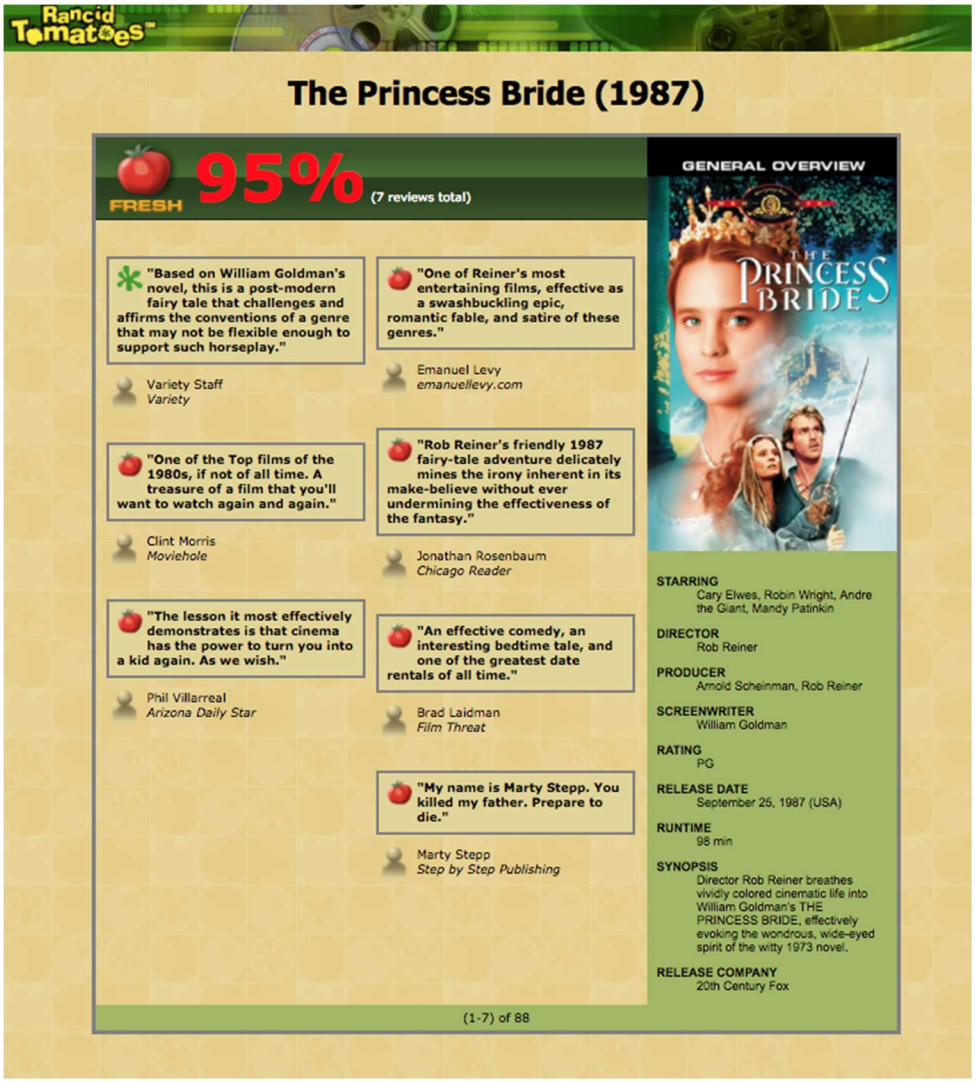
Assignment 3: Movie Review Part Deux

What you need to do

- Apply PHP basic control and data structures to create dynamic web pages
- Apply PHP to handle files

Requirements

For this assignment you will write PHP code for movie review pages much like your *TMNT* page from assignment 2. Your PHP code will allow you to generate reviews for a variety of movies using the same code. For example:



Create the following files:

- movie.php (code to produce review pages for movies)
- movie.css (the style sheet for your pages)

Your pages must match the appearance specified in this document. You are not asked to produce a pixel-perfect representation of the page that matches the image shown here. But your page should follow all of the styles specified in this document and should match the overall look, layout, and behavior of the page shown here as closely as possible.

You should base your movie.php on the tmnt.html you wrote in assignment 2. You can also reuse your style sheet, movie.css. The modifications you need to make to your HTML code are to cause it to read the movie information using PHP so that the same file can produce different movie review pages.

