

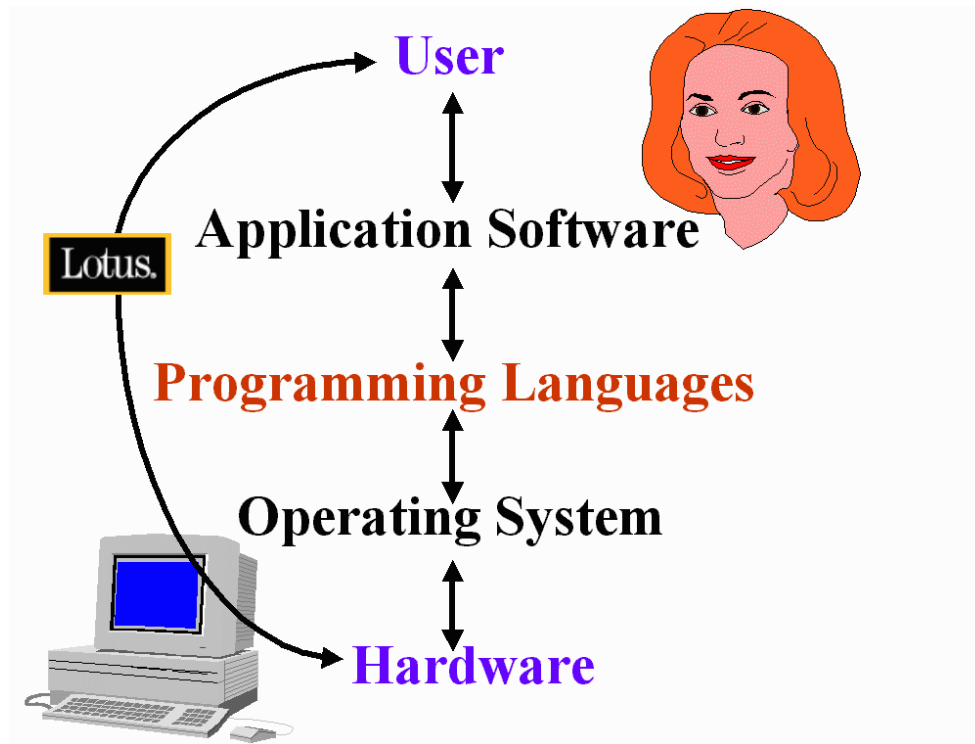


Software?

What is software?

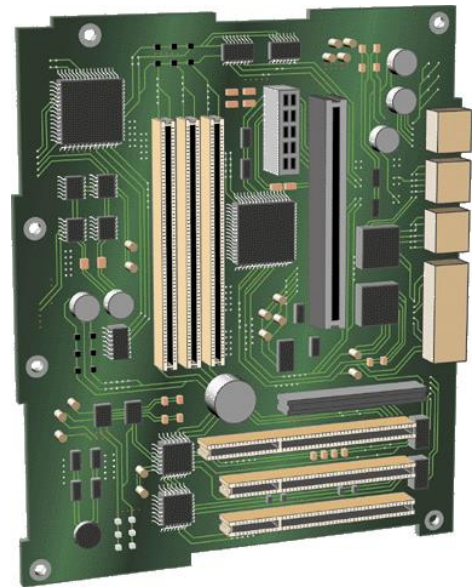
- ▶ Groups of **Programs**
 - ▶ **Programs are a series of instructions that tell the computer what to do**
- ▶ For Example: in Excel
 - ▶ An instruction would be:
 - ▶ Add the contents from Cell B17 to B24
 - ▶ Instruction:=SUM(B17:B24)

Software types:



System/Operating Software

- ▶ Set of programs that coordinates the activities of various hardware components



Operating Systems: 3 main functions

Feature	Nickname	Purpose
Manage Hardware	Traffic Cop	Directs the flow of data between hardware components such as RAM, disk drives, CD's, CPU, and Printers Also provides how programs are executed and some limited security Attempts to maximize system resource utilization
User Interface GUI (graphic user interface)	Icons	Provides a common feel and look to the tool bars lines for all the applications. Makes it easier for a user to learn how to use the software
Storage / Retrieval	Librarian	Provides a standard format to store and retrieve the data on storage devices (RAM, disk drives etc)

