

## PIC 40A Section 1 - Homework #4 (due Wednesday, May 13, by 6 pm)

Follow these submission instructions carefully:

- submit the .html, .js, and all supporting files to CCLE by the deadline;
- submit a file, "README.txt" that provides your PIC username and includes the written honestly pledge as listed in the syllabus;
- produce a live webpage\* that can be viewed at **www.pic.ucla.edu/~your\_username/HW4** and make no changes to the site after the deadline. What you submit on CCLE should be exactly the same files as can be found on your live webpage\*\*.
- follow the established convention: your main HTML file should be **index.html**, which should be located in the folder **HW4** within **public.html**.

\*: if your webpage is not live at the precise link given above, where your\_username is replaced by your actual user name, you will get 0/10 for display as per the homework grading policies. Your page has to be live and work. No exceptions.

\*\* : do not modify that live page in any way after the deadline. As per the syllabus, no matter how small the change may be, any modifications after the deadline will be treated as a case of academic dishonesty.

### Important Remarks:

It may be wise to do everything but the cookie bit first. Then worry about cookies.

Be sure to clear your cache frequently or your "helpful" web browser may prevent you from observing relevant changes to your webpage. Or use the query string trick to prevent caching.

## COOKIES AND ANIMATIONS

This exercise combines many interactive features from JavaScript. You will build a greeting page. Here are the specifications, with screen shots to follow.

- The page always has a heading "A Greeting Page for Important People".
- If it is a user's first time visiting the page or the cookies (to be discussed) have expired, they are prompted for their name.

- Otherwise, the name stored in the cookie is used.
- Their name is then sought in a list of important people, "important.txt" **using an AJAX call**.
- If their name is not found, the page adds a message, "No greeting for you!" and their name is not saved, but
- if their name is found, the page can animate as follows:
  - They see a panel of 51 labelled buttons for animation speed settings (0 = off, and 1-50 increase in speed) and a panel of 3 buttons for colours "red", "yellow", and "blue".
  - If the cookie was there when the page loaded, their past choice of speed and colour should automatically be selected and the animation (to be described) begins.
  - Otherwise, the form starts off with speed 0 and colour "red" selected.

The animation consists of the text "Welcome [NAME]" where NAME is their name, centered in a coloured rectangle with a gray background. The rectangle always starts at the left of its gray container and moves right and left, back and forth.

Every second, JS looks at the buttons to determine if the colour or speed need to be updated and does so accordingly. There are no stipulations on the speed other than 0 should be off (motionless), 1 should be slow, and there should be a steady increase in speed up to 50 where the rectangle moves really fast.

The cookie should remember their name, colour, and speed settings for 10 seconds after they leave the page. An easy way to approximate this is to save the cookie every time the animation updates and set its expiry to 10 seconds into the future.

The list of important people is included in the CCLE download page. It includes well-known celebrities Foo Bar, Baz Quuz, and Joe Bruin. Do not hardcode the names from the file into your code. Use AJAX so that, in principle, the guest list could be updated live.

You won't be able to run the AJAX calls locally (unless you do a lot of reconfiguring): you'll need to have your webpage up on the server to test that.

Screen shots are included here. On CCLE, there is a zip file of 3 videos demonstrating two different speed settings and what should happen when a transition takes place.

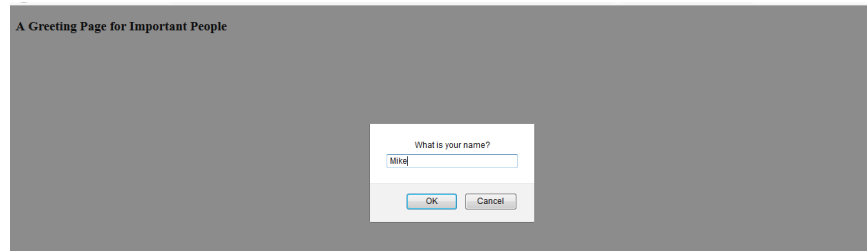


Figure 1: First time visitor or when cookies are not remembered are asked for their name.



Figure 2: If their name is not listed as being important.

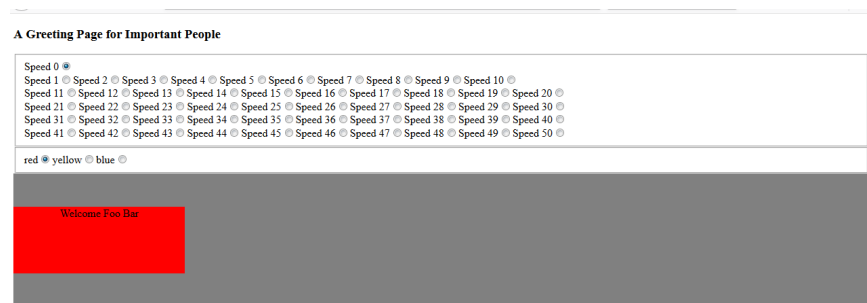


Figure 3: An important person's first visit - note the default settings.

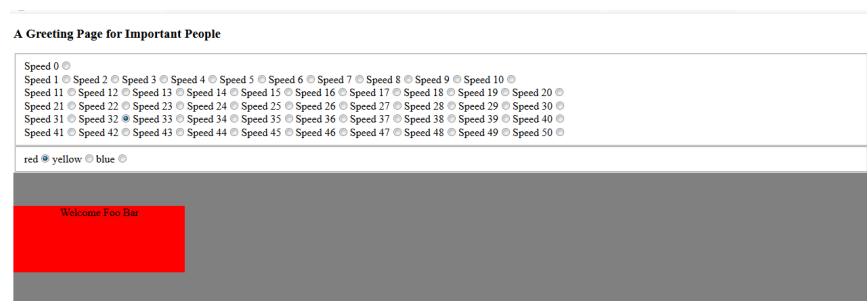


Figure 4: Assuming Foo Bar had last set the colour to red and speed to 32 and the cookie was still being remembered, this is what he/she would see immediately upon page loading - before the red box starts to move.