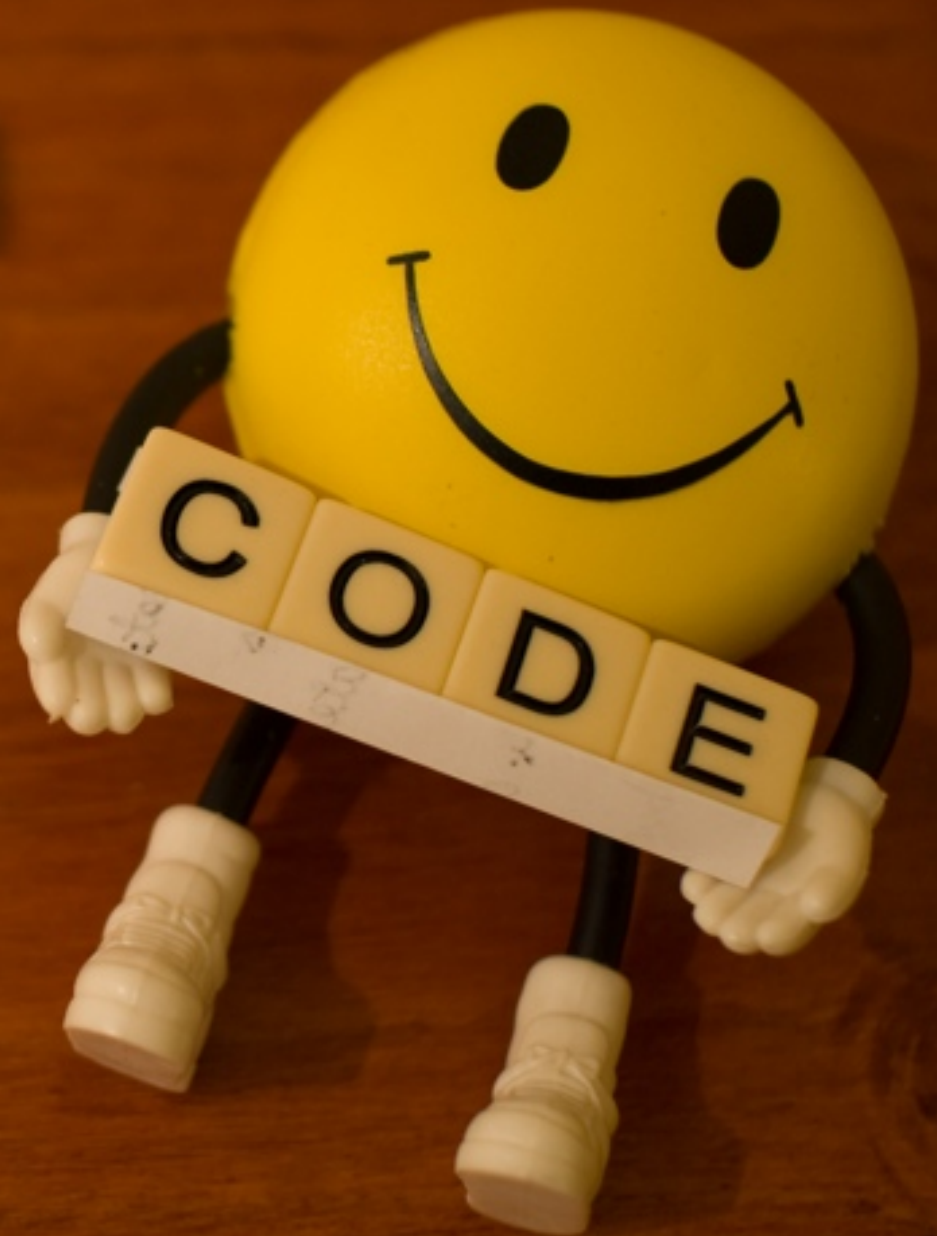


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Happy Code?

PRINTF SMILE

Happy Code?

- Correct

PRINTF SMILE

Happy Code?

- Correct
- Understandable

PRINTF SMILE

Happy Code?

- Correct
- Understandable
- Efficient

PRINTF SMILE

Happy Code?

