

# MacMAD Beginner's Class

Instructor: Jamie Cox

- Naming your Computer and its Parts
- RAM & Disk
- How to Hook Up & Turn on Your Mac
- Your Mental Model
- Basic Operations
- Lunch
- Learning New Things
- Problems
- Frequently Asked Questions
- Frequently Given Answers

# About the Class

- **This is a BEGINNER's Class**
- **We'll Cover a Lot**
- **Basic Beginner Questions have Priority**
- **No Over-Your-Head Stuff Here**
  - If you have a question - ASK
- **I probably have never used your favorite application program.**

# Monitor

- Just Makes a Picture
- Stores No Data
- Dumb
- “Monitor” or
- “CRT” or
- “Display”



# The Computer

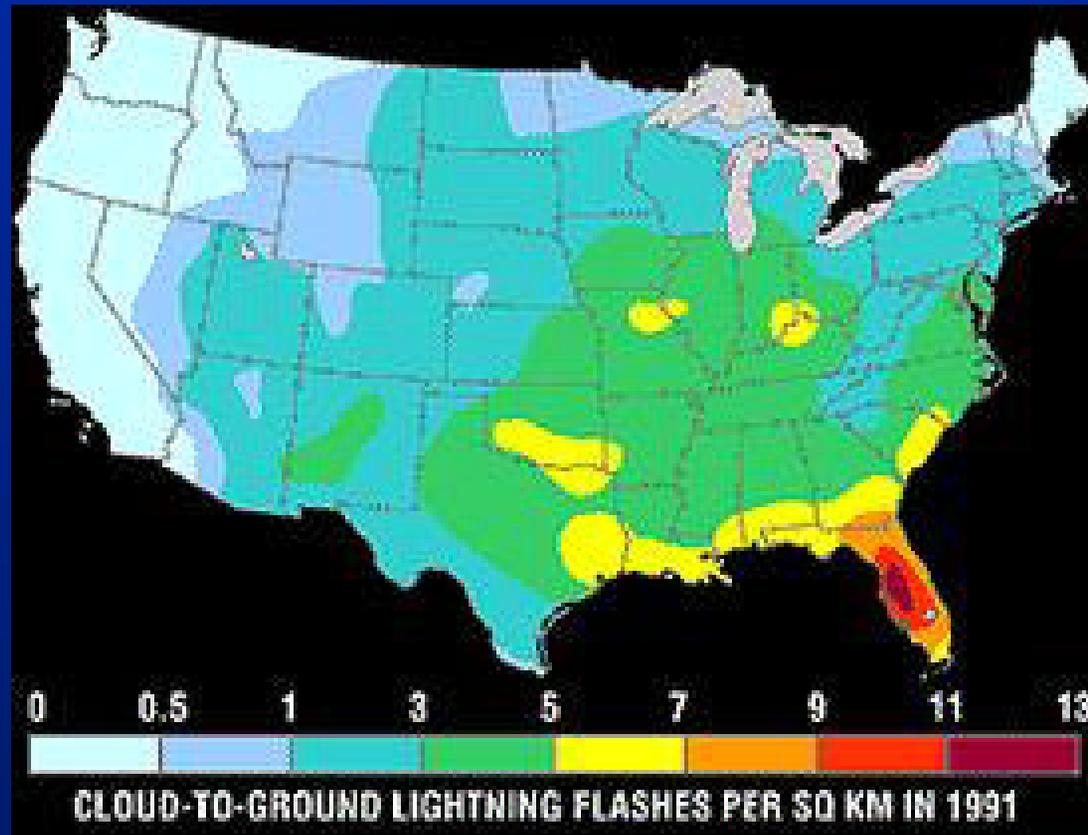
- The Brains
- Contains:
  - Microprocessor
  - Internal Hard Disk
  - RAM
  - Floppy Drive
- “Computer” or
- “System Unit” or
- “Power Mac 7200”



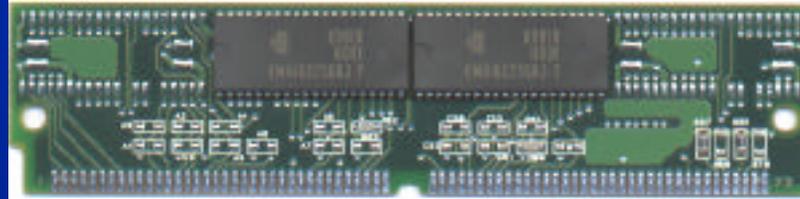
# Connecting Your System

- Cables are Marked with Icons
- Like Icons Go Together
- Don't push too hard: If it doesn't go easily, It may be the wrong cable, or the wrong side up.

