

IMAGING III

WEEK 1

WORKFLOW
HARDWARE + SOFTWARE
FILING STRUCTURE
CAPTURE + DOWNLOAD

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WORKFLOW

wārk·flō

- A sequence of industrial, administrative or other processes through which a piece of work passes from initiation through completion.
- A logical series of processes in the evolution of a work which efficiently produces reliable and repeatable results.
- The set of relationships between all the activities in a project, from start to finish.

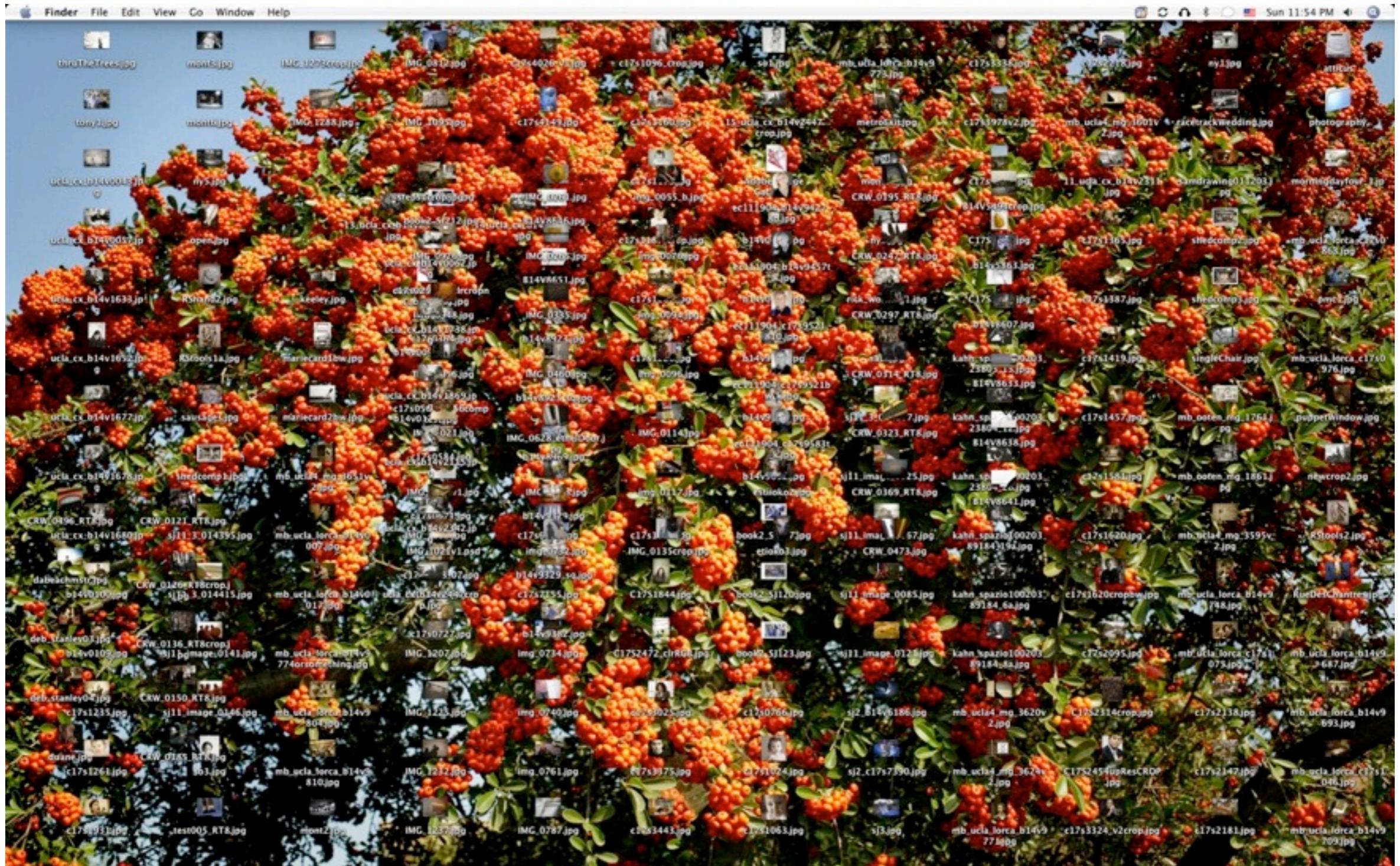
TRADITIONAL WORKFLOW

- BUY FILM
- LOAD CAMERA
- SET EXPOSURE
- SHOOT
- PROCESS AND PROOF (LAB OR YOUR DARKROOM)
- MAKE A PRINT (LAB OR YOUR DARKROOM)
- SEND PRINT TO RETOUCHER
- PUT NEGS IN SHOEBOX UNDER BED
- TO MAKE A PRINT 1 YEAR LATER, FIND CONTACT SHEET IN A CUPBOARD IN THE KITCHEN, THEN GO TO SHOEBOX, DUST OFF NEGATIVE AND SEND TO LAB.

DIGITAL WORKFLOW

- BUY CAMERA
- CHOOSE FROM A ZILLION SETTINGS ON CAMERA WITH HELP OF A SPECTACULARLY WELL-WRITTEN MANUAL, WHICH OF COURSE YOU READ COVER-TO-COVER
- SHOOT
- DOWNLOAD 1 MILLION FILES (OR 3 MILLION, BECAUSE 'I SHOOT JPEGs BECAUSE I CAN GET MORE ON A CARD!')
- EDIT DOWN TO 900,000 (2.7 MILLION JPEG) FILES
- CHOOSE IMAGES TO WORK UP BY OPENING EVERY ONE 'SO I CAN SEE IT BIG, AND HECK - I'LL DO SOME WORK IN PHOTOSHOP WHILE I'M THERE'.
- WHAT'S A PROOF SHEET?
- WORK ON FILE FOR 4 HOURS IN PHOTOSHOP BECAUSE NOW I DO MY OWN RETOUCHING, THEN FIND I'M UNABLE TO SAVE IT BECAUSE MY HARD DRIVE IS FULL.
- SAVE AS JPEG (!) AND EMAIL MY MASTERPIECE TO FRIENDS AND FAMILY
- MAKE A PRINT (WELL, THAT'S A DAY AND HALF-A-BOX OF PAPER, AND IT STILL DOESN'T LOOK LIKE MY MONITOR, SO I JUST MAKE THE ONE ON MY SCREEN SORT OF GREEN TO COMPENSATE)
- DIGITAL FILES DON'T FIT IN A SHOEBOX AND ANYWAY I DON'T THINK ABOUT STORAGE - I'VE GOT A 250GB HARD DRIVE AND THAT SHOULD BE PLENTY.
- TO MAKE A PRINT A YEAR LATER - "UH, IT'S RIGHT HERE ON MY DESKTOP ..."

