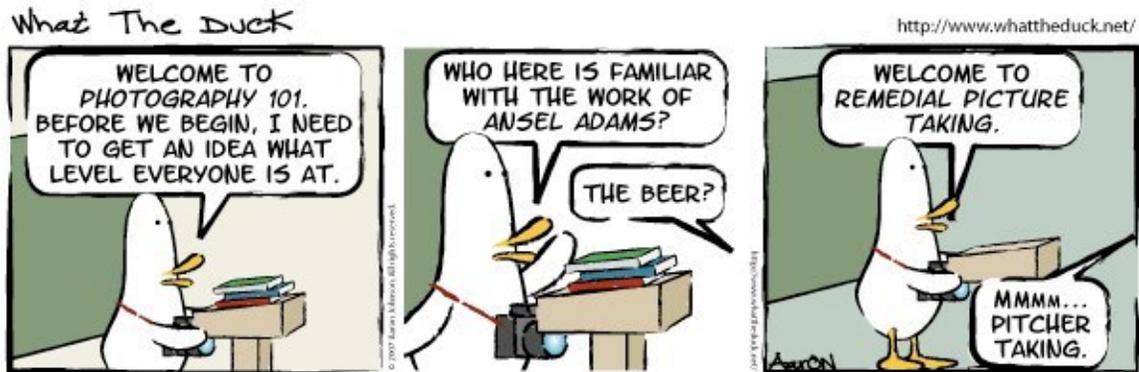


Keep an I[SO] Out

Project 1. Due 11:59PM on Friday, February 8, 2013.

Staff email: cs194-23@imail.eecs.berkeley.edu



Part I. Setup! (10 points)

The projects, problem sets, and critiques for this course require submitting various types of files toward their completion. For critiques, for instance, the course is using Tumblr to submit photos.

Tumblr (<http://www.tumblr.com>) is a microblogging service that allows an author to quickly post text, pictures, video, and other media via an easy-to-use interface. The staff will be using this to post announcements, photos, and posts with links to items that are either directly or tangentially related to the course or class material. Tumblr is the means through which you will be sharing select items! In fact, you will be posting directly to the CS 194-23 Blog found at <http://cs194-23.tumblr.com>.

Submission of projects and problem sets will most likely be done via a submission tool supplied by CS50 Apps. This detail will be finalized by the second lecture!

As part of your setup you will need to get accounts for each of these services. You may use an existing Tumblr account or create a new one manually. The submission tool, by contrast, requires an invitation from us. Once you complete the setup form (below), we will send you an invitation and then you will be able to finish creating an account on the tool's website to submit your assignments.

1. **Sign up for Tumblr.** If you have an existing account and you don't mind using it for the course then feel free to skip this step. (One note: the primary blog in your existing account may become visible to your classmates.) If you need an account or if you wish to create a new one, simply submit the registration form on the Tumblr homepage:

<https://www.tumblr.com/>

This will create your own Tumblr account and blog. Feel free to use the newly-created blog for your own purposes since we will not be using it for this course. You may also add as many other blogs as you wish. In a moment, we will have you tell us the email address that you used to register for Tumblr and we will add you as a member of the CS194-23 Blog, which will give you permissions to author

posts for the course's Tumblr. To familiarize yourself with this service, try posting something on your own new blog!

2. **Submit the setup form.** Once you are setup on Tumblr, you will need to tell us some information to enable the completion of the setup with the course. Please submit the following setup form:

<http://bit.ly/cs194-23-setup>

After 24 to 48 hours we will complete our portion of the setup which comprises the following two steps:

- a. Sending an invitation to your preferred email address from our submission tool. Once you receive the invitation and visit the URL provided, click on "Register now!" in the lower-right of the screen to complete your setup and gain access to the tool. Please note the invitation for this tool may be delayed as we finalize our own setup on the site.
- b. We will send an invitation to the email address that you used for Tumblr to participate in the course blog where you can author posts of your own that will appear on the [CS194-23 Blog](#).