# Use Surge Protection Especially in Florida



# RAM - Random Access Memory



- **Smaller in Size and Capacity**
- **More Expensive (\$/Megabyte)**
- **Purchased as SIMMs/DIMMs**
- **Installed in RAM Slots**
- **Be Careful buying RAM: Many Different Types & Sizes exist**
  - Most of Which WILL NOT work in your computer
- **Volatile - Loses everything without power**

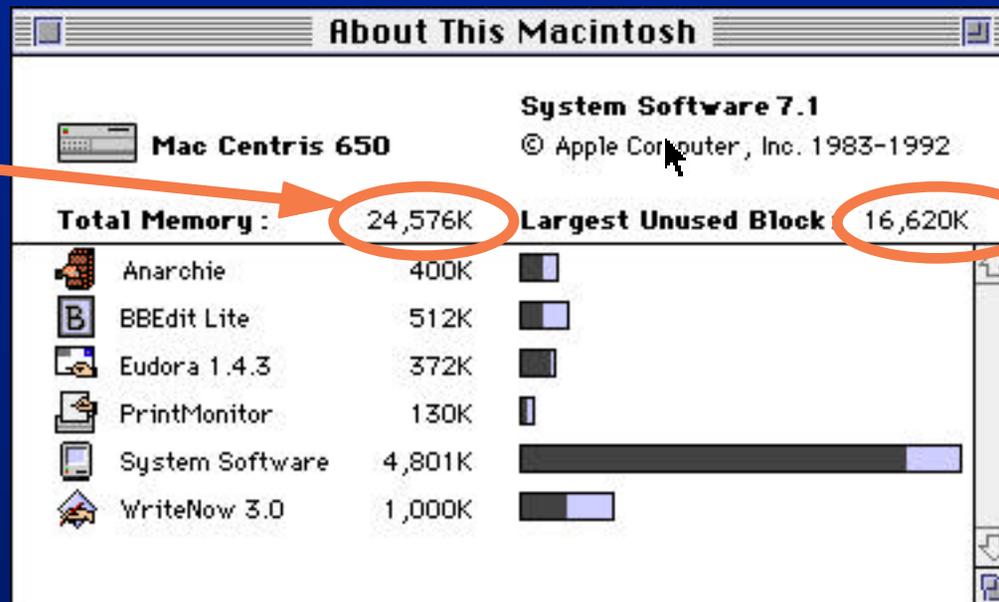
# RAM & Disk

- **Typical Modern System (1999 Prices)**
  - 32 Mbytes RAM ~ \$32 worth
  - 3 Gigabytes = 3,000 Megabytes on Hard Drive ~ \$300
- **3 Gigabytes of RAM would cost \$3000**
- **RAM is about 100x Faster than Disks**
- **RAM costs ~10x as much**

# Checking RAM: Is it Full?

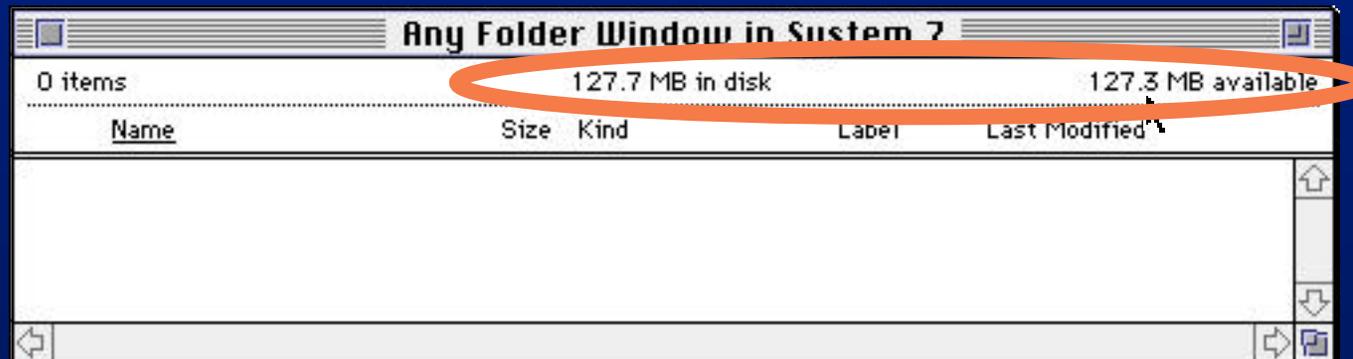
- Select *About This Computer* from the Finder's Apple Menu
- The System below has about 16 Meg free