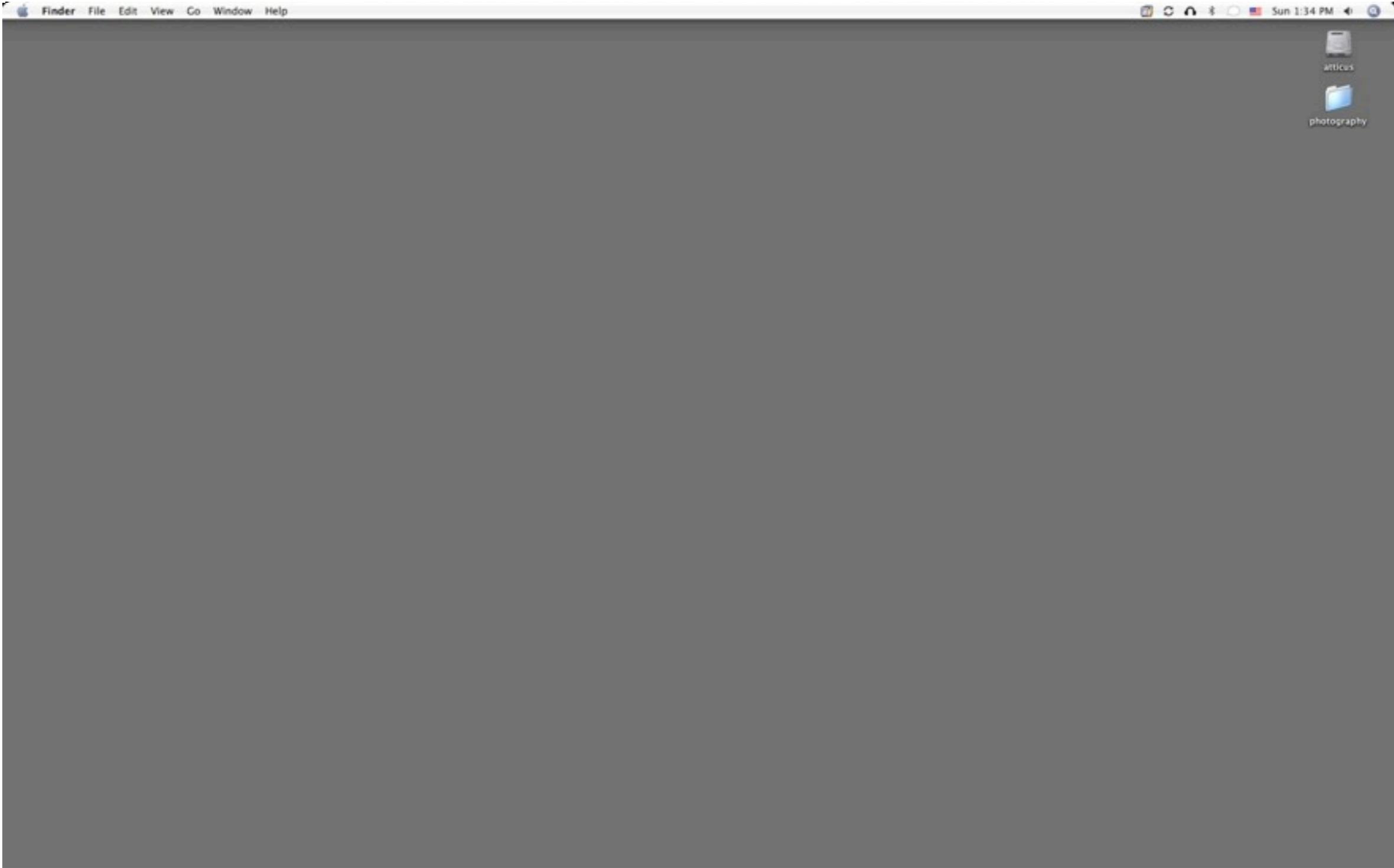
BAD DESKTOP



yər wərk'flō

- YOUR PHOTOGRAPHIC WORKFLOW is a *series* of specialized workflows, completed in a specific order.
- Parts of your workflow may be so routine for you that you don't think of them as formal workflow - but you should.
- Having a defined workflow offers the opportunity for efficient, repeatable and predictable results and let's you BE MORE CREATIVE!

GOOD DESKTOP



HARDWARE & SOFTWARE

BASIC HARDWARE/SOFTWARE FOR A PROFESSIONAL DIGITAL DARKROOM

- COMPUTER + MONITOR
- MONITOR CALIBRATION SYSTEM
- REDUNDANT DRIVES FOR CURRENT WORK
- REDUNDANT DRIVES FOR ARCHIVED WORK
- IMAGING, ESTIMATING, BACKUP, FTP & DATABASE SOFTWARE

HARDWARE

- COMPUTER - Laptop, Tower or iMac
for APPS + temporary storage of location files (laptop)
- MONITOR with CALIBRATION SYSTEM
- CURRENT WORK DRIVE + BACKUP
to protect against a Drive Failure
- OFF-SITE COPY OF CURRENT WORK DRIVE
to protect against theft, fire, water damage at main computer
location
- PORTABLE BUS-POWERED USB EXTERNAL DRIVE
for location backup & for moving files from home to school
- REDUNDANT OFF-SITE SECURE STORAGE OF ARCHIVE