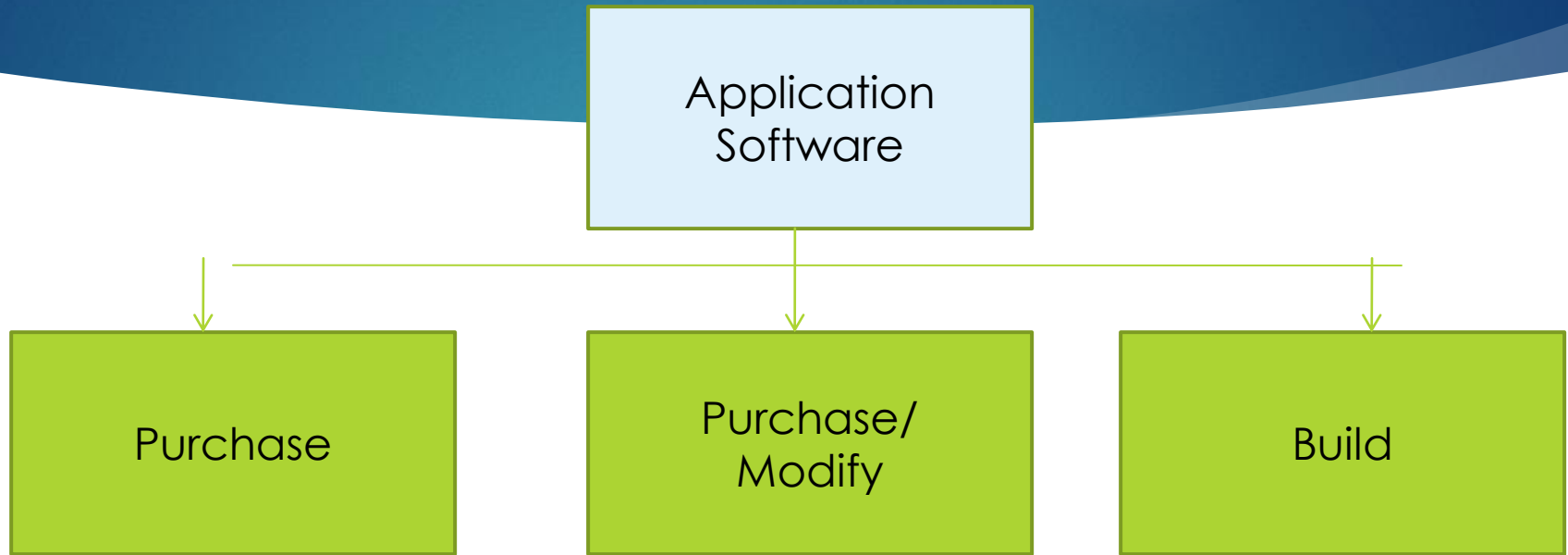
Operating Systems / desktops

Operating Family	Interface	Best Tasks	Market Share
Windows 10 Windows Family	GUI (graphic)	Business Applications Numerical Applications Basic Communications	77% of business & home
Mac Family	GUI	Graphical Applications Multi media Design/Creative arts	17%
Linux / Unix	Command (unless you purchase)	Web Servers Computer Geeks	2%+

Phone Operating Systems Based on Shipments (2021 & 2022)

Operating Family	Market Share (Worldwide)	Market Share (US)
iOS / Apple	28%	51%
Samsung / Android	28%	27%
Others	44%	22%

Application Software



Payroll Program?

Harris Teeter Customer Tracking

Personal Productivity Software



Personal Productivity Software

Ranked by Usage

Browsers (Chrome / Edge / Safari / Firefox)

Word Processors (Word, Google Docs, Pages)

Spreadsheet (Excel, Google Docs, Numbers)

Presentation (PowerPoint)

Database (Access, msSQL, ProGres)

Programming Languages

- ▶ HTML 5 + CSS 3 (Web Languages)
 - ▶ Java
 - ▶ Python
 - ▶ C#
 - ▶ PHP
 - ▶ C++
- ▶ Permit the application developer more control and customization