24 Megabytes



# Checking Disk Space

- Open any Folder on the disk
- Select Show Size in the Views Control Panel or View Options Menu Item (System 8)
- Your total hard drive space is the total of the “available” and “in disk” numbers. The example shows a drive totaling about 256 Mbytes.
- The drive is half full

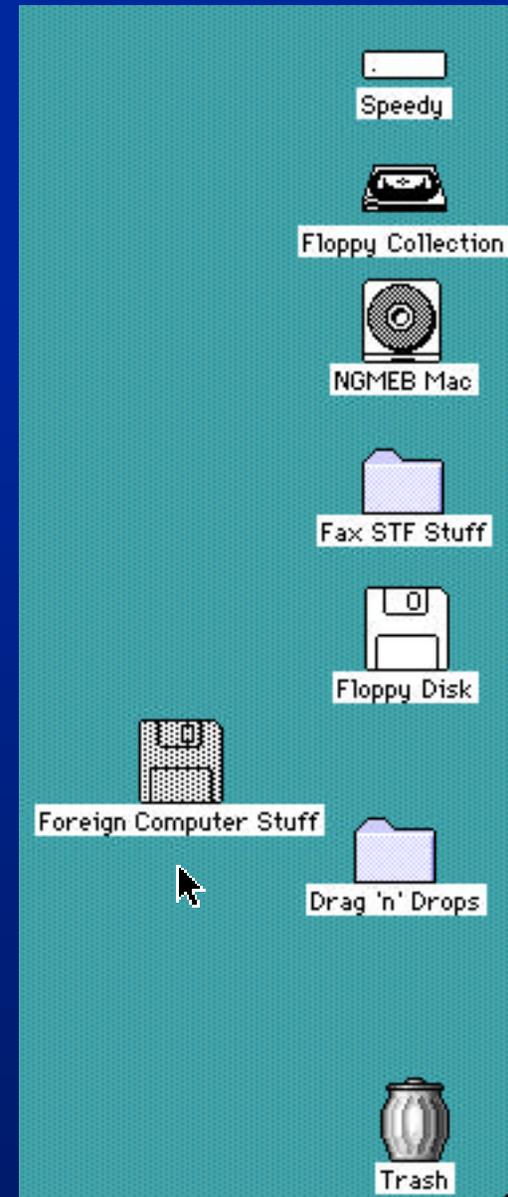


# Megabytes: RAM & Disk Space

- **Do Not Confuse Megabytes of RAM with Megabytes of Disk Space**
- **RAM**
  - Very FAST, Expensive, Working Storage
  - “Scratch Area”
  - Where Your Applications Run
  - Forgets Everything When Powered off
- **Hard Drive (Disk) Space**
  - Inexpensive
  - You can view the contents of a disk in the Finder
  - Where Your Data is at Night While the Computer is off

# The Desktop

- Speedy : Hard Disk
- Floppy Collection : Removeable
- NGMEB Mac : CD ROM Disk
- FAX STF Stuff : Folder
- Drag 'n' Drops : Folder
- Floppy Disk : Floppy Disk
- Foreign Computer Stuff : Floppy
  - (not mounted)
- Trash: The Trash

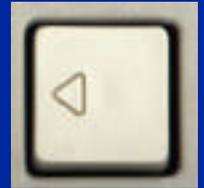


# Storage: Where Things Go

- **The Desktop Contains:**
  - Disks, Folders, Documents & Trash
- **Disks Contain:**
  - Folders & Documents
- **Folders Contain:**
  - Documents and more Folders
- **A Document is the same as a “File”**
- **Documents are Associated with the Application that Created them**