HARDWARE

FOR APPS



Laptop + Calibrated Monitor



OR



Tower + Calibrated Monitor

OR



iMac



FOR CURRENT WORK

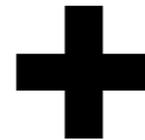


Trayless 2-bay RAID + 3rd drive

OR



3 identical external drives



Trayless 2-bay RAID
for ARCHIVING

+



bus-powered portable

HARDWARE



Monitor + Color Calibration Hardware & Software

OR
upgrade software to
BASICCOLOR software



HARDWARE RESOURCES

- <http://www.apple.com> - computers, displays
- <http://www.eizo.com> - displays
- <http://www.weibetech.com> - Trayless RAID enclosures, drives
- <http://www.macsales.com> - Internal & external drives, RAM
- <http://www.datacolor.com> - Spyder 3 Pro
- <http://www.basiccolor.de/> - basIColor Calibration Software

SOFTWARE

- CURRENT OS with Email, Browser, Word (Pages), Excel (Numbers) and Business Software
- PHOTOSHOP CS5 (includes BRIDGE + ACR6)
<http://www.adobe.com>
- SUPER DUPER! - automated volume duplication for backup
<http://www.shirt-pocket.com/SuperDuper/>
- TRANSMIT 4 FTP client - for uploading files to server
<http://panic.com/transmit/>
- EXTENSIS PORTFOLIO 8.5 archive database program
<http://www.extensis.com>

