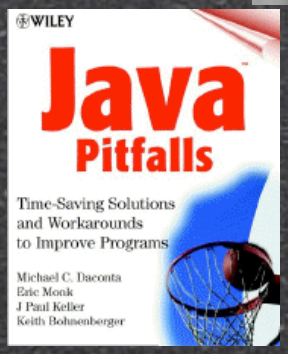
The Philosophy of Pitfalls



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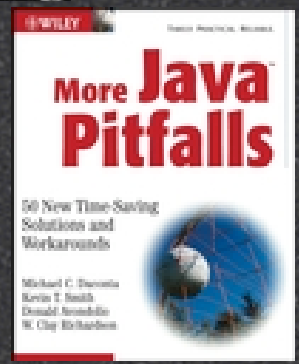


Introduction

- Michael C. Daconta - Chief Architect, VKB
  - Starting the MBI West Coast office!
  - Semantic Web Book (June 2003) is my 10th.
  - Last year - 2 books, Master's degree and a move.
    - Time for a REST! (Riiiiiight!)

Introduction (2)

- My Great co-authors
  - Kevin T. Smith - Chief Security Architect
    - Always delivers!
    - Speaking at JavaOne this year!
    - Semantic Web book co-author.
  - Donnie Avondolio - NCES Development Lead
    - brought on after 3 previous drop outs.
    - Had to catch-up and delivered in the clutch!

Introduction (3)

- History:
  - More Java Pitfalls. Mar 2003
  - Java Pitfalls
  - JavaWorld Columns
  - The “pitfall franchise”
    - Jakarta Pitfalls
    - “imitation is the highest form of flattery”

What is a Pitfall?

- Formal Definition (Java Pitfalls)
  - “A pitfall is code that compiles fine but when is executed produces unintended and sometimes disastrous results.”
- The “blessing” of compilation
  - syntax error versus logic error
- Pitfalls waste time and cause Frustration

