Testing, Daily builds & Releases

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Cse 403 Spring 2006
Readings

- *Rapid Development*: 4 & 8
- *The Pragmatic Programmer*: 8
Testing

What to test?
Testing

What to test?

- Correctness
- Integration
- Error handling
- Performance/Resource use
- Security
- Usability
- Accessibility
- Localization/globalization
- **Anything and everything!**
Testing

How to test?
Testing

How to test?

- Gather data
- Unit tests
- Integration tests
- Test the test
- **Automate**
  - Tools such as JUnit and CUnit can help
Testing

Pragmatic Programmer tip 66: Find bugs once
The Daily Build and Smoke Test

Every day:

- Build your system from scratch
- Run it through a series of basic tests
  - Tests evolve with your system
  - Tests exercise the whole system
- Have consequences for breaking the build
The Daily Build and Smoke Test

Why do a daily build?
The Daily Build and Smoke Test

Why do a daily build?

- Reduces integration risk
- Provides a basic quality check
- Helps pinpoint the cause of bugs
- There is always a “working” system
The Daily Build and Smoke Test

If the smoke tests fail, the project is broken.
Releases

- Beta release: May 9
- Final release: May 30
Releases

What do we expect?
Releases

What do we expect?

- Installer
- Documentation
- A system we can play with