Development Demo

PSU CS 300 Lecture 3-2

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Today's a bit different

- Show some actual SE I've worked on
- Show tools and process
- Prep for development
Nickle: A user app

- Programming language with many features
- Two-dev project: mainly Keith Packard
- 20+ years
- http://nickle.org
Nickle: What we got right

- Emphasis on usability
  - principle of least surprise
  - functionality first
  - hard limits on ambition
- No premature release
- Solid architecture
  - evolving over time
Nickle: What we got wrong

- Unclear, changing reqs
- Hard to maintain
  - no decent docs
  - no bootstrap; C no good
  - no community
- Current performance bad
XCB

- Replacement for Xlib
- Lead dev Jamey Sharp, small team project
- About 7 years
- http://xcb.freedesktop.org
XCB: What we got right

- **Good reqs process**
  - started with arch, specs
  - learned from reusable prototype
- **Solid SW engineering**
- **Reasonable V&V**
- **Clear use path**
XCB: What we got wrong

- Took a long time to deploy
  - Big tech switches
  - Disorganized work
- Still not properly adopted
- Should have been more than C from beginning
Java Yacht

- Toy project from 1997
- GUI app to play Yahtzee precursor game
- Just me, about 2 weeks
- So much wrong; so little right
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