Appearance Details:

The overall page has almost same if not identical appearance as it did in assignment 2. The difference is that the page might show reviews and information for a film other than *TMNT*. The page's title should reflect the movie; for example, when showing The Princess Bride, the page title should be The Princess Bride - Rancid Tomatoes.

The page uses the same images as assignment 2 with the same file/path names, with two minor changes. The tmnt.html page showed a large rottenbig.png icon next to its 32% overall rating. But in this version, some films have high overall ratings. Any film whose overall rating is 60% or above should instead show the new image freshbig.png, shown at right. Also, the overview.png image has moved, for reasons we will describe in the next section. As before, you should link to all images using their full absolute URLs, not relative ones. (Note that both rottenbig.png and freshbig.png are available under the hw2, not hw3, folder of my u web space same as the previous assignment.) The general overview images are the one exception; since these now reside in the folder with the movie's information, you should link to these using a relative path such as "tmnt2/overview.png".

Dynamic Page Content:

Your movie.php page will show reviews of different movies based upon a *query parameter* that is passed from the browser to the page in its URL. The browser will request your page with a URL such as the following:

http://u.arizona.edu/~your_ua_netid/hw3/movie.php?film=princessbride

Your PHP code can store this parameter into a variable using code such as the following:

```
$movie = $_REQUEST["film"];
```

You may assume that the browser has properly supplied this parameter and has given it a valid value. You do not have to handle the case of a missing or empty film parameter, a value that contains bad characters, a value of a movie that is not found, etc.

Based upon the film requested by the browser, you are to display a review of that film. Each film is stored in a directory whose name is the same as the film parameter. For example, the film princessbride stores its files in a folder named princessbride/. The files associated with each movie are the following:

info.txt, a file with exactly four lines of general information about the film: its title, year, overall rating, and number of reviews. Example:

```
The Princess Bride
1987
95
7
```

overview.txt, a file with information to be placed in the General Overview section of your page. Each line contains one item of information, with its title and value separated by a colon. The number of lines in the file varies from movie to movie. Example:

```
STARRING:Cary Elwes, Robin Wright, Andre the Giant, Mandy Patinkin
DIRECTOR:Rob Reiner
PRODUCER:Arnold Scheinman, Rob Reiner
SCREENWRITER:William Goldman
RATING:PG
RELEASE DATE:September 25, 1987 (USA)
RUNTIME:98 min
SYNOPSIS:Director Rob Reiner breathes vividly colored cinematic life into ...
RELEASE COMPANY:20th Century Fox
```

overview.png, an image to display at the top of the General Overview section. This is the movie poster for the film, such as the one shown at right.

review1.txt, review2.txt, ..., files containing information for each review of the film. Each review file contains exactly **four** lines: The review, a fresh/rotten rating, the reviewer's name, and the publication. Example review1.txt:

```
One of Reiner's most entertaining films, effective as a swashbuckling...
FRESH
Emanuel Levy
emanuellevy.com
```

You may assume that all of the above files exist and are valid for the films your page is displaying. Part of your task is to successfully open these files, read the information from them, and display that information on the page. For example, if your page is requested as movie.php?film=princessbride, you should open princessbride/info.txt to read the film's title/year/etc. and display that in the headings and other text on the page. You would open the file princessbride/loverview.txt and display its contents in the General Overview section on the right side of the page. You would look for all review text files in the princessbride/ folder and would display each of them in the reviews area of the page.

Different movies have different numbers of reviews. You should show the first half of the reviews in the left column on the page, and the rest on the right. If a given movie has an odd number of reviews, the right column should receive the extra review. For example, Princess Bride has 7 reviews, so the first three go into the left column and the last four into the right column. You do not have to worry about the possibility that the general overview section and the reviews sections will be wildly different in height; this would potentially upset the appearance of the page, but your page does not need to handle this.

The images for each review are affected by the contents of the corresponding review text file. If the critic gave the film a FRESH rating, you should display an icon of fresh.gif in the review. If the critic gave the film a ROTTEN rating, you should display an icon of rotten.gif in the review.

Several other various pieces of text on the page is now related to the contents of these input files. For example, the display of the number of reviews shown, the number of total reviews, and the large red rating text all adjust based on the film's input files. The number of total reviews comes from the `info.txt` file, and the number of reviews shown comes from the count of the number of review text files.

