

Personal Portfolio

CMS

Designed, developed and documented by Jonathan C James ©2015

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Website URL

<http://ct5017-14t.studentsites.glos.ac.uk/>

Final Version

18

CMS Login Account

Username: zayd

Password: webdev

PIN: 2014

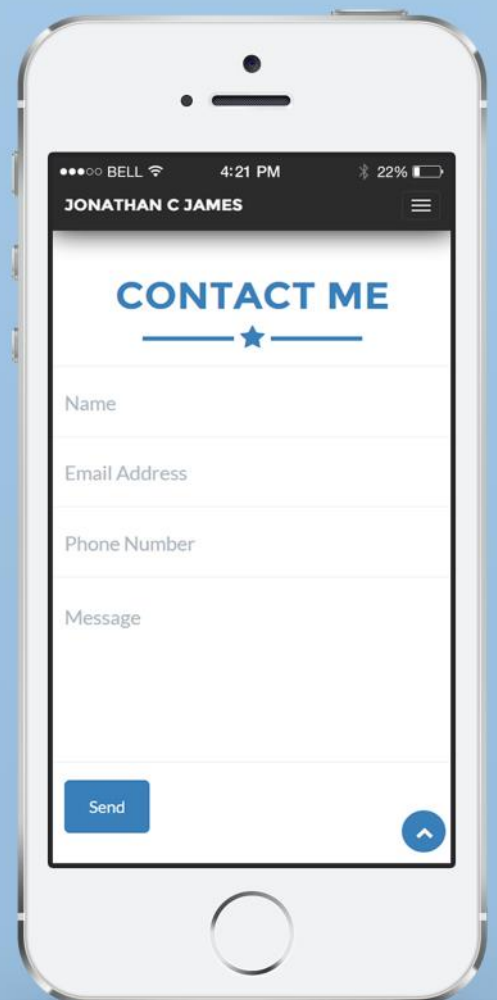
CMS Phone Login

Number: 07790 382 989

Email Login Information

Username: jcjwebdev@yahoo.com

Password: jcj.web.dev

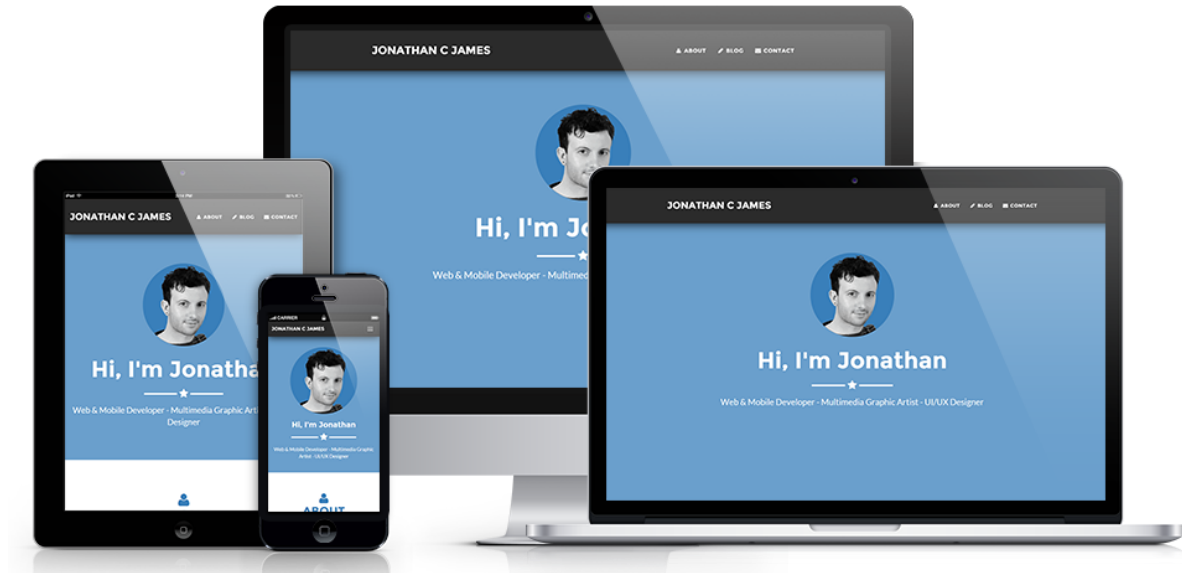


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Introduction

The site is responsive on all devices through use of the design framework Bootstrap 3.



Bootstrap works by pre-loading CSS classes and media-queries into the document object model that can be referenced by the developer in the HTML mark-up. This allows for fast, efficient responsive web design.