FILING STRUCTURE

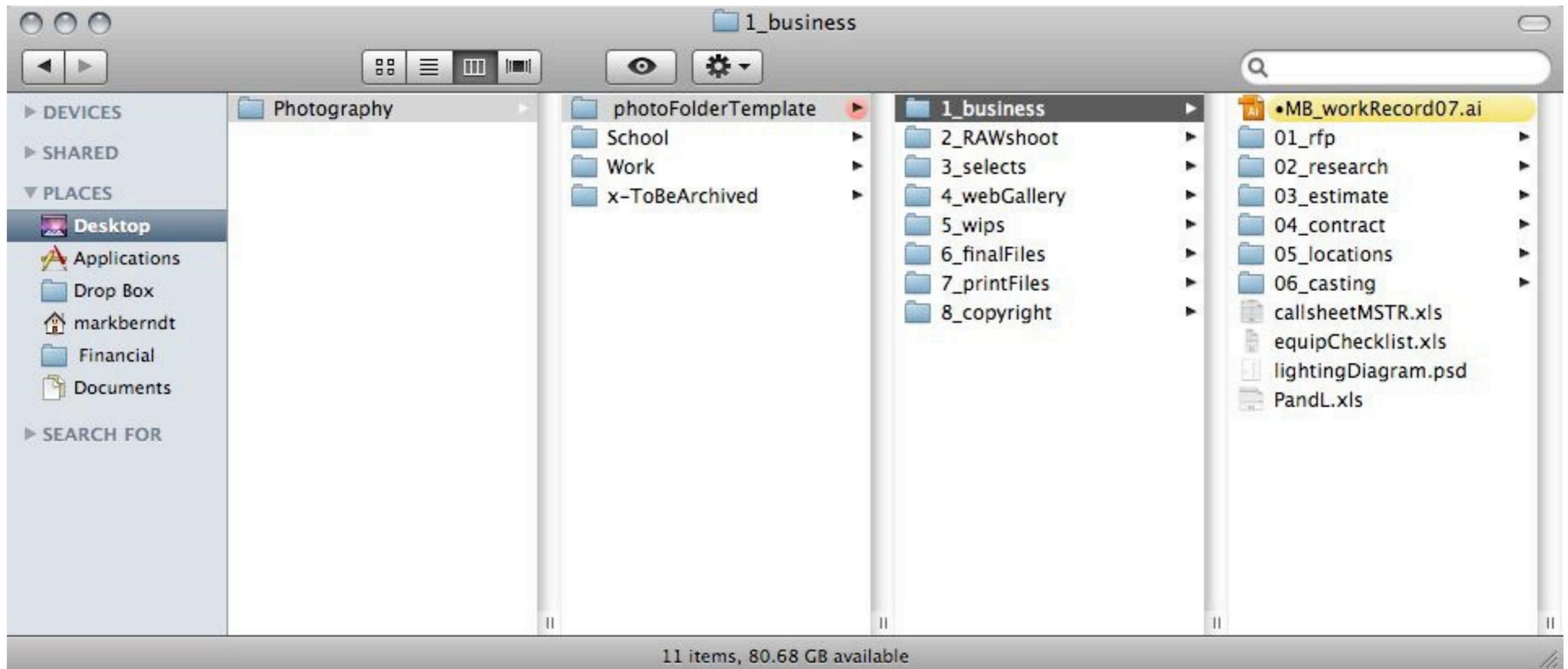
FILING STRUCTURE

- Create a “PHOTOGRAPHY” folder on your desktop or external work drive



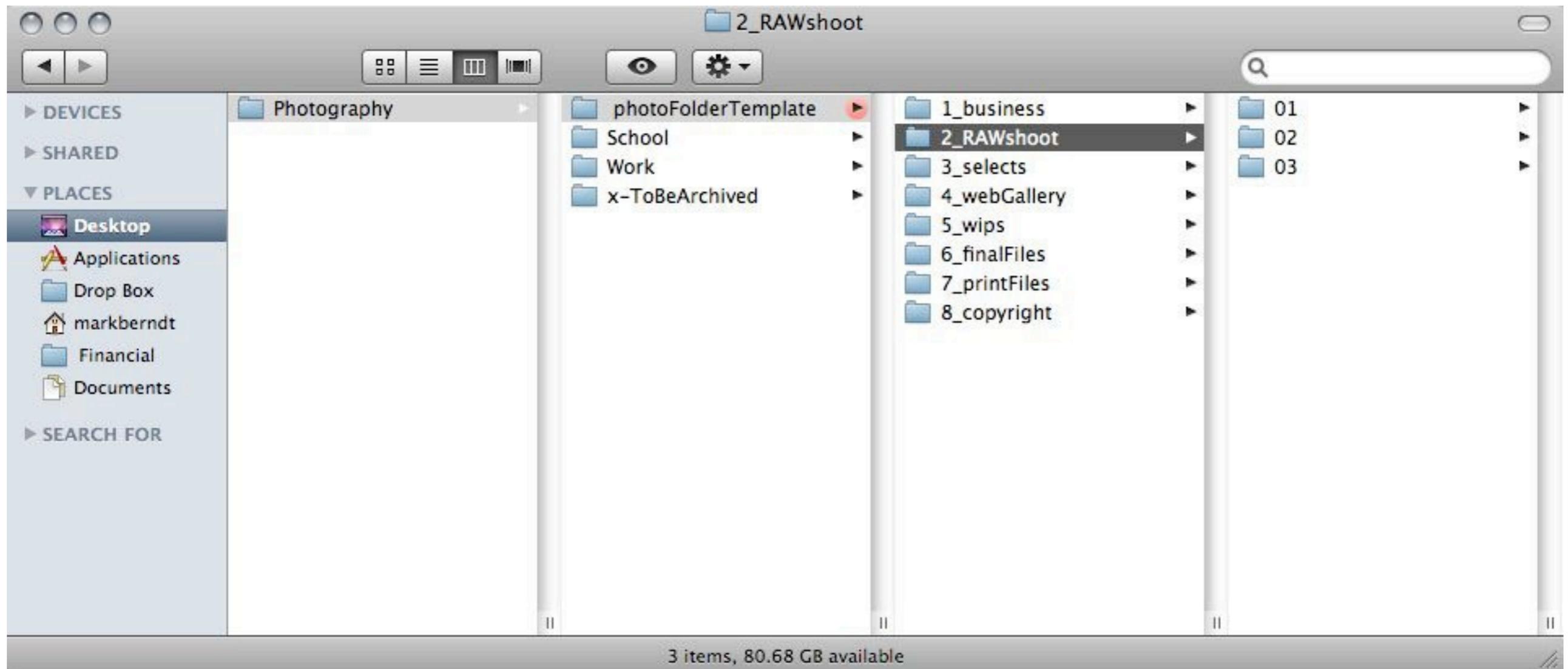
FILING STRUCTURE

- Create a “photoFolderTemplate” - a folder containing the following set of numbered/named folders - your workflow in order. Each primary folder can contain additional folders which further define that phase of your workflow.



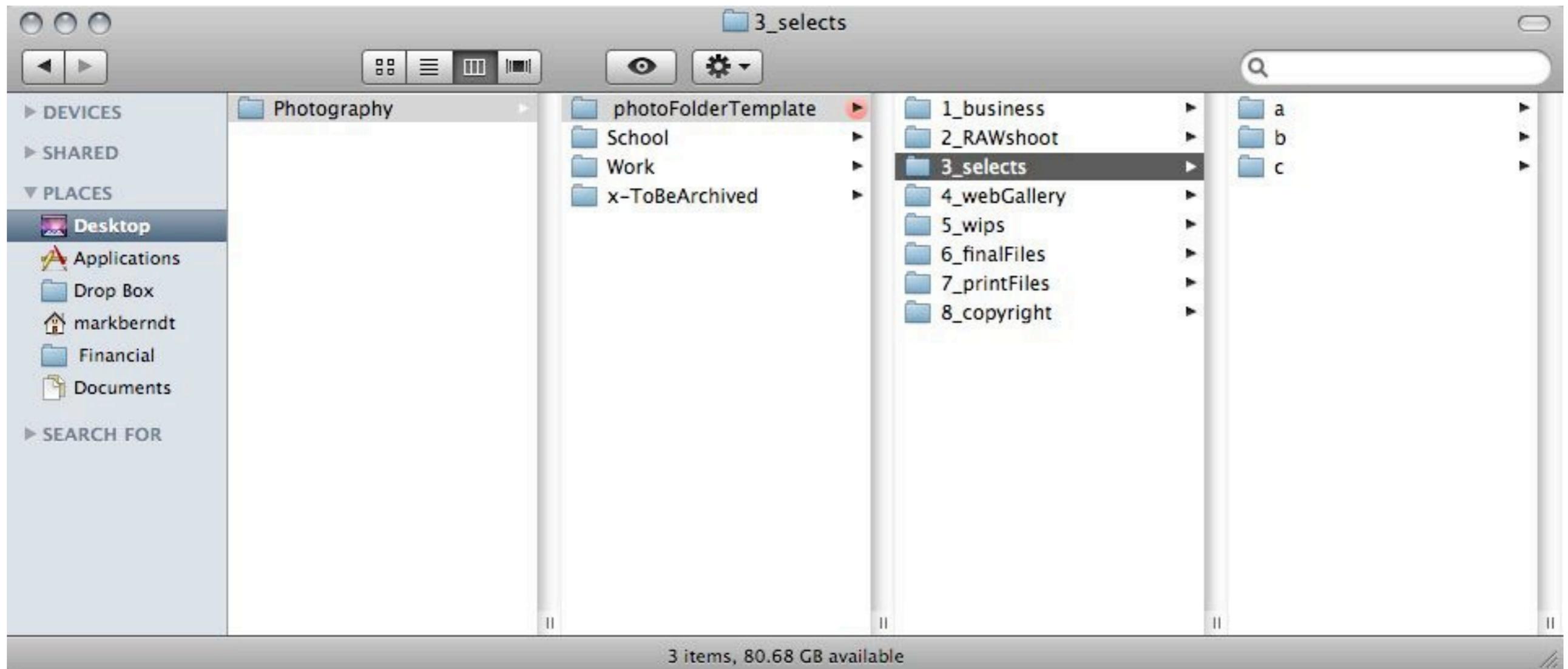
FILING STRUCTURE

- The RAW SHOOT folder contains sequentially NUMBERED folders - one folder for EACH CARD DOWNLOAD.



