A Friendly Face for Eclipse

Charles Reis, Corky Cartwright
creis@alumni.rice.edu, cork@cs.rice.edu
Java at the Intro Level

- Great for OO Concepts
- But:
  - Tough syntax
  - “Magic code” for main, console I/O
  - Compile / Run at command line
Simplify with IDEs

• Syntactic aids
• Error highlighting
• Avoid the command line
IDE Pitfalls for Novices

- No relief from **main** or console I/O
- Overwhelming interface
- Heavyweight
DrJava

- Pedagogic IDE
- Lightweight
- Simple user interface
DrJava

- Pedagogic IDE
- Lightweight
- Simple user interface
Interactions Pane

- “Read-Eval-Print Loop” (REPL)
- Calculator metaphor
- Build up state
- Good for demos, experiments, etc.
Potential DrJava Drawbacks

• No Plug-in Architecture
• Limited feature scope
DrJava Plug-in for Eclipse

- Create a DrJava / Eclipse Hybrid
- Simplify Eclipse’s layout
- Add Interactions Pane
Simplify the Layout
Simplify the Layout
Simplify the Layout
Interactions Pane

• Straight from DrJava
• REPL vs. Scrapbook Page
  • More intuitive metaphor
  • Clear, convenient to build up state
Coming Soon

- Debugger Integration
- Interactions during suspension
- More power than just expression eval
Conclusion

• Eclipse + DrJava: better for novices
  • Less daunting UI
  • Avoid complexities with REPL
  • Ease transition to advanced tools