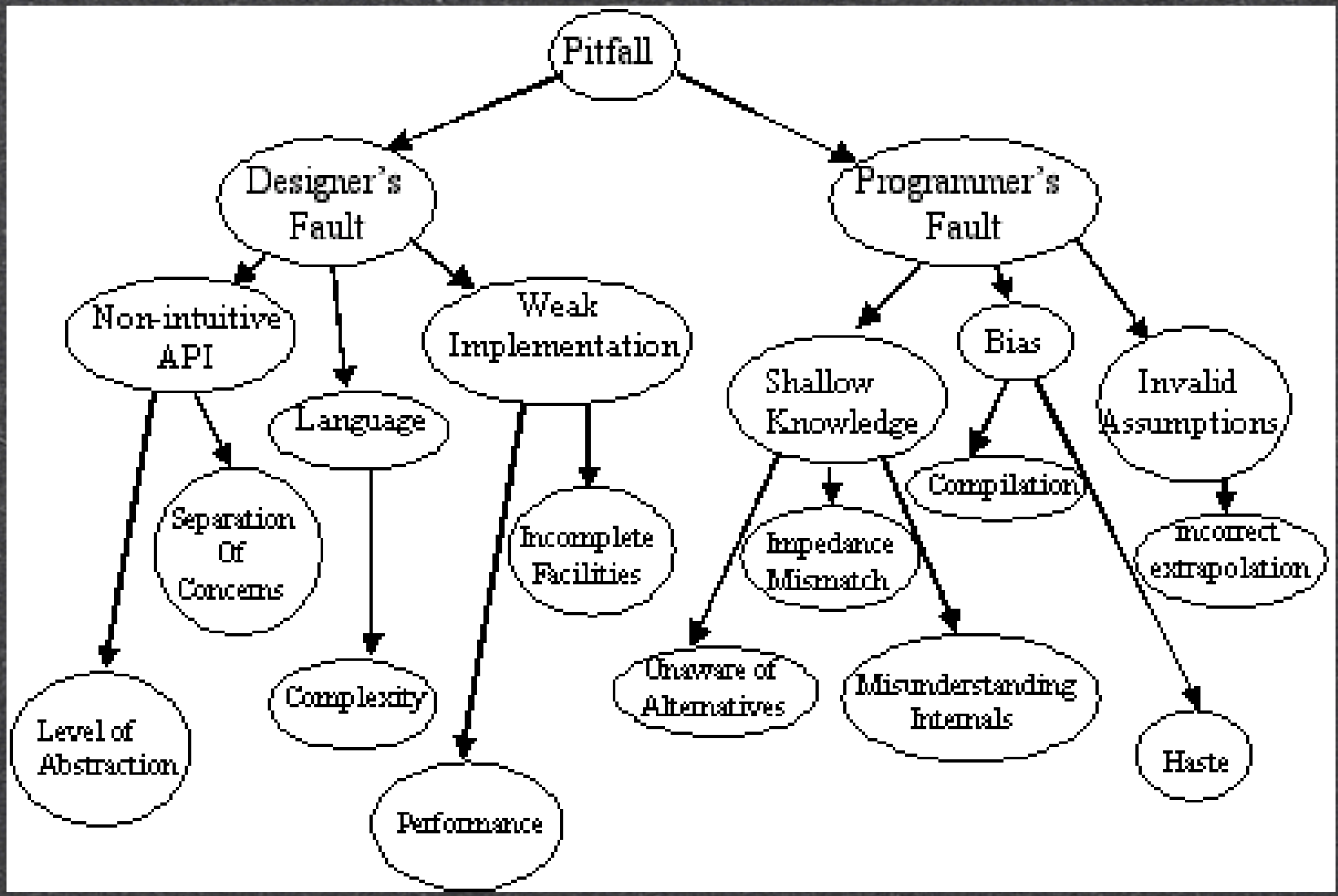
Anatomy of a Pitfall

- Symptom. Demonstrated with BadXXX.java
- Root cause. Figure is helpful.
  - Shallow knowledge versus “deep” knowledge.
- Cure. Solution or Workaround.
  - Demonstrated with GoodXXX.java

The Philosophy of Pitfalls

- Programming is difficult.
- This is a truth, a great truth.
  - Mike's corollary to "Life is Suffering".
- Why do pitfalls happen to good people? (Next slide)

The Pitfall Taxonomy



Sins of the Designer

- The Art of Design
  - Walking a mile in another's moccasins
  - form follows function
  - balance of forces
    - control, cohesion and cost

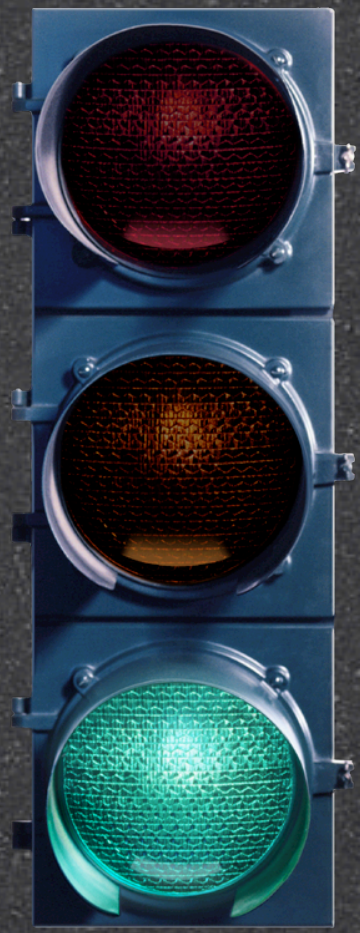
Sins of the Designer(2)

- The Art of Simplicity
  - The primacy of adoption
  - Proverbial question: How to squeeze 10 pounds into a 3 pound sack?
    - Answer: make the sack appear bigger
    - Simple interface, postpone complexity, just enough control

Peer Mentoring

- Anyone can be a mentor
  - The all-knowing bias (long white beard required)
  - The illusion of perfect knowledge.
- Peers are the best teachers
  - Non-threatening (fertile ground)
  - Best way to learn, Teach!
  - Combinatorial Experimentation

A Culture of Mentoring



- Whiteboard in every office
- Mornings with Monroe
  - Senior/junior meetings
- Corporate Wiki is a must!
  - (capture/share/create cycle)

Conclusion

- Co-author Comments?
- Next book: The Semantic Web: A guide to the future of XML, Web Services and Knowledge Management.
- Questions?
- Thanks for coming!!!