# Turning Your Mac On and Off



- **Make Sure you have your Mac Plugged in to a reliable, safe, source of power.**
- **Surge Protection is Recommended in FL**
- **Most Macs Start from Keyboard Power Key**
- **This key will also shut down many Macs (after an are-you-sure dialog box).**
- **Always Use *Special-Shut Down* to turn off your Mac**
- **Don't turn it off from the switch on back**

# Mental Model

## All-purpose Instructions

- How to Use a Computer:
  1. **Open** an Application (a “program”)
  2. **Open** a Document
    3. Read the Document or Change it
    4. **Save** the Document
    5. **Print** the Document
  6. **Close** the Document
  7. **Quit** the Application

# Basic Operations

- **Click - Press and Release Mouse Button**
- **Drag - Hold Mouse Button While moving Mouse**
- **Select - Select things by clicking them**
  - Objects are **HIGHLIGHTED** when selected
  - Select Multiple objects with the Shift Key

# Basic Operations

## Menu Selections

- Press Mouse with the Pointer On the Menu Title (like *File*)
- Drag down to the desired operation
- Release the Mouse Button
- OR:
- Click on Menu Title
- Then, Click on the desired operation



# Basic Operations

## Cut, Copy and Paste

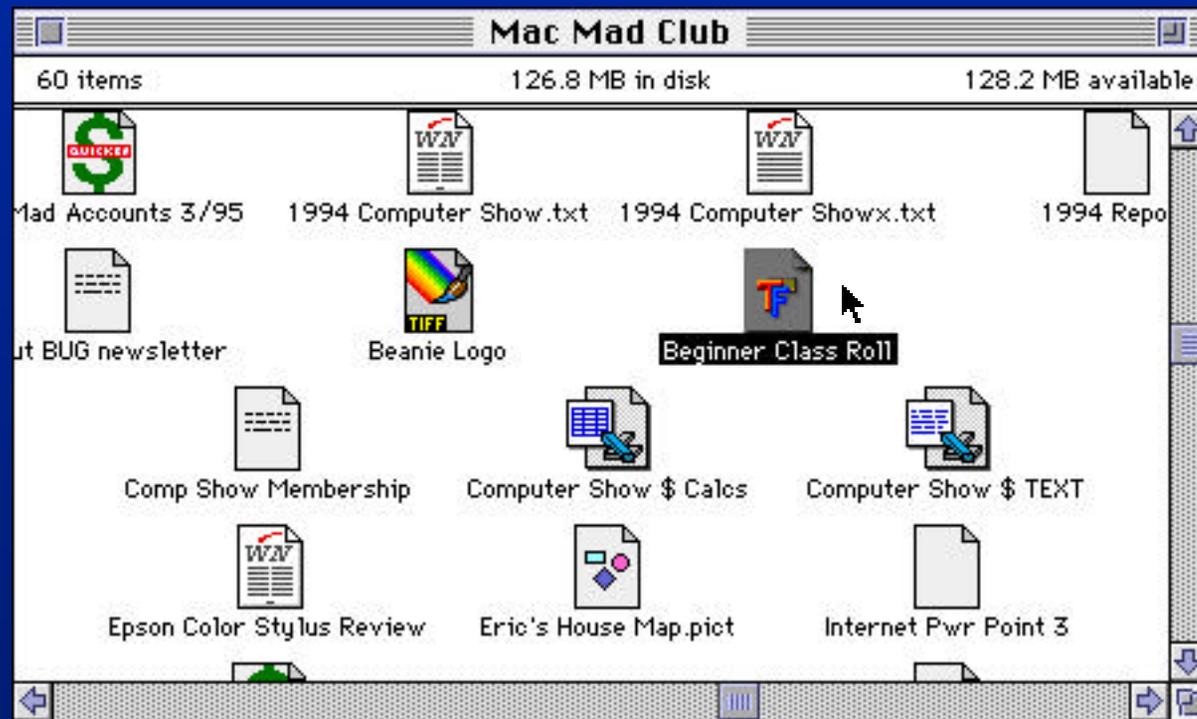
- **Cut X** Deletes Selected Object, moving it to the Clipboard
- **Copy C** Copies Selected Object to Clipboard
- **Paste V** Pastes Clipboard into your Work  
**Pastes at the Insertion Point**  
The insertion point is a Blinking Vertical Bar
- **MNEMONICS**  
**X - Looks Like Scissors: CUT**  
**C - C for Copy**  
**V - Point of the V Marks the Spot for Pasting**



