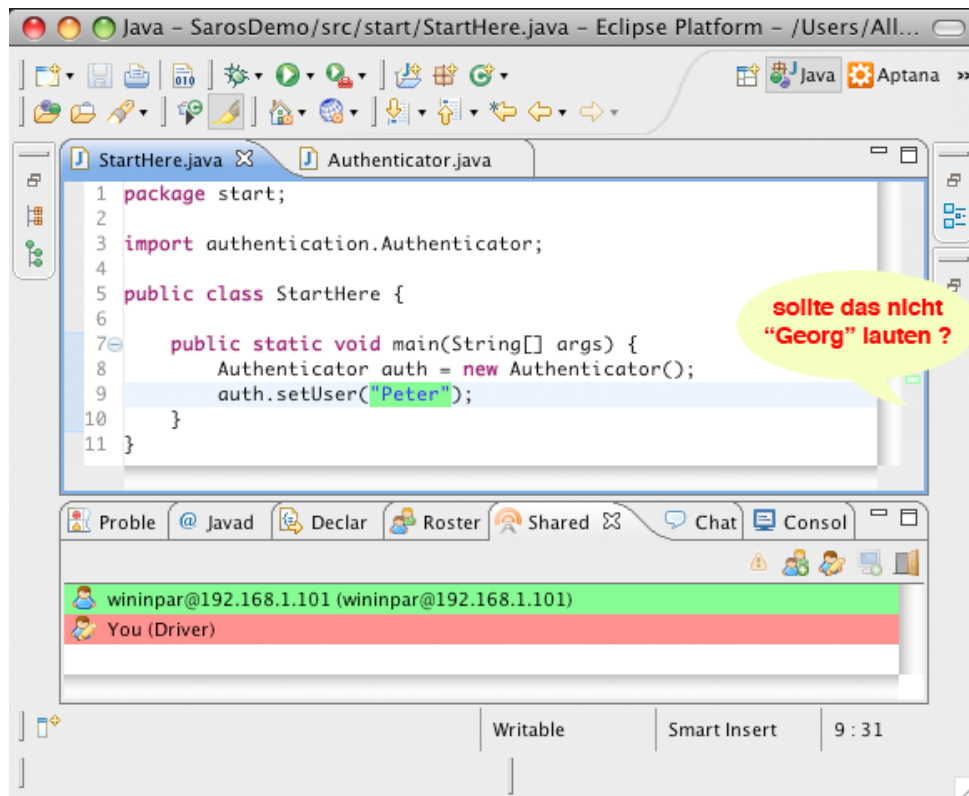
- Was ist das ?
  - Persönliche Einstellung: „etwas sehr nützliches“
  - ermöglicht kollaboratives Arbeiten über ein Netzwerk
- Assoziierte Begriffe
  - Distributed Pair Programming, Xtreme Programming
- Woher kommt das ?
  - FU, Bereich: Software Engineering
    - 5.10.2006 Verteidigung der Diplomarbeit zu dem Thema von Riad Djemili
    - Aktuell 9 Developer bei SourceForge.net eingetragen

- Zwei PCs irgendwo auf der Welt
  - mit Eclipse mit Saros Plug-In mit Skype oder Mumble
- Einer initialisiert
  - Eclipse → Project Name → Share Project
  - User auswählen (aus Buddyliste) → Invite
- Gemeinsames arbeiten
  - Einer ist Driver... das ist Derjenige, der schreibt
  - Andere
    - können live mitlesen, Code kontrollieren, ... oder Chips essen
    - können Text markieren → live und sofort für alle sichtbar
    - oder auch schreiben (mehrere Driver)
    - können per „Followmode“ konstant am Geschehen / Cursor sein, oder an ganz anderen Stellen im Code stöbern