The site was built in versions so as to protect each progress stage during development.

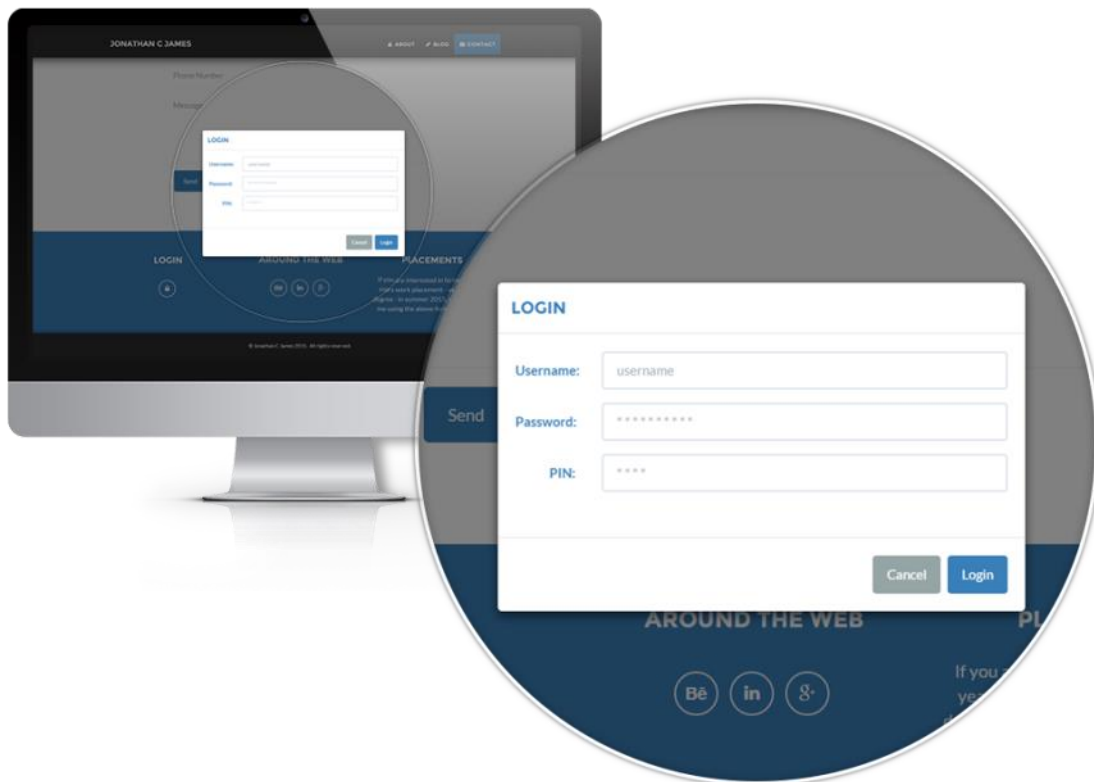
- | | |
|---|--|
| version 1 (working blog) | version 10 (cms - edit post modal) |
| version 2 (complete css and structure) | version 11 (working contact form) |
| version 3 (home page login - working) | version 12 (dial pad login) |
| version 4 (home page login - styled) | version 13 (dial pad login - integrated) |
| version 5 (home page login - validated) | version 14 (gallery page) |
| version 6 (custom denied access pages) | version 15 (gallery page - integrated) |
| version 7 (cms - styled) | version 16 (slimmed down, commented) |
| version 8 (cms - edit post unstyled) | version 17 (custom TinyMCE) |
| version 9 (cms - edit post styled) | version 18 (debugging) |

As developmental milestones are reached, a copy of the site is taken, with the original being kept as a working model whilst further development is carried out.

Innovative Login

The site uses a multi-phase login system, akin to those used in conjunction with online banking systems.

Making use of the aforementioned Bootstrap 3 framework, the front-end login process begins with a HTML5 form contained within a modal.



The information inserted into this form is retrieved and handled using a PHP script that utilises the `$_POST` method; this method allows information to be sent anonymously from an HTML form to a PHP script for processing - in this case, `login.php`.