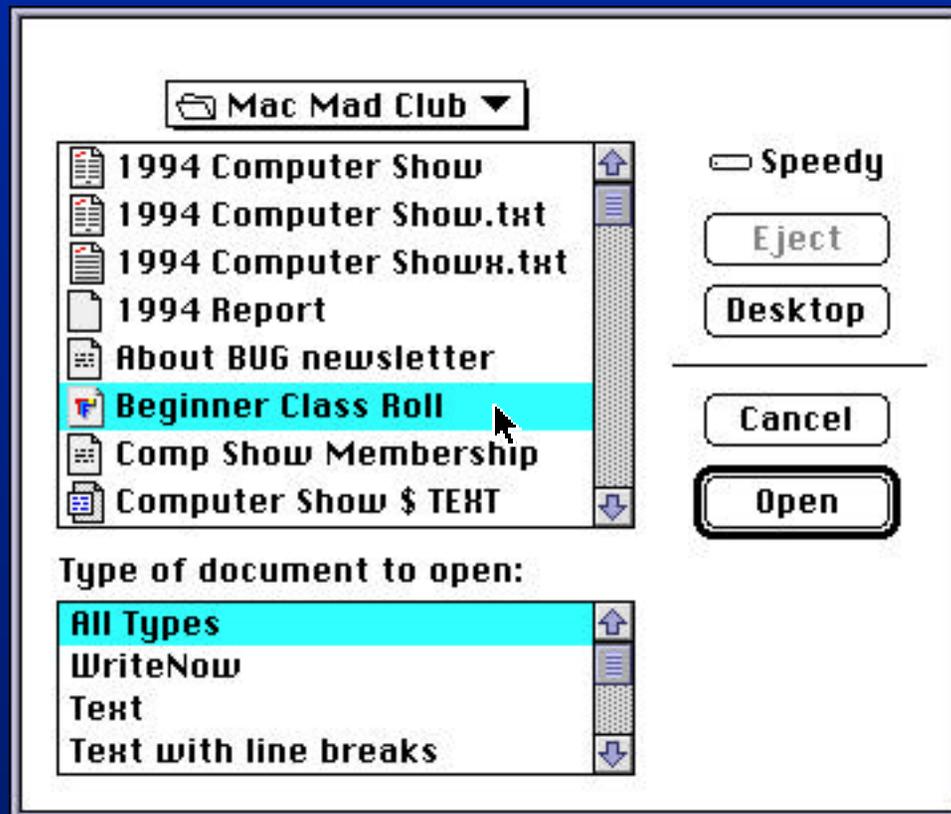
# Opening Documents

- The following actions all have exactly the same effect, that of opening the selected item:
- Select *File:Open*
- Type **O**
- Double Click the Icon
  - Double Clicking is always a shortcut for “Open”

# View of a Document in the Finder



# Finding the Same File from Within an Application



# Organizing Your Work

- Give Your Folders Meaningful Names
- Store Files in the Appropriate Folders
- Make Aliases to Commonly Used things
- Learn to Use Find: **F** (Sherlock in 8.5+)
- Backup Your Data
  - Use Floppies, Zip Disks, CDs
  - Especially, Backup files YOU create.



# The Application Menu

- List of Active Applications
- They're Using Up RAM
- Check indicates the active Application
- Menu Bar Belongs to active Application
- To Quit an Unused Application:
  - Select it from the Application menu
  - Select quit from its File menu



# Learning New Things

- **Mac Users Learn Lots of Applications**
  - Each uses the Macintosh User Interface
  - Minimum Re-learning



# Macintosh Applications

- Macintosh User Interface
- Consistent Interface Make Learning New Programs Easy
- Consistent Window controls 
- Standard Menu Commands
- Standard Keyboard Commands

# Learning New Things Expect a Lot

- Expect A LOT - You may get it
- If you want your software to do something, it probably does!
- You are not the first to want a feature -
  - The programmer wanted it first
- It's probably in there somewhere already
- Look for it
- Use The Help Menu



# Problems: Error Messages

- READ MESSAGE CAREFULLY
- Try to Guess Source of Message and Cause of Message
- What are your Options?