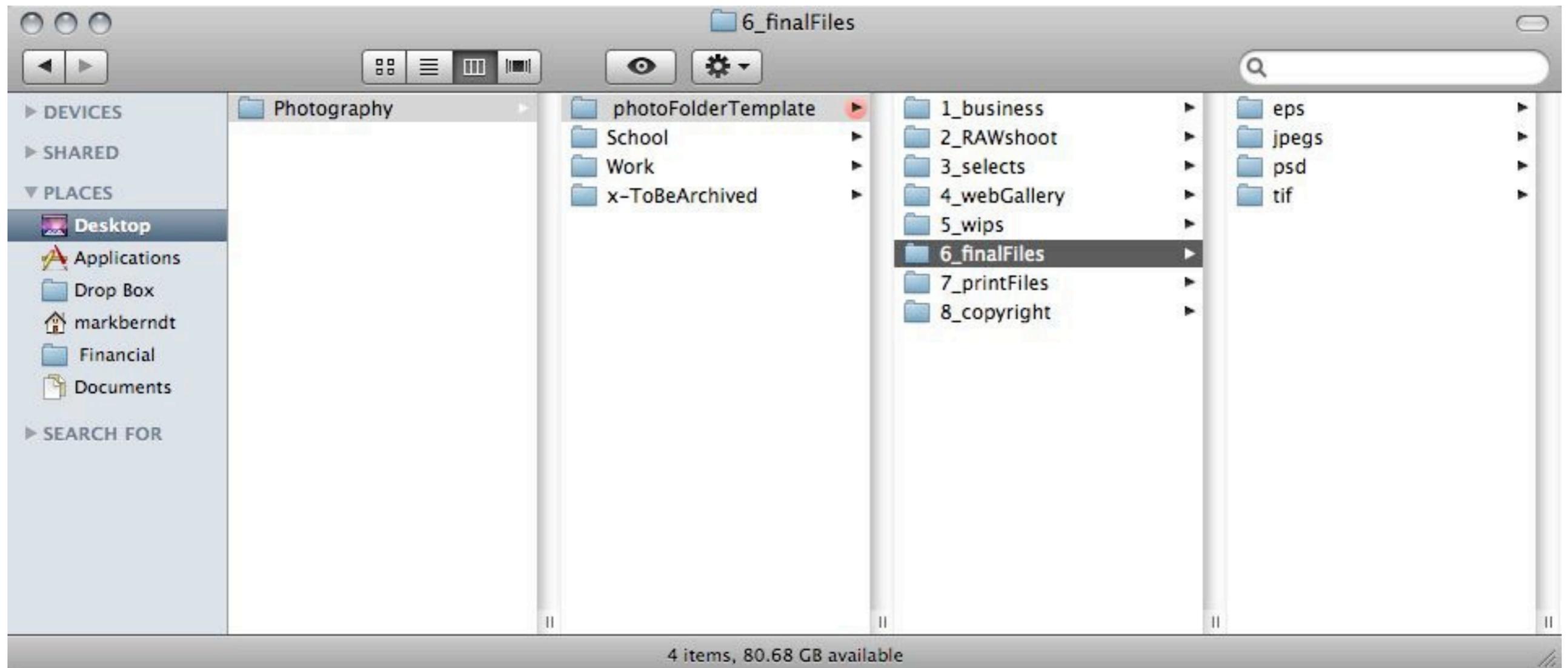
FILING STRUCTURE

- The SELECTS folder contains NAMED folders - for each person, setup, location, etc.



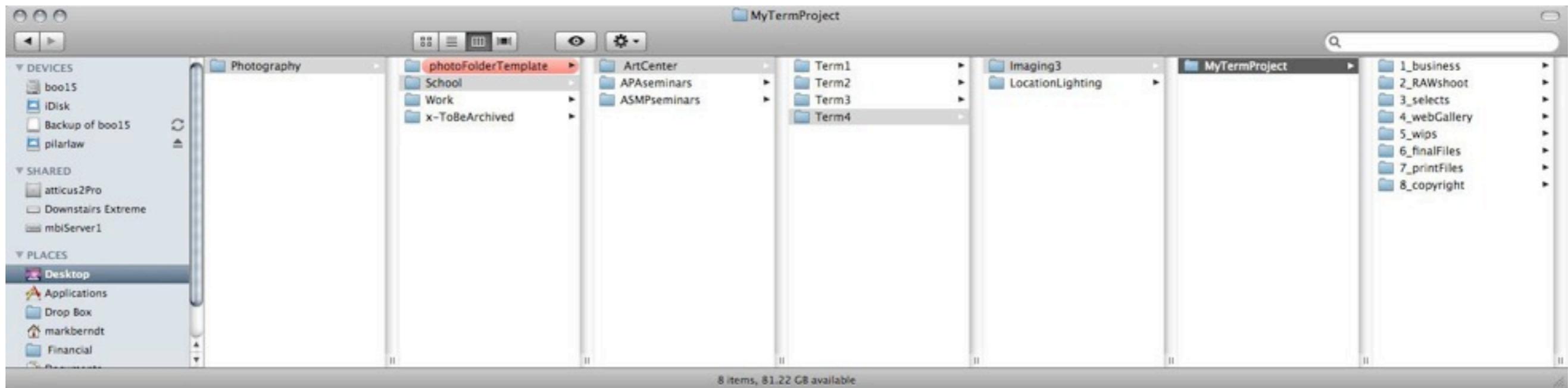
FILING STRUCTURE

- The FINAL FILES folder contains a “psd” folder for MASTER FILES (1 for each finished image), which are used to generate files in other sizes and formats as needed.