Coding style:

Implement the HTML output of your web page using HTML as taught in class. Do not use HTML tables on this assignment.

Your PHP code should generate no errors or warning messages when run using reasonable sets of parameters. Decompose the problem into functions as appropriate, minimize global variables, utilize parameters/returns properly, correctly use indentation/spacing, and avoid long PHP lines over 100 characters. Use material that was covered in class as well as the textbook chapters we have learned.

A grading focus in this assignment is avoiding redundancy. One possible source redundancy is between different movies. You should not have code that depends on particular movies or that uses lots of `if/else` statements to figure out which movie to display; the same code should be able to display any movie. Use loops, functions, variables, `if/else` factoring, etc. to ensure that your code is not redundant.

Another grading focus on this assignment is commenting. HTML and CSS are simple declarative languages; in PHP you are implementing complex algorithms. You should have much more commenting in your PHP than we have expected so far. Put a descriptive header (name, course, description of assignment, etc.) at the top of your code, and a well-written comment on each major section of code and function explaining in detail what that code is doing.

For full credit, you should reduce the number of large complex chunks of PHP code that are injected into the middle of your HTML code. When possible, try to replace such chunks with functions that are called in the HTML and declared at the bottom of your file. Also, you should minimize the use of `print` and `echo` statements. As much as possible you should insert dynamic content into the page using PHP expression blocks as taught in class. You should rewrite your code if you `print` any HTML tags into the page such as the following:

```
print "<p>I am adding content to the page!</p>"; # bad
```

Format your HTML and PHP code similarly to the examples from class. You must properly use whitespace and indent your HTML and PHP code following examples shown in class. To keep line lengths manageable, do not place more than one block element on the same line or begin any block element past the 100th character on a line.

CSS is not a major part of this assignment, but you should not introduce new poorly written CSS code. Do not express stylistic information in HTML, such as inline styles or presentational HTML tags.

Development Strategy and Hints:

PHP code is difficult to debug if you have lots of errors on your page. It is wise to write this program **incrementally**, adding small pieces of code to a known working page, and not advancing until you have tested and debugged the new code. Rather than trying to generalize all of your page at once, focus on incorporating a particular aspect or input file. Once this is successful, move on to the next.

We suggest that get your page to display a single film (such as `princessbride` or `tmnt2`) first, then generalize it for other films. None of your code should refer to specific names of films such as `princessbride`.

Since this program uses PHP code, you will need to upload your files to the web to test your work. Changes you make to your files will not be shown in the browser until you re-upload the file and refresh.

The following PHP functions may be helpful to you in implementing this program:

`count` - returns the number of elements in an array
`explode` - breaks apart a string into an array of smaller strings based on a delimiter
`file` - reads the lines of a file and returns them as an array
`glob` - given a file path or wildcard such as `foo/bar*.jpg`, returns an array of matching file names
`list` - unpacks an array into a set of variables; useful for dealing with fixed-size arrays of data
`trim` - removes whitespace at the start/end of a string (gets rid of stray spaces in output)

Turn-in

Please create a zip file with the name following this convention: *uanetid_hw3.zip*. This zip file should contain all the files you generated as part of this assignment. Once constructed, submit this zip file to the Assignments folder Assignment 3 at D2L site. You still need to turn in your movie.css even if it did not change from HW2.

Additionally, please post your work to your password-protected web space within your U-System account and submit the URL within your D2L dropbox submission notes. In addition to the URL, please also provide me the password for user ***milazzom*** to access your protected web folder in your submission note.

Even if your web folder is not protected, you need at least upload your files into your U web space. And provide me an URL to access your web page(s) and grade. **I will not grade your submission without the URL attached.**

Rubric

This assignment is worth a total of 100 points. I will check the below components when grading your work:

- (30 points) The appearance of your submission appears similar to the screenshot of the page in this document.
- (50 points) The dynamic page content satisfies the assignment requirements
- (20 points) Coding style satisfies the assignment requirements.

Again, even if your web folder is not protected, you need at least upload your files into your U web space. And provide me an URL to access your web page(s) and grade. **I will not grade your submission without the URL attached.** If your folder is protected, please provide me the password for user ***milazzom*** to access your protected web folder in your submission note attached with your submission work in the D2L dropbox.