Within `login.php`, the submitted form data is extracted from the `$_POST` method and stored in variables.

```
// Define $username and $password ($_POST)
$username = $_POST[ 'username' ];
$password = md5( $_POST[ 'password' ] );
$pin = md5( $_POST[ 'pin' ] );
$submit = $_POST[ 'submit' ];

if ( isset( $submit ) )
{
```

```
//SQL query to fetch information of registered users and finds user match.
$query = mysql_query( "SELECT * FROM users WHERE password='$password'
AND username='$username' AND pin='$pin'", $connection );

$rows = mysql_num_rows( $query );

//does the query return a true result? i.e. the username and password matched
if ( $rows == 1 ) {

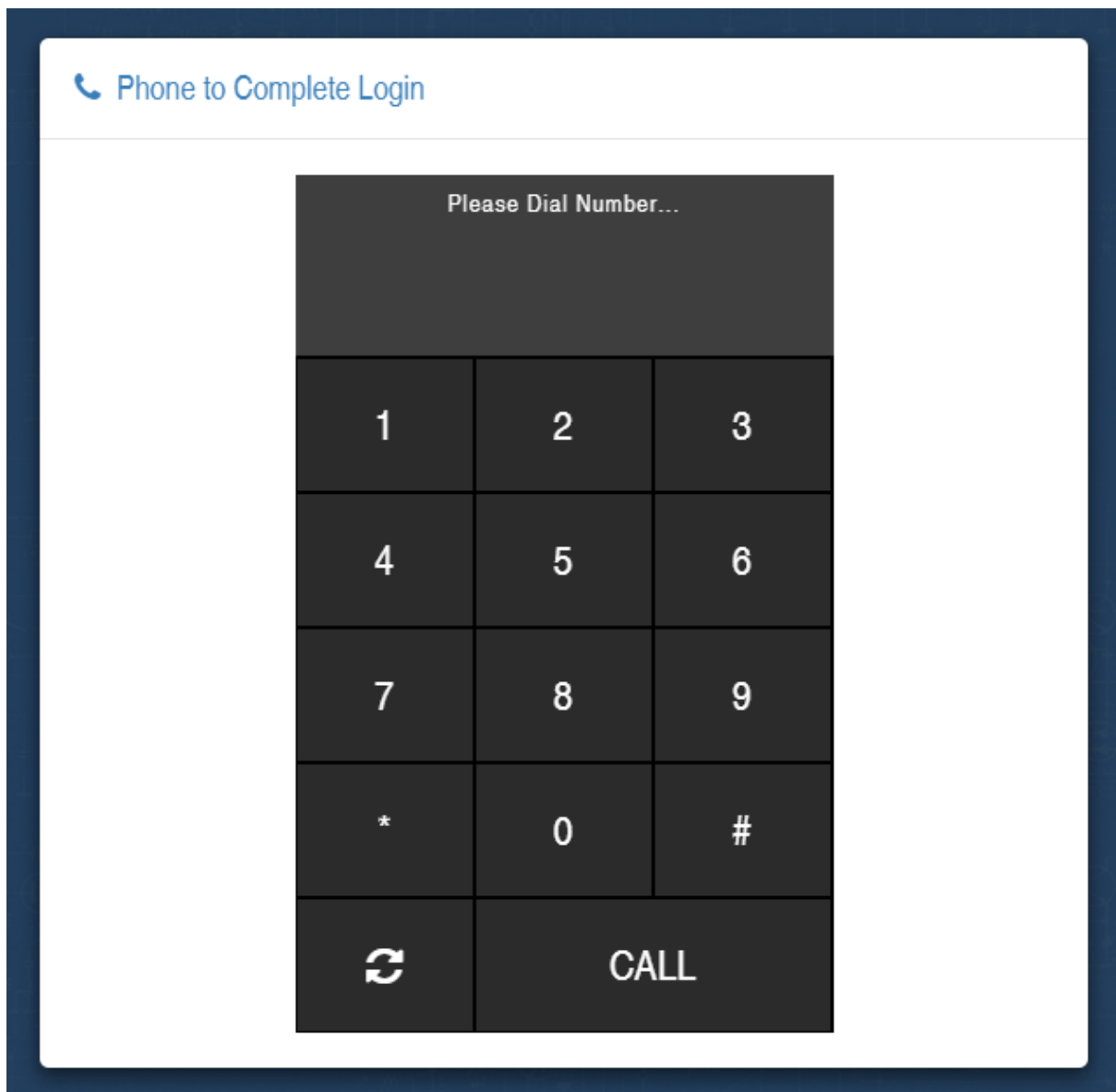
    //Initializing Session
    $_SESSION[ 'login_user' ] = $username;
```

The data within these variables is then compared with the relative table data. If they match, the user is logged in.

The existing login form has extra security with the addition of a 4-digit PIN number necessity for each user.