1. Driver schreibt etwas falsches

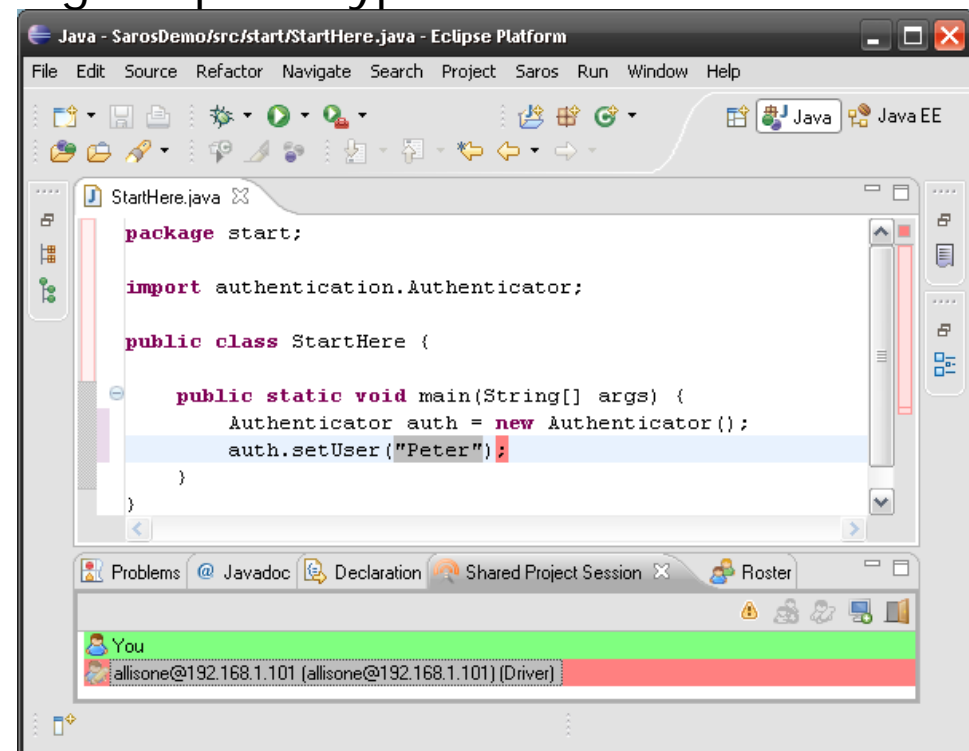
3b. Driver sieht sofort die Markierung und hört Observer's Hinweis



4a. Driver kann sofort korrigieren, spätere Durchsichten werden minimiert

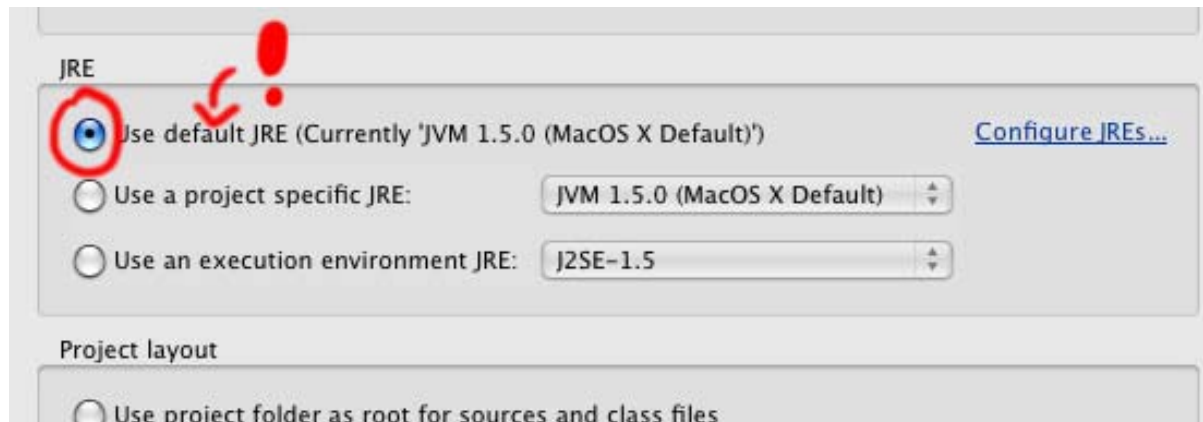
2. Observer sieht Fehler

3a. Observer macht Markierung und sagt es per Skype

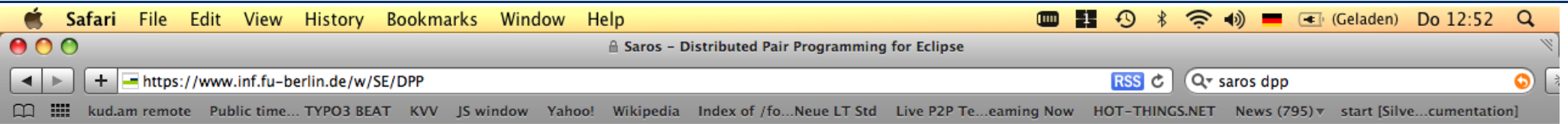


4b. Observer sieht auch sofort die Korrektur

- Download hier:
  - <http://sourceforge.net/projects/dpp/>
- Anleitung hier:
  - <https://www.inf.fu-berlin.de/w/SE/DPP>
- In Eclipse bei Projekt Erstellung
  - Unbedingt „Use default JRE“



- Sonst steht in der .classpath ein systemspezifischer Wert  
→ Java Projekt wird bei Partnern mit anderem System konstant fehlerhaft gemeldet



