PHP: Bail Bond application

**Scope**

When someone goes to jail, they would rather be at home in order to work on their case. To get out of jail, they post bond. The bail bond agency will pay the court the full amount (actually they use an insurance agency or credit provider for the cash) right away. BUT the defendant must give the bail bond agency 15% of the total bail amount + $100. A simple calculator is needed. The program is not required to add in extra expenses such as petrol or postage when the bail bond company tries to get the defendant into court on their assigned date.

|  |  |
| --- | --- |
| FR01 | When the user enters the bail bond amount, 10% + 100 is calculated and output to the screen. |
| FR02 | Existence validation is required so the user is returned to the form if they neglect to enter any data. |
| FR03 | The defendant’s given name, surname and local address must be entered and then output to the screen. |
| FR04 | Range checking validation for the bail amount is required. |
| FR05 | Datatype checking for bail amount is required. |
| FR06 | Allow the user to return to the form |

|  |  |
| --- | --- |
| NFR01 | Clear and concise instructions are required. |
| NFR02 | A large fontsize (18px) both on the form and the output screen. |
| NFR02 | Links are obvious with a contrasting colour for the hovers. |
| NFR03 | Numerical output must formatted as currency. |

**The algorithm**

Test table

|  |  |  |  |
| --- | --- | --- | --- |
| Purpose of test | Test data or condition | Expected output | Actual output |
| Bail bond calculation accurate |  |  |  |
| Output as currency |  |  |  |
| Output complete |  |  |  |
| Existence checking for name |  |  |  |
| Existence checking for surname |  |  |  |
| Existence checking for address |  |  |  |
| Range checking for bail amount |  |  |  |
| Links – hovers have obvious colour change |  |  |  |
| Allow user to return to form |  |  |  |

**Copy and paste this into your PHP editor.**

<!DOCTYPE html>

<html>

<head>

<meta charset="utf-8">

<title> Form</title>

<link rel="stylesheet" media="screen" href="teal.css" >

</head>

<body>

<header>

<h1>Bailbonds for Bad Boyz</h1>

<hgroup>

<h4> Bailbond Calculator</h4>

<h4></h4>

</hgroup>

</header>

<form class="contact\_form" action="bailbond.php" method="post" name="contact\_form">

<ul>

<li>

<h3>Enter the data required</h3>

<span class="required\_notification">\* Denotes Required Field</span>

</li>

<li>

<label for="name">Defendant's Name:</label>

<input type="text" name = "name" placeholder="Bugsy " required />

</li>

<li>

<label for="surname">Defendant's Surname:</label>

<input type="text" name = "surname" placeholder="Malone" required />

</li>

<li>

<label for="address">Defendant's Address:</label>

<input type="text" name = "address" placeholder="Hell's Kitchen" required />

</li>

<li><!-- number - needs further validation -->

<label for="sets">How much is needed for bail?</label>

<input type="number" size = "2" name="bailamount" min="1" max="1000000" placeholder="4" required />

<span class="form\_hint">A number between 1 and 1000000 only</span>

</li>

<li>

<button class="submit" type="submit">Calculate now</button>

</li>

</ul>

</form>

<footer>

<a href="bailbond.html">Main Menu </a>

</footer>

</body>

</html>

Copy and paste this file, using your PHP editor.

<?php

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

file: bailbond.php called from bailbond.html

calculates bailbond amount with 10% + $100

range check for bail amount

datatype check

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

include('library.inc');

page\_header('Dial 1800bailbond');

//gather posted variables

$name = $\_POST['name'];

$surname = $\_POST['surname'];

$address = $\_POST['address'];

$bailamount = $\_POST['bailamount'];

//calculate bailbond

if(!is\_numeric($bailamount))

{

echo "You must enter a number between 1 and 1000000";

echo "<a href=\"bailbond.html\">Select again</a>";

exit;

}

else

{

$bond = ($bailamount \* 0.1) + 100;

$bond = number\_format($bond, 2);

//print the data

echo "$name <br />";

echo "$surname <br />";

echo "$address <br />";

echo "$$bond";

//allow the user to return to the main form

page\_footer('VK3CFI');

}

?>

This is the css file. This is necessary to make the form and the output look good.