# Problems: Error Messages

- **The Error Message Might not Even Be from Your Computer!**
- **On the Internet, it can be from another computer**
- **Or, It could be from your printer**

# Problems: Error Messages



Sorry, a serious system error has occurred.

- **“Serious System Error” or “Bomb” Messages**
  - They’re NOT your fault
  - But, you might be able to fix them
  - See Frequently Given Answers
  - You might be out of RAM
  - The Error Code is usually unimportant

# Problems: If it Hangs

- If your computer seems to be hung...
- To Recover, Try These (It may not be as bad as you think)

Don't Panic - Wait a bit. Maybe it is just slow



1. **Command-C** to cancel disk or printing operations
2. **-Option-Esc** to Force Quit the Application
3. **-Option-Powerkey** (Or Use Reset Button  if you have one) This resets your Mac, Same as power off, and back on again.

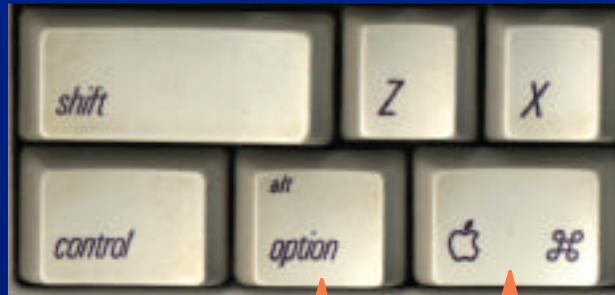
# How to Fix the Problem

- Round up the Usual Suspects: Extensions & Control Panels
- What's the Last Program You Installed?
- What Were You Doing?
- Could You Have Been Out of Memory?
- Can You Repeat The Problem?
- See Frequently Given Answers

# Frequently Given Answers

To Solve Problems with Icons & Opening Files

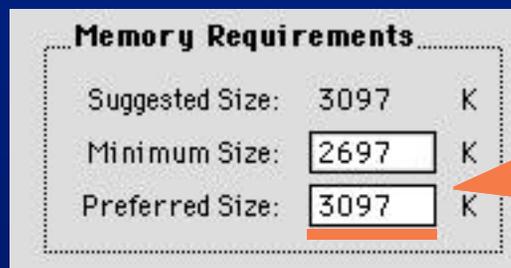
- **Rebuild Your Desktop File:**
  - Hold **Shift** and **Option** Keys while Starting Up
  - Wait for Dialog Box - Answer Yes to Rebuild
  - It takes a few minutes



# Frequently Given Answers

To Solve Mysterious Application Problems

- Give the Application More (or Less) Memory
- Select the Application Icon
- Select *Get Info I* from the *File* Menu
- The *Application* can be out of RAM, even if the computer has plenty



**You can change this number  
Try + %50 from the  
suggested size.**

# Frequently Given Answers

## To See if Your Disk Data is Damaged

- Run Apple's Disk First Aid 
- Disk First Aid Comes with your Mac
- Before MacOS 8.6- Disk First Aid must Be Started from another disk to repair your hard disk:
  - a Floppy, or
  - a CD, or
  - an External Hard Disk
- It's a good idea to run Disk First Aid if you've had a crash or two, before things get worse

# Your Questions



# Computer Numbers

- **Binary: Using the Digits 1 and 0 Only**
- **A Bit: A single Binary Digit, 0 or 1**
- **A byte: a group of 8 binary digits, eg. 01010101**
- **How High can you count?**
- **With 1 bit: count to 1, (2 values)**
- **With 2 bits: count to 3, (4 values)**
- **With 3 bits: count to 7, (8 values)**

# Computer Numbers

These Bits

Store this many Values

1 bit

2

8 bits

256

10 bits

1,024 (1 k)

16 bits

65,536

20 bits

1,048,576 (1 Meg)

32 bits

4,294,967,296