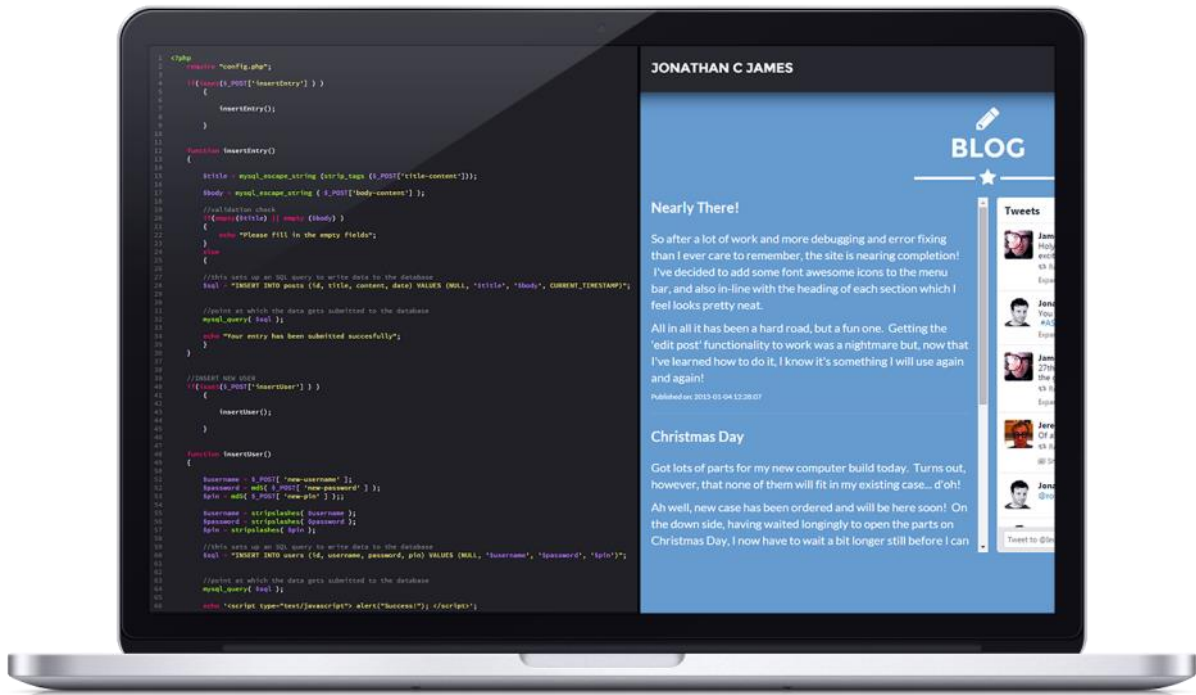
```
// Define $username and $password ($_POST)
$username = $_POST[ 'username' ];
$password = md5( $_POST[ 'password' ] );
$pin = md5( $_POST[ 'pin' ] );
$submit = $_POST[ 'submit' ];
```

Additional security is provided through a jQuery dial-pad. Users must enter a secret number in order to access the main content management system (CMS).



Insert Posts

The `insertEntry()` function within `functions.php` also uses the `$_POST` method to gather data from title input and content textarea fields on forum submission.



However, whereas `login.php` compares `$_POST` values against existing data, `insertEntry()` uses a `mysql_query` to insert the values into a database (line 28).

```
1 <?php
2 require "config.php";
3
4 if(isset($_POST['insertEntry'] ) )
5 {
6
7     insertEntry();
8
9 }
10
11
12 function insertEntry()
13 {
14
15     $title = mysql_escape_string (strip_tags ($_POST['title-content']));
16
17     $body = mysql_escape_string ( $_POST['body-content'] );
18
19     //validation check
20     if(empty($title) || empty ($body) )
21     {
22         echo "Please fill in the empty fields";
23     }
24     else
25     {
26
27         //this sets up an SQL query to write data to the database
28         $sql = "INSERT INTO posts (id, title, content, date) VALUES (NULL, '$title', '$body', CURRENT_TIMESTAMP)";
29
30
31         //point at which the data gets submitted to the database
32         mysql_query( $sql );
33
34         echo "Your entry has been submitted succesfully";
35     }
36 }
```

Delete Posts

The `deleteEntry()` process begins with the relevant `$post['id']` being passed from a button click to an AJAX request. This request then sends and receives data with the `deleteEntry()` function within `functions.php`.

