Information Systems
ISM 3011
Spring 2004
Unit 4A

Assignment for Next Class
• Read chapters 5 + 6
• Self-Assessment test chapters 5 + 6
• Check that you know the key terms listed on p. 218 / p. 266
• Prepare review questions:
  – Chapter 5: 1, 4, 5, 8, 11
  – Chapter 6: 1, 3, 6, 13, 14, 17

Flextronics /QuoteWin
• What is the problem with QuoteWin from a supplier’s perspective?

An Overview of Software
• Computer program - sequences of instructions for the computer
• Documentation - describes program functions
• Systems software - coordinates the activities of hardware & programs
• Applications software - helps users solve particular problems

The Importance of Software in Business

The Role of the Operating System

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Hardware Independence

Examples:
- Accessing Printers (Windows-API) or
- Scanners and Digital Cameras (TWAIN)

Memory Management

Find and reserve free blocks etc.

Processing Tasks

- Multitasking - more than one program (task) can run at a time using a single processor
- Multi-User OS - multiple users can simultaneously use the resources of a single processor
- Scalability - easy adaptation to more users or tasks

System Speed and RAM

- Why does a bigger primary storage capacity (more RAM) increase your PCs speed?
- Does more memory always lead to a higher system performance?

Off-the-Shelf Software

- The book says on page 147 that one should check whether the software manufacturer is financially solvent and reliable. Why?
Proprietary vs. Off-the-Shelf Software

<table>
<thead>
<tr>
<th>Advantage</th>
<th>Disadvantage</th>
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<tbody>
<tr>
<td>Can solve specific problems effectively</td>
<td>Implementation costs are high</td>
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<tr>
<td>Customizable to meet specific needs</td>
<td>Technical support is often limited</td>
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<td>User-friendly interfaces</td>
<td>Can lead to vendor lock-in</td>
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What is **Integrated** Software?

- **Data Integration**: “One fact at one place”
- **Functionality Integration**: one function can interact with others (copy and paste inside one program)
- **Application Integration**: Two or more software applications can interact.
- **Process Integration**: Two or more business processes are connected.

What is **Compiler**?

- **Objects** - data and actions that can be performed on the data
- **Encapsulation** - group items into an object
- **Polymorphism** - one procedure can work with multiple objects
- **Inheritance** - an object in a particular class gets attributes of that class

Thank you!

The slides will be available on the internet at http://ruby.fgcu.edu/courses/mhepp/ (→ CRN10033)