- Correct
- Understandable
- Efficient
- Testable

PRINTF SMILE

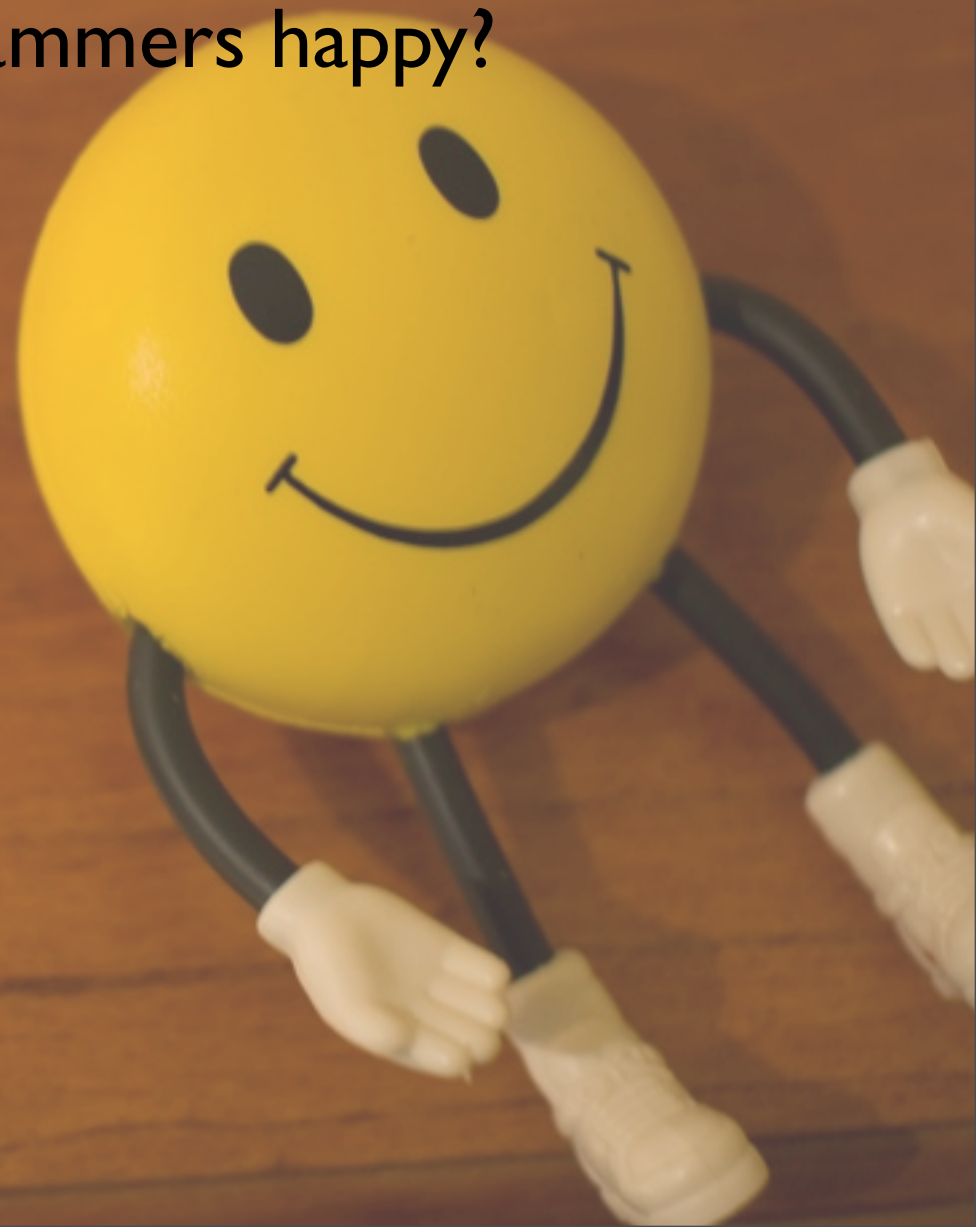
Happy Code?