Please be sure to check your inbox for both of these emails! If you do not receive anything after 48 hours, check your spam folder to see if one of these invitations might have been considered junk. If you still do not find it, please email cs194-23@imail.eecs.berkeley.edu and we will re-send your invitations.

Part II. Imitation is the sincerest form of flattery. (30 points)

Now that you are ready to submit assignments, it's time to dive in and start taking some photographs! In general, every project will require that you take a series of photographs. Over time, the requirements and guidelines that we will specify for your photographs might change; thus, please be sure to read through the entire project and understand the various requirements before you undertake it.

The following are general guidelines that apply for every photograph that you will submit for this project:

- The **EXIF data** associated with your photo must remain wholly intact. If you are unsure if your modifications will result in the erasure of this metadata, please submit the photo directly from the camera. We'll discuss EXIF data in upcoming lectures, but Wikipedia and a subsequent Google search might provide some additional information: <http://en.wikipedia.org/wiki/Exif>
- The photo **must not be resized**. We should be able to view the photo at its full resolution. Aspect ratio crops for composition are acceptable. Again, if you are in doubt, use the photo directly from the camera.
- Please do not make modifications to the image such as color tweaks, contrast enhancement, *etc.*
- All submissions should be **new, original photos** taken by you for the purposes of this project. Please do not submit photos that you had taken before the class began.
- Be sure to submit the photos in the **JPEG** file format; this should be the default for many, if not all, cameras. If you prefer taking photos in RAW format, note your camera may have a "RAW+JPEG"

setting which will save a photo in both formats. You may also submit a photo that was taken in RAW and processed to JPEG, but you must ensure the preservation of the EXIF data. There is no need to be concerned if you are unfamiliar with RAW because we will be discussing it later in the course. If you would like to know more about it in the meantime, please search Wikipedia and Google for some preliminary information.

- To submit these photos by the due date, simply place them in the appropriate project dropbox in the submission tool. Please be sure to place them in the directory sufficiently in advance of the due date to allow enough time for them to upload to the servers before the project is due. You are welcome to submit early and modify the images as many times as you wish before the due date. However, take special care not to modify any of the files in this directory after the due date because doing so will cause your entire submission to be considered as late.

Developing your own artistic style is an important aspect in your exploration of photography. Nevertheless, sometimes it can be instructive to try to mimic the style of others, perhaps to understand a technique or a creative process. To this end, find **two photographs** taken by someone else and attempt to mimic them as closely as possible. For this assignment, ensure that the two photographs are of different genres. For instance, if one is a portrait, the other should not be a portrait, but it should be a landscape or abstract photo, *etc.*

Part of the challenge is to find appropriate photographs to try to mimic. Be ambitious! But also be realistic: some photographs will be out of reach. It might be difficult (though certainly impressive) to mimic a photograph of a scene of some far away land. In addition, do not attempt to mimic photos that require heavy modification; the spirit of this assignment is to attempt to imitate photos that were done entirely (or nearly entirely) in-camera.

Please be sure not to underestimate the consequences of attempting to replicate an image without modifications. You should spend time carefully considering details of the scene: what are the light sources? How is the camera setup?

For some inspiration, go to Flickr and search for keywords that interest you. We also want to bring to your attention *Fiat Lux Redux*, an exhibit open at the Bancroft Library until February 28. The exhibit features fantastic photos from the mid-1960's that were taken by Ansel Adams who was commissioned by the President of UC, Clark Kerr, to celebrate the one-hundredth anniversary of the University. This is a wonderful visit even outside the context of this project:
<http://onthesamepage.berkeley.edu/>

For each photograph, you should also submit a digital version of the original (do your best to obtain a decent copy) that you attempted to mimic as well as a very short description of your process. In your description, you might address the following questions: What was the most difficult aspect of this assignment? What features did you initially identify in the photograph that you wanted to mimic? Did those features change as you attempted them? Why did you pick these photographs to mimic? Also be sure, in your description, to properly attribute the original photographer.

