



The Context of Software Development

Chapter 1

What is a Computer Program?

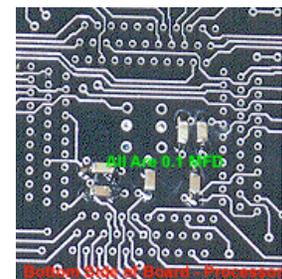
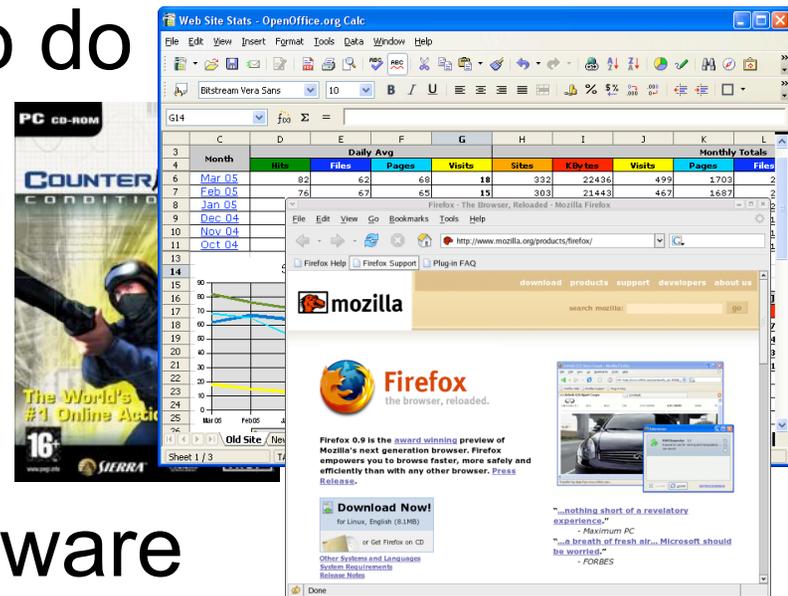
- The instructions that make a computer do the things we want it to do

- Game
- Spreadsheet
- Browser

- A program is software

- Software controls hardware

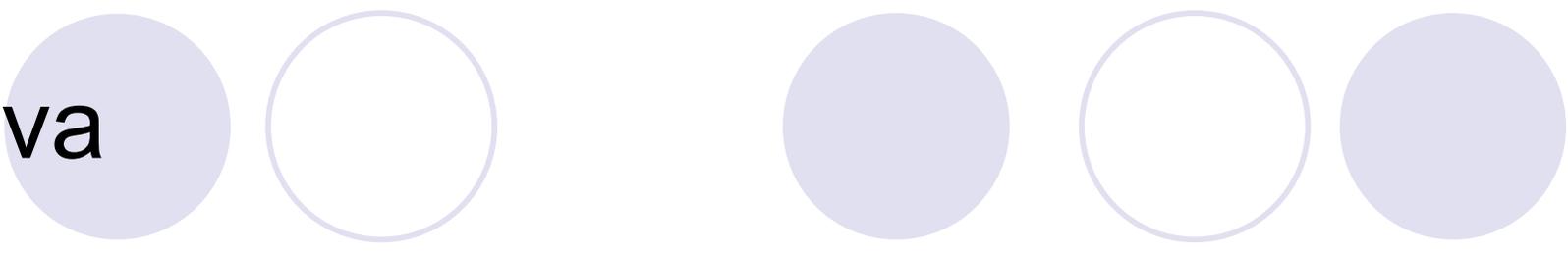
- Hardware without software is useless
- Software without hardware is useless



Do I Need to Know about Hardware?

- Applications programming vs. systems programming
- We do not need to know anything about the hardware!
- Our programming language insulates us from the platform:
 - Processor
 - Operating system

