Discussions on Code Management

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SuperBelle Computing Meeting

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Code Repository

- Code Management meeting on 26.2.
- Katayama san reported on svn and trac
- Subversion (svn):
  - Successor of cvs
  - ✔ Atomic commits
  - ✔ Allows renaming and removal of files
  - ✔ Flexible access control
- Trac
  - Project management tool
  - Used as code browser only for now

➔ Need volunteer to take care of code repository

Want to use svn for new SuperBelle code repository

Language

- Email discussion about which language we want to use for the SuperBelle code
- Katayama san proposed pythons as second language
- Mitaroff san proposed java as second language
- Agreement on C++ as first language (HEP standard, fast, but very complicated)

Have to educate/ guide people

- Want to keep complexity of software as low as possible

→ Don't use too many languages

→ *Always use C++ by default for official code, except for specific cases where second language is obviously better*

→ Have only one second language

→ No strict rules for user analysis code (only recommendations)

Draft of Coding Recommendations

- **Try to keep your code as simple as possible!**
- Use inheritance and templates with care.
- Aim for high coherence (only things belonging to a class should be there, and the class should be complete) and low coupling (minimize dependence on other classes).
- Try to avoid hacks and fancy features.
- Try to avoid interfaces to interfaces to interfaces.
- Names should be precise, colorful and concise.

Draft of Coding Recommendations

- The code should be portable. It has to compile and run under SL4, SL5, debian, Mac (?), (... tbd) using gcc4, icc(?), (... tbd) on 32 and 64 bit machines.
- Try to avoid dependence on external software. Check whether a plug-in mechanism can be used if external software is required.
- The documentation in the code should be correct, up-to-date and sufficient to understand and use the code.
- All external documentation (in manuals, notes, twiki/web pages, etc.) should be correct, up-to-date and sufficient to use the code.

Wiki

Wiki (confluence) at KEK

- http://wiki.kek.jp/display/sbelle/SuperBelle+Wiki+Home
- World readable
- Individual registration via paper form
- ↙ Very nice collection of use cases by Katayama san
- → Allows to check software features against requirements

twiki at EKP

- http://www-ekp.physik.uni-karlsruhe.de/~twiki/bin/view/SuperBelle
- User name: SuperBelle, password: sbelle

→ Need volunteer for web page