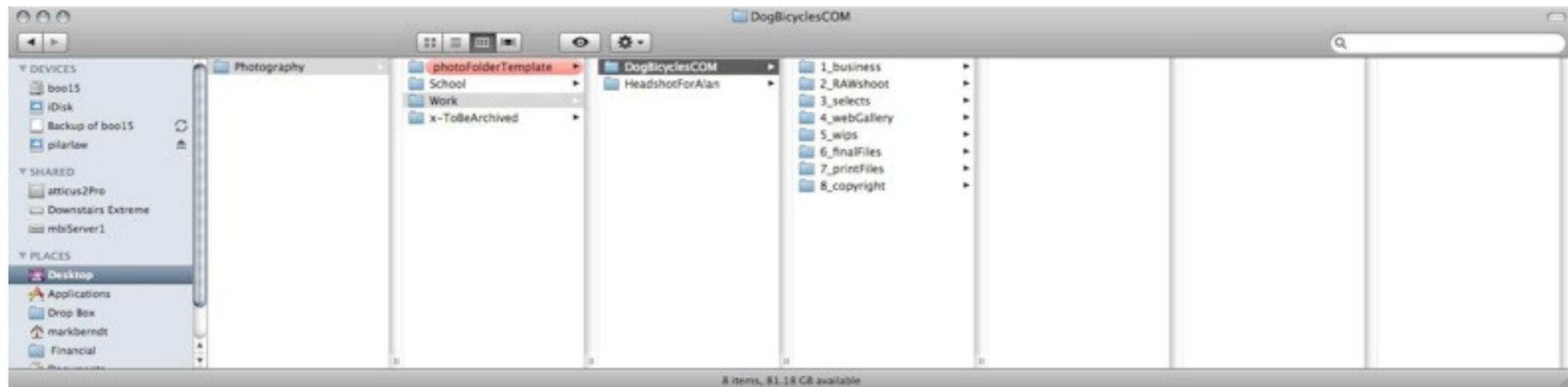
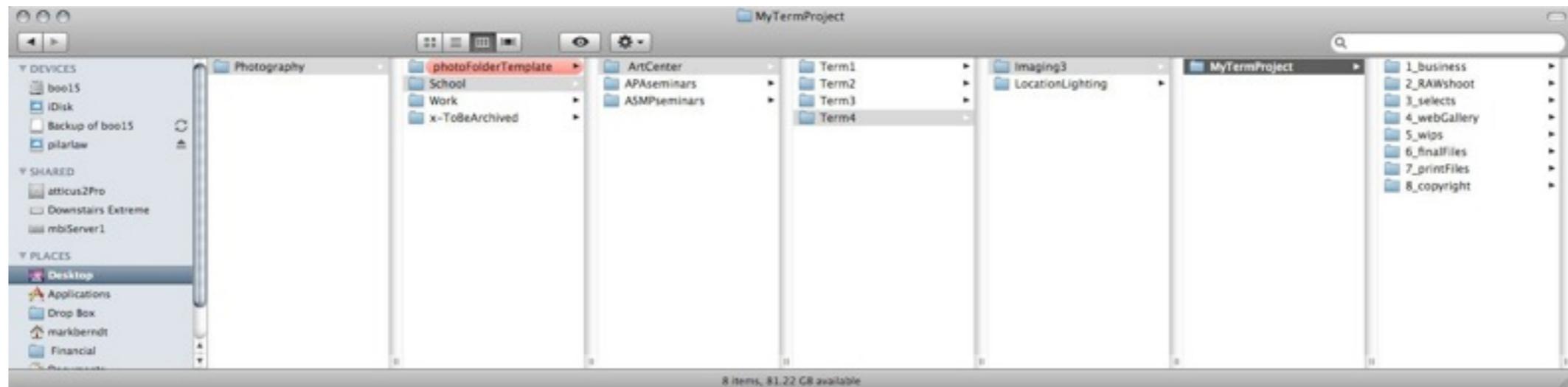
FILING STRUCTURE

- Create folders for different categories of your photography (“SCHOOL”, “WORK”, “TO BE ARCHIVED”, etc.) to create a logical organization of your digital assets.



FILING STRUCTURE

- For each new project, make a COPY of the PROJECT FOLDER TEMPLATE. Then RENAME THE COPIED FOLDER with the name of your new project and you are ready to start filling in the folders in order as you progress through your project.

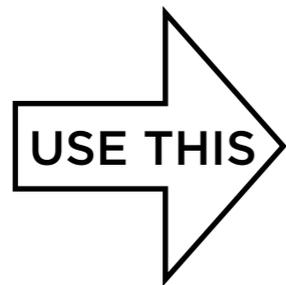


CAPTURE

DIGITAL CAPTURE

- CAMERA MODE
- METER MODE
- ISO (SENSITIVITY TO LIGHT)
- FILE FORMAT (JPEG or RAW?)
- WHITE BALANCE (AUTO WHITE BALANCE or PRE-SET)
- EXPOSURE
- FOCUS - CENTER FOCUS POINT IS THE MOST ACCURATE

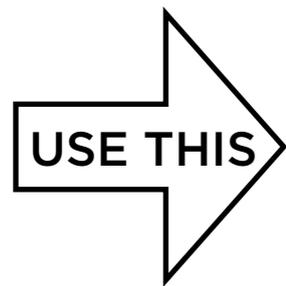
CAMERA MODES



- PROGRAM - camera controls everything
- AUTO - you control ISO
- APERTURE PRIORITY - fixed aperture
- SHUTTER (TIME) PRIORITY - fixed shutter speed
- MANUAL
- FACE, MOUNTAINS, RUNNING MAN, FLOWER

METER MODES

USE ONLY ONE MODE FOR THIS CLASS



- EVALUATIVE (MATRIX)
- PARTIAL
- SPOT
- CENTER WEIGHTED AVERAGE

Selecting the Metering Mode [★]

Four metering modes are provided: Evaluative, partial, spot, and center-weighted average metering. In the (Full Auto) mode, evaluative metering is set automatically.



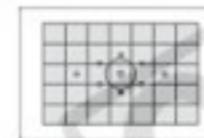
1 Press the button. (06)



2 Select the metering mode.

- While looking at the LCD panel, turn the dial.

-  Evaluative Metering
-  Partial Metering
-  Spot Metering
-  Center-weighted Average Metering



Evaluative Metering

This is the camera's standard metering mode suited for most subjects even under backlit conditions. After detecting the main subject's position, brightness, background, front and back lighting, etc., the camera sets the proper exposure.