- Correct
- Understandable
- Efficient
- Testable
- Supportable

PRINTF SMILE

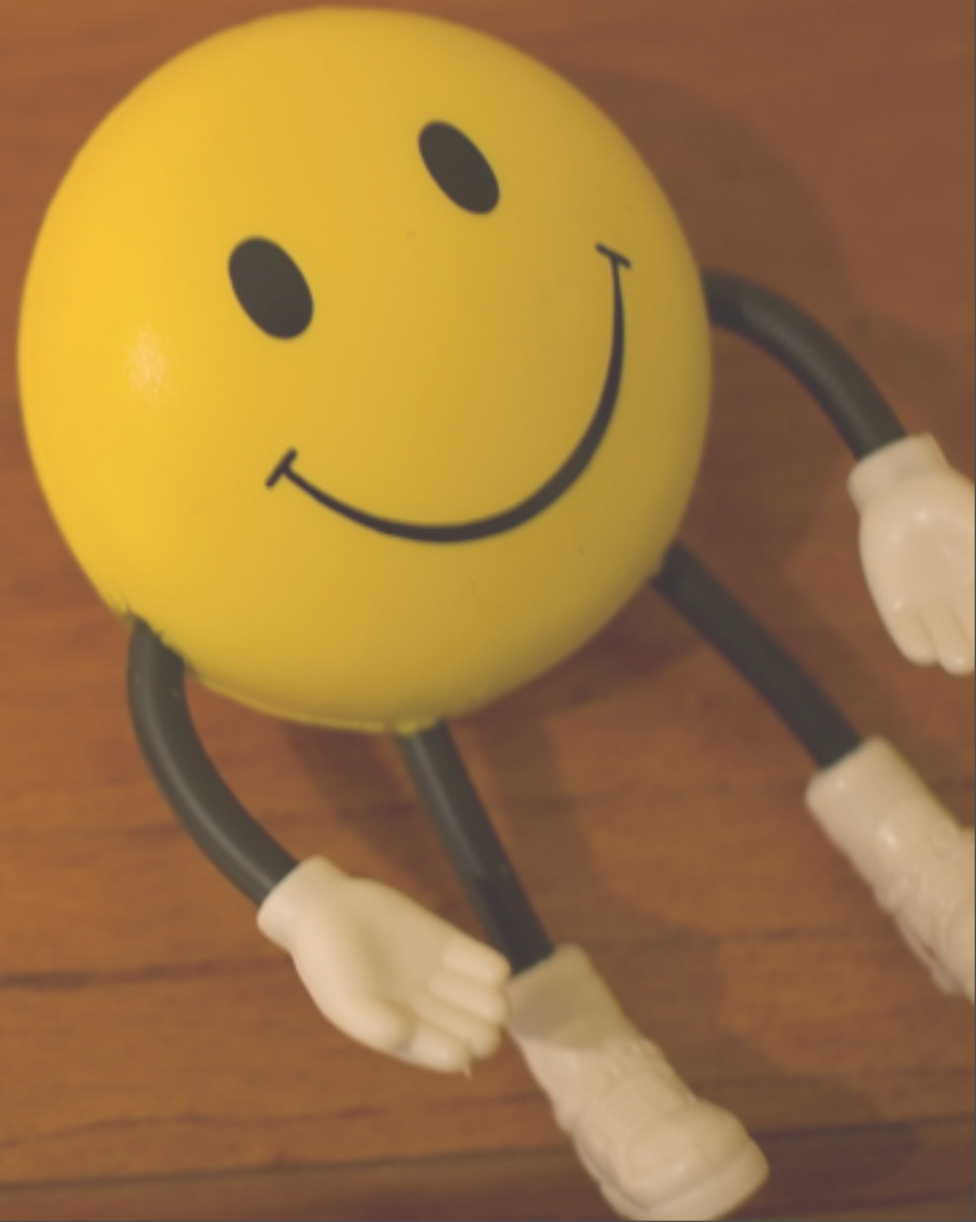
Happy Programmers

What makes programmers happy?



Happy Programmers?

- Good Tools
- Good Policies
- Good Colleagues!
- Happy Code!