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

file: teal.css

most of this code comes from: http://webdesign.tutsplus.com/tutorials/site-elements/bring-your-forms-up-to-date-with-css3-and-html5-validation/

colors in cadetblue and teal shades

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

/\* === defaults === \*/

\*

{

margin:0;

padding: 0;

}

/\* === Remove input autofocus webkit === \*/

\*:focus {outline: none;}

/\* === Form Typography === \*/

body

{

font: 16px Georgia;

background: #BED0DB; /\* bgcolor very pale cadet blue \*/

}

header

{

display: block;

width: 400px;

padding-left: 150px;

color: #003366; /\* dark cadet blue \*/

margin-top: 20px;

text-align: center;

border: thin red dotted;

}

hgroup

{

display: block;

width: 300px;

text-align: center;

}

.contact\_form h2, .contact\_form label {font-family:Georgia, "Palatino Linotype", serif;}

.form\_hint, .required\_notification {font-size: 12px;}

/\* === List Styles === \*/

.contact\_form ul {

width:750px;

list-style-type:none;

list-style-position:outside;

margin:0px;

padding:0px;

}

.contact\_form li{

padding:12px;

border-bottom:1px solid #eee; /\* light grey \*/

position:relative;

}

.contact\_form li:first-child, .contact\_form li:last-child {

border-bottom:1px solid #777; /\* dark grey \*/

}

/\* === Form Header === \*/

.contact\_form h2 {

margin:0;

display: inline;

}

.required\_notification {

color:#d45252; /\* Indian red \*/

margin:5px 0 0 0;

display:inline;

float:right;

}

/\* === Form Elements === \*/

.contact\_form label {

width:250px;/\* was 150px \*/

margin-top: 3px;

display:inline-block;

float:left;

padding:3px;

}

.contact\_form input {

height:20px;

width:220px; /\* box gets wider when clicked for data input \*/

padding:5px 8px;

}

.contact\_form textarea {padding:8px; width:300px;}

.contact\_form button {margin-left:156px;}

/\* form element visual styles \*/

.contact\_form input, .contact\_form textarea {

border:1px solid #aaa; /\* light grey \*/

box-shadow: 0px 0px 3px #ccc, 0 10px 15px #eee inset;

border-radius:2px;

padding-right:30px;

-moz-transition: padding .25s;

-webkit-transition: padding .25s;

-o-transition: padding .25s;

transition: padding .25s;

}

.contact\_form input:focus, .contact\_form textarea:focus {

background: #fff; /\* white \*/

border:1px solid #555; /\* solid gray \*/

box-shadow: 0 0 3px #aaa; /\* light gray \*/

padding-right:70px;

}

/\* === links === \*/

a

{

text-decoration: none;

}

a:link

{

text-decoration: none;

color: #599CAF; /\* cadet blue shade \*/

padding: 20px;

text-align: center;

}

a:visited

{

text-decoration: none;

color: #599CAF; /\* cadet blue shade \*/

padding: 20px;

text-align: center;

}

a:hover

{

text-decoration: none;

font-weight: bold;

cursor: pointer;

color: #000;

}

/\* ===footer styles and footer links === \*/

footer

{

display: block;

width: 750px;

}

footer a

{

display: block;

text-decoration: none;

color: #003366; /\* dark cadet blue \*/

padding: 20px;

text-align: center;

font-size: 18px;

}

footer a:link

{

text-decoration: none;

font-weight: bold;

cursor: pointer;

color: 003366; /\* dark cadet blue \*/

}

footer a:hover

{

text-decoration: none;

font-weight: bold;

opacity: 0.90;

cursor: pointer;

color: #000;

}

/\* === HTML5 validation styles === \*/

.contact\_form input:required, .contact\_form textarea:required {

background: #fff url(images/red\_asterisk.png) no-repeat 98% center;

}

.contact\_form input:required:valid, .contact\_form textarea:required:valid {

background: #fff url(images/valid.png) no-repeat 98% center;

box-shadow: 0 0 5px #68AEBB; /\* pale cadet blue \*/

border-color: #3C7997; /\* cadet blue shade \*/

}

.contact\_form input:focus:invalid, .contact\_form textarea:focus:invalid {

background: #fff url(images/invalid.png) no-repeat 98% center;

box-shadow: 0 0 5px #d45252; /\*pale brick red \*/

border-color: #003366; /\* dark cadet blue \*/

}

fieldset

{

display: block;

width: 200px;

font: 14px Georgia;

}

legend

{

font: 14px Georgia;

}

/\* === radio button styles === \*/

.regular-radio {

display: none;

float: left;

font: 14px Georgia;

}

.regular-radio + label {

-webkit-appearance: none;

background-color: #fafafa;

border: 1px solid #cacece;

box-shadow: 0 1px 2px rgba(0,0,0,0.05), inset 0px -15px 10px -12px rgba(0,0,0,0.05);

padding: 9px;

/\*border-radius: 50px;\*/

display: inline-block;

position: relative;