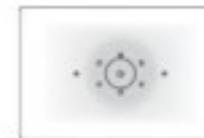
Partial Metering

Effective when the background is much brighter than the subject due to backlighting, etc. Partial metering covers about 8% of the viewfinder area at the center. The area covered by partial metering is shown on the left.



Spot Metering

This is for metering a specific part of the subject or scene. The metering is weighted at the center covering about 3.5% of the viewfinder area. The area covered by spot metering is shown on the left.

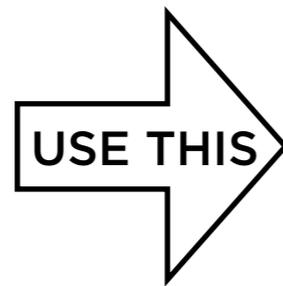


Center-weighted Average Metering

The metering is weighted at the center and then averaged for the entire scene.

ISO (CAMERA SENSITIVITY)

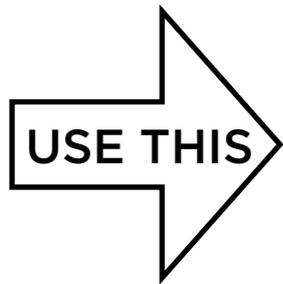
USE THE LOWEST ISO POSSIBLE
WHILE MAINTAINING AMPLE SHUTTER SPEED
FOR HANDHELD AND ACTION PHOTOGRAPHS



- **LOWEST ISO SETTING**
 - + HIGHEST QUALITY IMAGE
LITTLE OR NO NOISE (GRAIN)
SHALLOW DEPTH-OF-FIELD
 - HARDER TO HANDHOLD
- **HIGHER ISO SETTING**
 - + CAN SHOOT IN LOW LIGHT
CAN SHOOT WITHOUT FLASH
EASIER TO HANDHOLD
INCREASED DEPTH-OF-FIELD
 - MUDDY IMAGE
INCREASED NOISE

CAPTURE FORMAT

RAW OR HIGHEST RESOLUTION JPEG



- **RAW**

- + HIGHEST QUALITY IMAGE
MAXIMUM ENHANCEMENT POTENTIAL

- NONE

- **JPEG**



FOR THIS WEEK'S ASSIGNMENT, USE THIS

- SMALLER FILE SIZE (INFORMATION IS DISCARDED)
PROCESSED IN CAMERA (SMALLER COMPUTER)
CONTAINS JPEG "ARTIFACTS"
LIMITS IMAGE ENHANCEMENT
LIMITS PRINT SIZE

WHITE BALANCE

USE CAMERA PRESET, COLOR TEMPERATURE OR CUSTOM WB

AWB

- **AUTO** (AWB) - CAMERA RESETS FOR EACH EXPOSURE



- **DAYLIGHT**



- **SHADE**



- **CLOUDY**



- **TUNGSTEN**



- **FLOURESCENT**



- **FLASH**



- **CUSTOM WHITE BALANCE** (USING GRAY CARD)

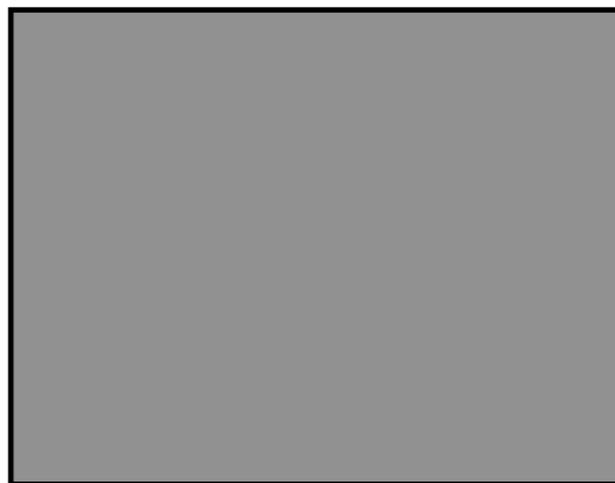


- **COLOR TEMPERATURE SETTING**

HOW THE METER WORKS

IT MEASURES THE LIGHT IT SEES AND MAKES IT 18% GRAY

- **THE CAMERA** “SEES” ALL PARTS OF THE SCENE IN THE VIEWFINDER
- **THE METER** “SEES” ONLY THE PARTS OF THE SCENE THAT ARE WITHIN THE BOUNDARIES OF THE SELECTED METERING MODE.
- THE METER **AVERAGES ALL** OF THE LIGHT IT SEES, AND CALCULATES AN EXPOSURE THAT WILL RENDER THAT AREA OF THE SCENE AT A DENSITY OF **18% GRAY**



THIS IS 18% GRAY

PERFECT EXPOSURE IN 3 STEPS

USING THE METER IN YOUR CAMERA IN MANUAL MODE

STEP 1 FIND YOUR SHOT & TAKE A METER READING
USING THE IN-CAMERA REFLECTED LIGHT METER, ROTATE THE F/STOP AND SHUTTER SPEED DIALS ON YOUR CAMERA UNTIL THE GRAPH IN YOUR VIEWFINDER SHOWS THE INDICATOR ARROW IN THE CENTER POSITION

THIS SETTING IS THE **STARTING POINT** FOR DETERMINING THE PROPER EXPOSURE FOR THE PICTURE YOU WANT TO MAKE

STEP 2 TAKE ONE PICTURE USING THIS SETTING

CHECK THE HISTOGRAM, HIGHLIGHT ALERTS AND THE DISPLAY ON THE BACK OF YOUR CAMERA TO DETERMINE IF THE EXPOSURE IS: PERFECT, TOO LIGHT OR TOO DARK. DO NOT TAKE ANOTHER READING.