A `mysql_query` deletes the `$post['id']` associated values from the database. This delete data is then sent back through AJAX, resulting in the `#blog` div being updated.

```
47 <br/>
48
49 <a class="btn btn-info" href="edit.php?edit=?php echo $post['id']; ?>">Edit</a>
50 <button class="btn btn-danger" type="button"
51     onClick="javascript:deleteEntry(?php echo $post['id']; ?)">Delete</button>
52
53 </div>
```

```
83 function deleteEntry(id)
84 {
85     var deleteConfirm = confirm("Click 'OK' to delete post with the ID " + id);
86     if ( deleteConfirm )
87     {
88         var dataString = 'deleteEntry=true' + '&id=' + id;
89         $.ajax({
90             type: "POST",
91             url: "functions.php",
92             data: dataString,
93             success: function( result ) {
94                 $.ajax({
95                     url: "posts.php",
96                     cache: false
97                 }).done(function(posts) {
98                     $("#blog").html( posts );
99                 });
100             }
101         });
102     }
103     }
104 }
105
106 }
```

```
72
73 if(isset($_POST['deleteEntry']))
74 {
75     deleteEntry($_POST['id']);
76 }
77
78 function deleteEntry( $id )
79 {
80     //sets up an sql query to delete from the database
81     $sql= "DELETE FROM posts WHERE id='$id' ";
82     //point at which the data gets deleted from the database
83     mysql_query( $sql );
84 }
85
86 }
```

Edit Posts

The ability to edit posts is thanks to the PHP `$_GET` method. Just like `$_POST`, this method creates an array of key value pairs. The difference is `$_GET` method passes its array variables through the URL.

The id of the post to be edited is passed via a button click:

```
<a class="btn btn-info" href="edit.php?edit=?php echo $post['id']; ?>">Edit</a>
```

The edit.php script then pre-loads the relevant `$post['id']` data into a HTML textarea by inserting the results of a `mysql_query` into a variable as a `mysql_fetch_array`.

Once the pre-populated data has been amended within a form, the `$_POST` method then inserts the new data back into the relevant row using the `$post['id']`.

```
1 <?php
2
3 //start a session and identify the user
4 session_start();
5
6 include "../check-logged-in.php";
7
8 if( isset( $username ) )
9 {
10     require "config.php";
11
12     if( isset( $_GET['edit'] ) ) 1
13     {
14
15         $id = $_GET['edit']; 2
16         $res = mysql_query("SELECT * FROM posts WHERE id='$id'"); 2
17         $post = mysql_fetch_array($res); 2
18
19     }
20
21     if( isset($_POST['update-post']) 3
22     {
23         $newTitleContent = mysql_escape_string (strip_tags ( $_POST['new-title-content'] )); 4
24         $newBodyContent = mysql_escape_string ( $_POST['new-body-content'] ); 4
25         $id = $_POST['id']; 4
26
27         $sql = "UPDATE posts SET title='$newTitleContent', content='$newBodyContent' WHERE id='$id'";
28         $res = mysql_query($sql) or die("Could not update".mysql_error());
29         echo "<meta http-equiv='refresh' content='0;url=index.php'>";
30     }
31
32 ?>
```

New users can be registered through the CMS via the `InsertUser()` function. This function uses the `$_POST` method, much like the `insertEntry()` function.

Areas for Improvement

End Session

As it stands, logging out from the site ends the session but closing the browser does not. This feature would be easily integrated to add additional security to the login area.

Dial-Pad Login Phase

This is currently handled using jQuery. However, replicating this feature using PHP in with a MySQL database would keep sensitive login information hidden from the browser.


References

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Product Criteria Grid

Name: Jonathan C James

Student number: s1308501

| Grade | Content | Claim |
|----------------|--|---|
| To achieve <30 | Some requirements met, but very limited and not recoverable. Copyright violation. No comments in any code. | |
| To achieve <40 | Deliverables partially complete, e.g. not all components attempted. No CMS. Scripting patterns inconsistent. Poor quality comments in code. Limited weekly progress report. Limited supporting documentation. No references. | |
| To achieve 40+ | All components attempted. Basic front-end of web site. Not responsive. Some evidence of a basic CMS. Basic understanding of server-side scripting. Some comments in code. Some evidence of weekly progress report. Supporting documentation submitted, with references. | |
| To achieve 50+ | All components functional. Database communications robust. Suitable file and code structure. Front-end of web site responsive. Good combination of server-side and client-side technologies. Good comments in code. Clear progress report. Evaluation contains evidence of criteria. | |
| To achieve 60+ | Original and intuitive ideas. Front-end and back-end of web site responsive. Very good use of web technologies to provide an innovative design. Clear evidence of progress, showing evidence of problem-solving along the way. Clear comments indicating understanding of code. Evidence of critical reflection in evaluation. | |
| To achieve 70+ | Excellent progress reports and completed product. High quality, aesthetically pleasing, interactive interface designs. Explored and integrated APIs. Included suggestions for further work. Excellent level of commenting ready for auto-documentation. Extensive and detailed evaluation. |  |