}

.regular-radio:checked + label:after {

content: ' ';

width: 12px;

height: 12px;

border-radius: 50px;

position: absolute;

top: 3px;

background: #99a1a7;

box-shadow: inset 0px 0px 10px rgba(0,0,0,0.3);

text-shadow: 0px;

left: 3px;

font-size: 32px;

}

.regular-radio:checked + label {

background-color: #e9ecee;

color: #99a1a7;

border: 1px solid #adb8c0;

box-shadow: 0 1px 2px rgba(0,0,0,0.05), inset 0px -15px 10px -12px rgba(0,0,0,0.05), inset 15px 10px -12px rgba(255,255,255,0.1), inset 0px 0px 10px rgba(0,0,0,0.1);

}

.regular-radio + label:active, .regular-radio:checked + label:active {

box-shadow: 0 1px 2px rgba(0,0,0,0.05), inset 0px 1px 3px rgba(0,0,0,0.1);

}

/\* === checkbox styles === \*/

.checkbox label

{

display: block;

padding-left: 15px;

text-indent: -15px;

}

.checkbox input

{

width: 13px;

height: 13px;

padding: 0;

margin:0 5px;/\*5px spacing between box and label \*/

vertical-align: bottom;

position: relative;

top: -1px;

\*overflow: hidden;

}

/\* === Form hints === \*/

.form\_hint {

background: #d45252; /\*pale brick red \*/

border-radius: 3px 3px 3px 3px;

color: white;

margin-left:8px;

padding: 1px 6px;

z-index: 999; /\* hints stay above all other elements \*/

position: absolute; /\* allows proper formatting if hint is two lines \*/

display: none;

}

.form\_hint::before {

content: "\25C0"; /\* no clue \*/

color:#d45252; /\*pale brick red \*/

position: absolute;

top:1px;

left:-6px;

}

.contact\_form input:focus + .form\_hint {display: inline;}

.contact\_form input:required:valid + .form\_hint {background: #28921f;} /\* green \*/

.contact\_form input:required:valid + .form\_hint::before {color:#28921f;}

/\* === Button Style === \*/

button.submit {

background-color: #77BFC7; /\* light cadet blue \*/

background: -webkit-gradient(linear, left top, left bottom, from(#003366), to(#77BFC7));

background: -webkit-linear-gradient(top, #003366, #77BFC7);

background: -moz-linear-gradient(top, #003366, #77BFC7);

background: -ms-linear-gradient(top, #003366, #77BFC7);

background: -o-linear-gradient(top, #003366, #77BFC7);

background: linear-gradient(top, #003366, #77BFC7); /\* light cadet blue \*/

border: 1px solid #509111;

border-bottom: 1px solid #5b992b;

border-radius: 3px;

-webkit-border-radius: 3px;

-moz-border-radius: 3px;

-ms-border-radius: 3px;

-o-border-radius: 3px;

box-shadow: inset 0 1px 0 0 #77BFC7; /\* pale cadet blue \*/

-webkit-box-shadow: 0 1px 0 0 #77BFC7 inset ;

-moz-box-shadow: 0 1px 0 0 #77BFC7 inset;

-ms-box-shadow: 0 1px 0 0 #77BFC7 inset;

-o-box-shadow: 0 1px 0 0 #77BFC7 inset;

color: white;

font-weight: bold;

padding: 6px 20px;

text-align: center;

text-shadow: 0 -1px 0 #396715;

}

button.submit:hover {

opacity:.85;

cursor: pointer;

}

button.submit:active {

border: 1px solid #003366;

box-shadow: 0 0 10px 5px #68AEBB inset;

-webkit-box-shadow:0 0 10px 5px #68AEBB inset ;

-moz-box-shadow: 0 0 10px 5px #68AEBB inset;

-ms-box-shadow: 0 0 10px 5px #68AEBB inset;

-o-box-shadow: 0 0 10px 5px #68AEBB inset;

/\* shades of cadet blue \*/

}

The library file. Copy and save this file as bailbond-header.inc

<?php

/\*

file:library.inc

contains page\_header and page\_footer functions.

\*/

function page\_header ($title)

{

echo "<html> \n";

echo "<head> \n";

echo " <title> $title </title>\n";

echo " <link rel=\"stylesheet\" href=\" *teal.css* \" type=\"text/css\">";

echo " </head>";

echo "<body> \n";

}

function page\_footer ($yourname)

{

echo "<footer>";

echo "<a href=\" *bailbond.html* \">Select again</a>";

echo "<hr />";

echo "&copy; $yourname 2013 <a href=\"mailto:$yourname@gmail.com\">Contact Webmaster</a>";

echo "<hr />";

echo "</footer>";

echo "</body> \n </html>\n";

}

?>