STEP 3 ADJUST THE SETTINGS TO PROPERLY EXPOSE THE **SUBJECT** IN YOUR PICTURE AND MAKE ANOTHER **TEST** EXPOSURE

YOU SHOULD BE ABLE TO SET A PROPER EXPOSURE FOR YOUR PICTURE **WITHIN 3 TEST EXPOSURES.**

STEP 4 NOW YOU ARE READY TO BEGIN SHOOTING

EXPOSE TO PROTECT SUBJECT HIGHLIGHTS

USE THE FLASHING HIGHLIGHT ALERT IN CAMERA ALONG WITH THE HISTOGRAM TO PRESERVE SUBJECT HIGHLIGHT DETAIL



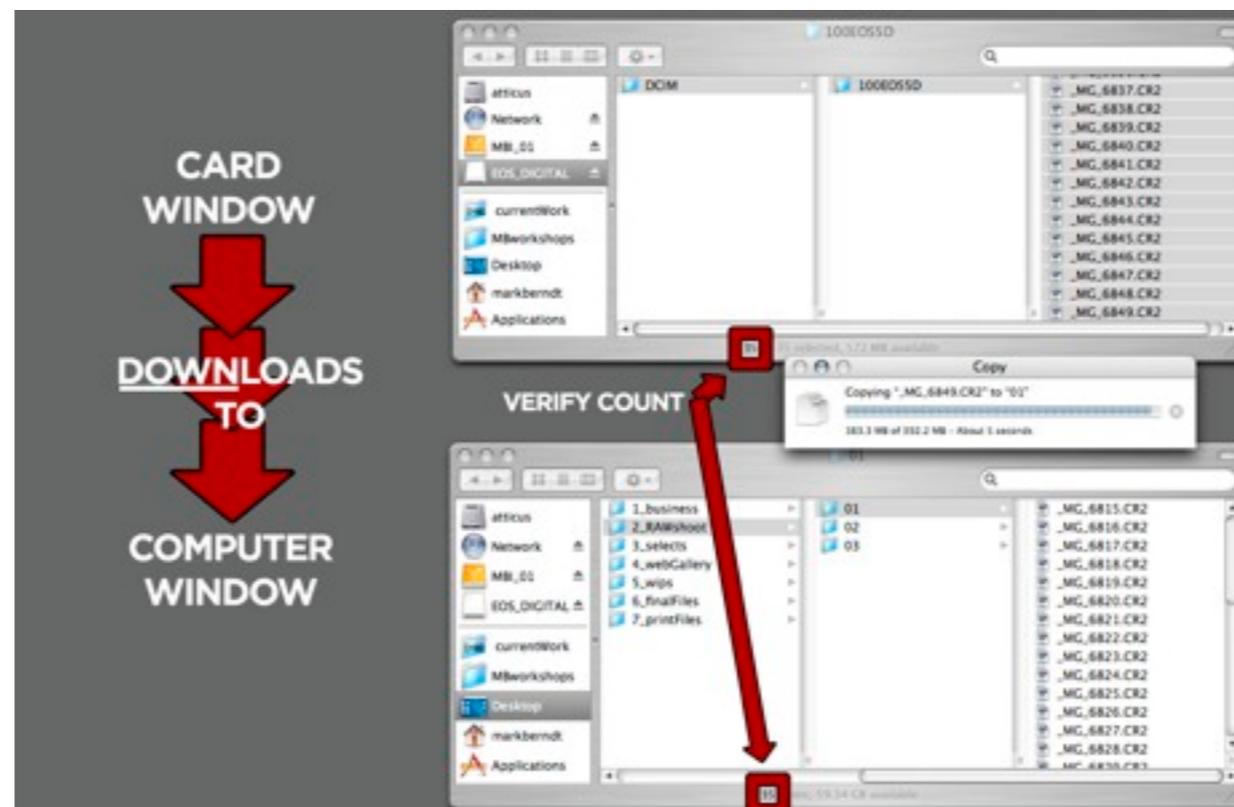
FLASHING INDICATES HIGHLIGHT OVEREXPOSURE - NO DETAIL

TURN ON FLASHING HIGHLIGHT ALERT FOR PLAYBACK IMAGES. MAKE SURE THAT, IF YOU HAVE OVEREXPOSED (“CLIPPED”) HIGHLIGHTS, THAT THEY ARE NOT CRITICAL TO THE IMAGE - FOR INSTANCE, **NOT** ON YOUR SUBJECT’S FACE.

DOWNLOAD

DOWNLOAD

- IN YOUR PROJECT'S "RAW SHOOT" FOLDER:
 - **MAKE** a NUMBERED FOLDER for EACH card download
 - **COPY** files from each card to its own numbered folder.
This is an OS operation - no software involved.
 - **VERIFY** the # of files on the card and those downloaded to your computer in the finder window.



CARD
WINDOW

DOWNLOADS
TO

COMPUTER
WINDOW



100EOSSD

DCIM 100EOSSD

35 selected, 572 MB available

Copy

Copying "_MG_6849.CR2" to "01"

383.3 MB of 392.2 MB - About 5 seconds

01

1_business 01

2_RAWshoot 02

3_selects 03

4_webGallery

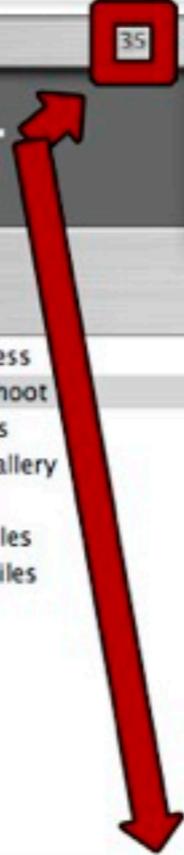
5_wips

6_finalFiles

7_printFiles

35 59.34 GB available

VERIFY COUNT



DOWNLOAD

- AFTER EACH CARD DOWNLOAD IS COMPLETE:
 - REFORMAT the card in your camera for re-use
 - OR**
 - RETAIN used cards as a backup until...
- AFTER **ALL** CARDS ARE SUCCESSFULLY DOWNLOADED,
BURN a DVD COPY of your complete untouched RAW shoot.



IMAGING III

WEEK 1

GO MAKE SOME PICTURES!

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