The Right Tools

The Right Tools

- Version Control
- Knowledge Management System
- Bug/Ticket/Task tracking system
- Build System
- Testing System
- Development tools

Version Control

- Centralised (CVS, SVN)
- Distributed (Git, Darcs, Mercurial, Bazaar)
- Google for a comprehensive comparison of different systems

Version Control

- Dealing with Conflicts: *“My current team has a bizarre fear of concurrent edits. Apparently they used some sort of lame source control software in the past that let multiple people edit a file, and whoever checked in last won!” - Kathryn from #linuxchix*
- Managing trees (branches, tags)
- Porting bug-fixes to different versions

Knowledge Management System

- Any is better than none
- Wikis, Content Management Systems (CMS), Document management systems (Sharepoint), combined solutions (Redmine, fogBugz, Jira)
- Should be searchable and organisable

Knowledge Management System

What goes in one?

Knowledge Management System

- Specification
- Important decisions
- Design documents
- Information about target platforms
- Essential information for employees

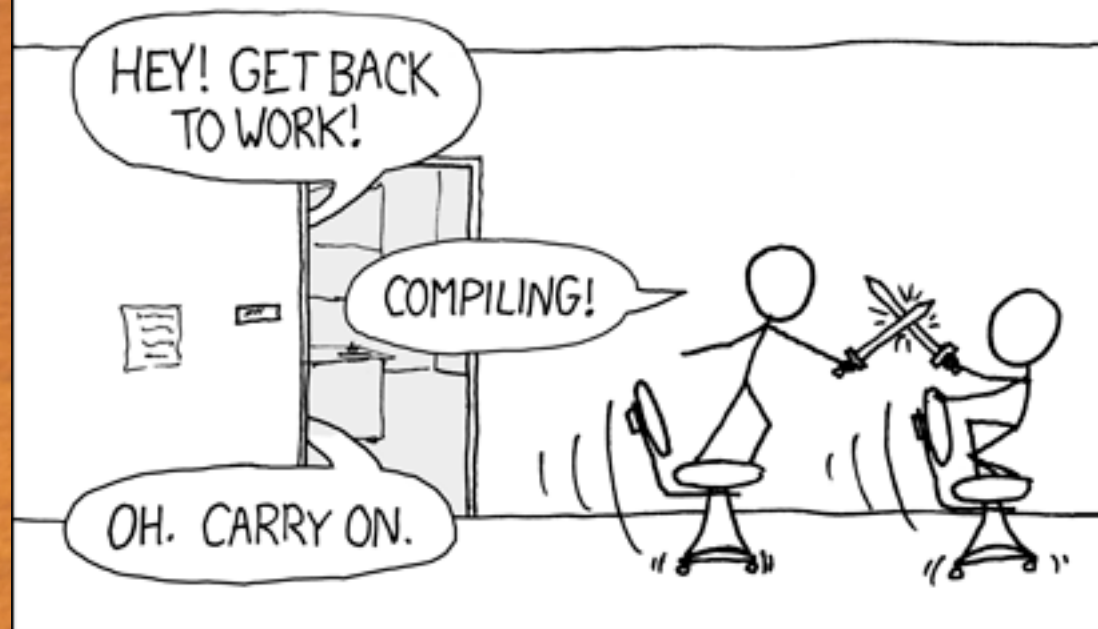
Task Tracking System

- Lets you manage Bugs, Tasks and Tickets
- Integration with Version Control System is useful
- Helps with project management
- Often bundled with VCS, wiki or both.

Build System

- Ideally a one-step build process
- Easy building for multiple different targets (if relevant)
- Integration with test system and version control system.

THE #1 PROGRAMMER EXCUSE
FOR LEGITIMATELY SLACKING OFF:
"MY CODE'S COMPILING."



Testing System

- Ideally should be in place before you start coding
- “Continuous Integration”
- Nightly builds/Nightly tests
- Staging system

Testing System

Testing System

- “Does it work?” testing - run it, and see it doesn't crash straight away
- Unit testing
- Regression testing
- Performance testing

Development Tools

- The right language for the job
- IDEs - love them or hate them
- Profilers, debuggers, monitoring tools
- Network debugging tools

Discussion!

- What tools make **you** happy? :-)



Slides + More Info

[http://sara.falamaki.id.au/moin/Writing/
HappyHackersHappyCode](http://sara.falamaki.id.au/moin/Writing/HappyHackersHappyCode)