## Saros - Distributed Collaborative Editing and Pair Programming

- User Manual
- Contact
- FAQ
- Developer Guide
- Publications
- Screenshots
- Technical Information
- Saros @ [SOURCEFORCE.NET](#)
- Bug Tracker

- ▀ What is Saros?
- ▀ Installation instructions
  - ▀ Saros prerequisites
  - ▀ Saros installation
  - ▀ Mumble installation (optional, high-quality voice conferencing)
  - ▀ Openfire installation (perhaps, XMPP/Jabber server)
  - ▀ Murmur installation (perhaps, voice conferencing server)
  - ▀ Other steps (for C/C++ development on MS Windows only)
    - ▀ MinGW installation
    - ▀ Cygwin installation
- ▀ Using Saros
  - ▀ 1. Connecting
  - ▀ 2. The Roster
  - ▀ 3. Starting and joining shared project sessions
  - ▀ 4. Working in a shared project session
- ▀ FAQs: Frequently Asked Questions (with answers)
- ▀ DOs and DON'Ts: How to be happy with Saros
- ▀ Known Issues with Saros
- ▀ Contact

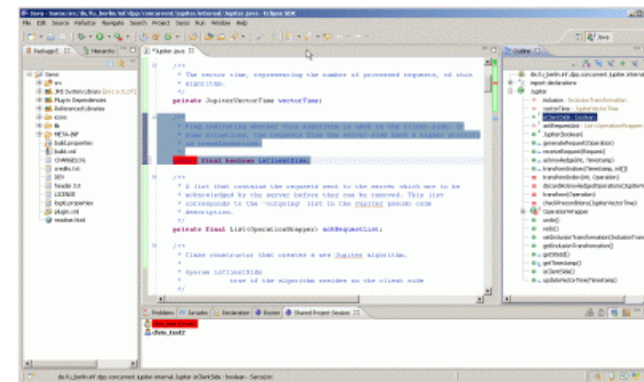
### What is Saros?

Saros is a Eclipse plugin for collaborative text editing that in particular targets distributed pair programming, but can support arbitrarily many participants at once. All members of a session have an identical copy of an Eclipse project (set of files) and Saros keeps these copies in sync as editing progresses.

One author ("driver" in pair programming lingo) can change any file and one or more "observers" can either set their Saros to automatically show them the author's activity ("follow mode") or can look around elsewhere in the same file or different files. Markers in everybody's annotation!!! bar will indicate who is currently seeing what ("awareness information"). All participants can highlight issues in the files at any time by simple **text selection** (that will be shown in different colors according to participant).


The **driver (author) role** can be handed around among the members of the session. (We will support multiple **concurrent authors** in future releases via the **ACE** implementation of the **Jupiter** algorithm.)

Saros will automatically **sync** the contents of the Eclipse project from the initiator of a session ("host") to the other participants. Separate high-quality **audio conferencing** completes



[Watch our Demo Video!](#)



News Details Screenshots Public **Activity** 

**Today**

[coezbek](#) committed revision [1237](#) to the [Saros - Distributed Pair Programming](#) SVN repository, changing 6 files, 1 hour ago

[coezbek](#) committed revision [1236](#) to the [Saros - Distributed Pair Programming](#) SVN repository, changing 1 files, 1 hour ago

**This Week**

[coezbek](#) committed revision [1235](#) to the [Saros - Distributed Pair Programming](#) SVN repository, changing 1 files, 13 hours ago

[coezbek](#) committed revision [1234](#) to the [Saros - Distributed Pair Programming](#) SVN repository, changing 84 files, 14 hours ago

[coezbek](#) committed revision [1233](#) to the [Saros - Distributed Pair Programming](#) SVN repository, changing 1 files, 14 hours ago

[marrin](#) committed revision [1232](#) to the [Saros - Distributed Pair Programming](#) SVN repository, changing 3 files, 2 days ago

[coezbek](#) committed revision [1231](#) to the [Saros - Distributed Pair Programming](#) SVN repository, changing 1 files, 2 days ago

[coezbek](#) committed revision [1231](#) to the [Saros - Distributed Pair Programming](#) SVN repository, changing 1 files, 2 days ago

[coezbek](#) committed revision [1230](#) to the [Saros - Distributed Pair Programming](#) SVN repository, changing 1 files, 2 days ago

[coezbek](#) committed revision [1229](#) to the [Saros - Distributed Pair Programming](#) SVN repository, changing 1 files, 2 days ago

- Pair Programming vs. Distributed Pair Programming  
Bildelemente:

<https://www.inf.fu-berlin.de/wiki/bin/viewfile/SE/ThesisDPPI?rev=1;filename=Saros-Verteidigung.ppt>