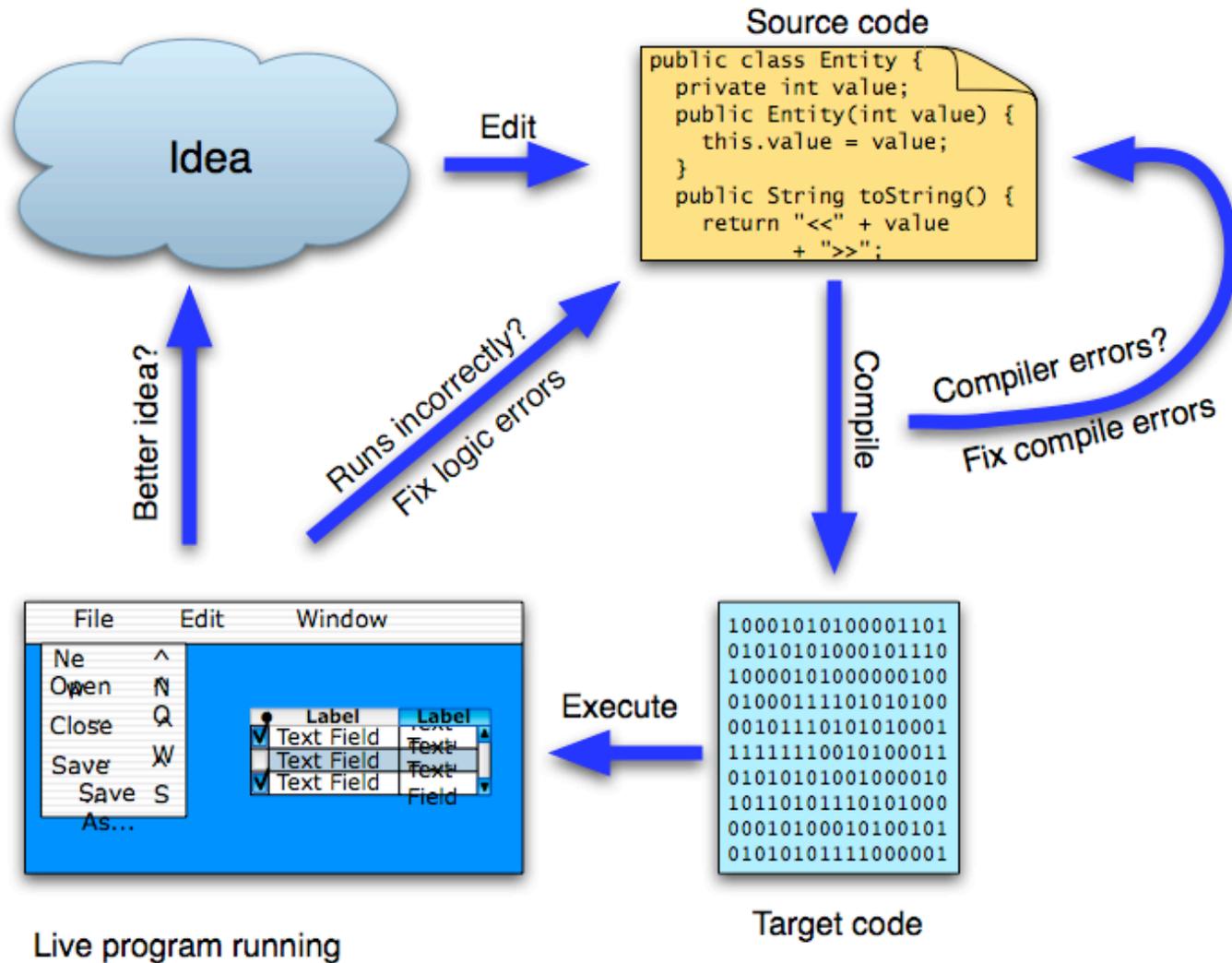


A decorative graphic at the top of the slide consists of two groups of three circles. The left group has a solid light blue circle on the left, a white circle with a light blue outline in the middle, and a solid light blue circle on the right. The right group has a solid light blue circle on the left, a white circle with a light blue outline in the middle, and a solid light blue circle on the right. The word "Java" is positioned to the left of the first group of circles.

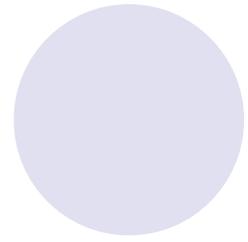
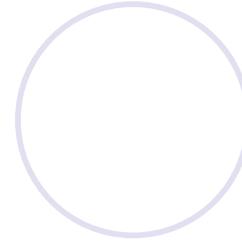
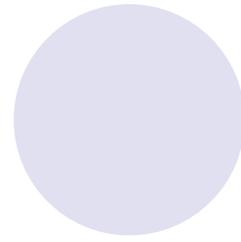
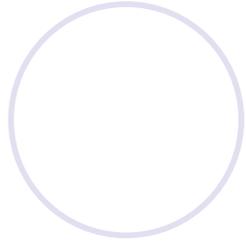
Java

- Modern
- Object oriented
- Platform independent
- Safe
- Good for beginners—**under the right conditions**
- Free

Software Development under Java



DrJava



- An IDE meant for beginners
- Interactive execution environment
- 100% Pure Java
- Free





Values, variables, and types