

```
<?php print 'PHP Projects' ; ?>
$projects = array();
```

```
$projects['Random Hex Code']=
```

Use `rand()` to create a random hex code to use as your page's background or font color. How could you generate a six-digit code consisting of numbers (0-9) and letters (A-F) using only a random number generator?

- Consider using an array to assign numbers to the letters.

```
$projects['Calendar']=
```

Create a function that can generate a calendar display for any potential month, considering what day of the week it starts on and how many days it has.

- Consider using a loop to print each day in a new column and if-statements to create new rows. A new row should be created every seven days. Consider using standard variables to act as tally markers.

```
$projects['Dice Statistics']=
```

Create a 'Dice Roller' that uses random number generators to virtually roll two dice several times and create some sort of chart to show the sum of the output each time.

- Use a loop to simulate each dice roll. Use `array_push()` to store the results in an array.
- Consider using `array_count_values()` to help you create your chart.
- Try incorporating more than two dice. Can you create a function that generates a probability chart given two parameters: number of dice and number of rolls?

```
$projects['Dynamic Pages']=
```

Create a PHP file that dynamically loads content by passing a `$_GET` variable. Here are some suggestions/hints:

- If the `$_GET` variable is set, the page variable should be the `$_GET` variable. If the `$_GET` variable isn't set, there should be a default value for the page variable. Use an if-else statement to define the page variable based on whether or not the `$_GET` variable is set.
- Use regular HTML links to pass the `$_GET` variable through the URL and 'link' to each page (`?page=home`)
- Consider storing your content in individual HTML files or in a local array where the key is the page variable and the value is the content.
- [[http://www.w3schools.com/php/php\\_forms.asp](http://www.w3schools.com/php/php_forms.asp)]
- [[http://www.w3schools.com/php/php\\_get.asp](http://www.w3schools.com/php/php_get.asp)]

```
$projects['Background Selector']=
```

Create a form through which the user selects an option from a drop down box to change the background color/image. Use cookies to store their selection and maintain the custom background selection even when the user leaves the page and then comes back.

- Create a local variable \$style to define the style.
- Consider the ways in which \$style might be defined: by a default if neither the \$\_POST or \$\_COOKIE are defined, by the \$\_COOKIE if it is defined and the \$\_POST is not defined, or by the \$\_POST if it is defined (defining the \$\_COOKIE as well). Create if statements to reflect these potential definitions.
- [[http://www.w3schools.com/php/php\\_forms.asp](http://www.w3schools.com/php/php_forms.asp)]
- [[http://www.w3schools.com/php/php\\_post.asp](http://www.w3schools.com/php/php_post.asp)]

## \$projects[‘Dane Joe’]=

Create a function that takes a first and last name and switches the first and last letter of each name. Jane Doe becomes Dane Joe.

- Here’s a list of PHP string functions:  
<http://php.net/manual/en/ref.strings.php>
- These might be particularly helpful: `strpos()`(haystack, needle) returns the first instance of a needle string in a haystack string. `substr()` returns portions of a given string. `strtolower()` changes the entire string to lower case letters. `ucwords()` makes the first letter of each word uppercase.
- [[http://www.w3schools.com/php/php\\_forms.asp](http://www.w3schools.com/php/php_forms.asp)]
- [[http://www.w3schools.com/php/php\\_post.asp](http://www.w3schools.com/php/php_post.asp)]

## \$projects[‘XML Blog’]=

Create a blog page that uses a PHP loop to display blog entries from an external XML file. Use the tutorial link below as a guide. Use `simplexml_load_file()` to call a local .xml file that you create to store your blog entries in.

<http://sihantech.wordpress.com/2008/08/06/simple-rss-reader-using-php/>

- What tags do you need in your XML file? Use the example as a guide but look over it critically and don’t include unnecessary elements for your blog purposes. Also look at my example XML file in my XML Blog example.

```
foreach($projects as $project){  
    complete($project);  
}
```

```
if(iscomplete($projects)){  
    research(‘CAPTCHA Validation’);  
    research(‘Sending Email with PHP’);  
    research(‘Fancy PHP Graphs/Charts’);  
}
```

}