To submit this portion of the assignment, you should submit:

- Your two imitation photographs, named **Imitation-1.jpg** and **Imitation-2.jpg**.
- The two original photographs named **Imitation-1-original.jpg** and **Imitation-2-original.jpg**. Please ensure that the numbers match the numbering of the imitation photographs.

- If you feel that proper imitation requires that you make small enhancements to your images, such as color tweaks, contrast enhancement, *etc.*, then you may do so. Keep in mind that we would like as much as possible to be done in-camera and you should still submit your original imitation photos without any edits. If you choose to supply edited photos (again, this is optional), please name them **Imitation-1-edited.jpg** and **Imitation-2-edited.jpg**.
- The two text responses named **Imitation-1.txt** and **Imitation-2.txt**. Again, be sure the numbering matches the images. Don't forget that each description should be four sentences or less and properly attribute the original photographer. The credit does not count against your sentence limit.

Part III. Getting an eye for exposure. (60 points)

Please note that the same guidelines specified in **Part II**, above, apply to all photos in this section as well.

Take a series of three photographs that demonstrate how each of the three exposure factors (ISO, shutter speed, F-number) can impact the appearance of a photograph. Each photograph should showcase exactly one of those factors, and that photo should be a clear demonstration of that particular factor. In other words, if you take a photograph that is meant to demonstrate the effect of shutter speed on an image then the effect of the F-number or ISO should not be distracting. A person knowledgeable in exposure factors and the intention of the photograph should be able to look at your image and determine that it is clearly intended to reflect a slow shutter speed, for example. When attempting to isolate each factor, you might consider using one of the extreme ends of the possible ranges for each. In other words, extremely fast (1/8000s) or slow (30s) shutter speeds, very small ($f/22$) or large ($f/2$) apertures, and so on.

Since you only have one image to demonstrate each factor, be sure to spend some time setting up an image that will satisfy the requirements of this question. In addition, try to take an image that is worthwhile with the effect you are trying to accomplish. In other words, if you decide to take a photo to isolate shutter speed it then it would be unwise to photograph a still object. As mentioned in class, taking many photos and then selecting only a few from a large set is a great way to hone the quality of your photos.

Most of all, be creative and have fun with your photograph! Outside the stated limitations for this question you have the freedom to capture any sort of photo you would like. Of course, we ask that you consider what would make a good scene.

On the topic of limitations, the following are the technical requirements for your images. These technical requirements are in addition to those listed for **Part II**:

- Submit **one photograph** per exposure factor to act as a demonstration of how that factor affects the image. You should therefore submit exactly three photographs for this question.
- Name the photographs **Exposure-1.jpg** through **Exposure-3.jpg**.
- You should ensure that your **intended effect is obvious** in each photo, as stated above.
- You should **isolate the effect** as best as you can. Even though you will need to modify other settings to keep your photos properly exposed, you should minimize the effects of those settings as much as possible. When illustrating the effects of F-number, for example, you should keep motion blur at a minimum. Although some overlap is unavoidable, we should be able to tell which exposure factor you are demonstrating simply by looking at the photograph.

- Your photos should be **perfectly exposed**. Remember, we are not asking you to show how each factor affects the end *exposure*; rather, we would like to ensure that you understand how each factor affects the *appearance* of the photograph while keeping exposure relatively constant. Your subject should not have any loss of detail in shadows or the bright regions. Under-exposing or over-exposing the background is sometimes unavoidable, but it should not be distracting.
- Only use the **Manual Mode**. Please set (either by trial-and-error, calculation, or even good guessing) your own exposure values for all exposure settings. Various modes such as aperture priority, shutter speed priority, or any of the “basic” modes do not count as manual modes as the camera is still setting exposure values based on its own calculations. Please borrow a camera with these features from a friend if your camera's manual mode does not enable you to override all three values. You do not need to manually focus; you may use autofocus.