

CodeIgniter PHP Framework

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Toby Bio

- 12 years - professional Web App Development
 - 5 years - Lotus Domino
 - 7 years - PHP
- Toby Beresford Applications Ltd
- Platform applications
 - Facebook
 - Bebo, Myspace et al.
- Clients
 - Sky News, Last.fm, Comic Relief, VideoJug, AffiliateWindow, .name registry....

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• www.facebook.com/pages/Toby-Beresford-Applications/6164004474



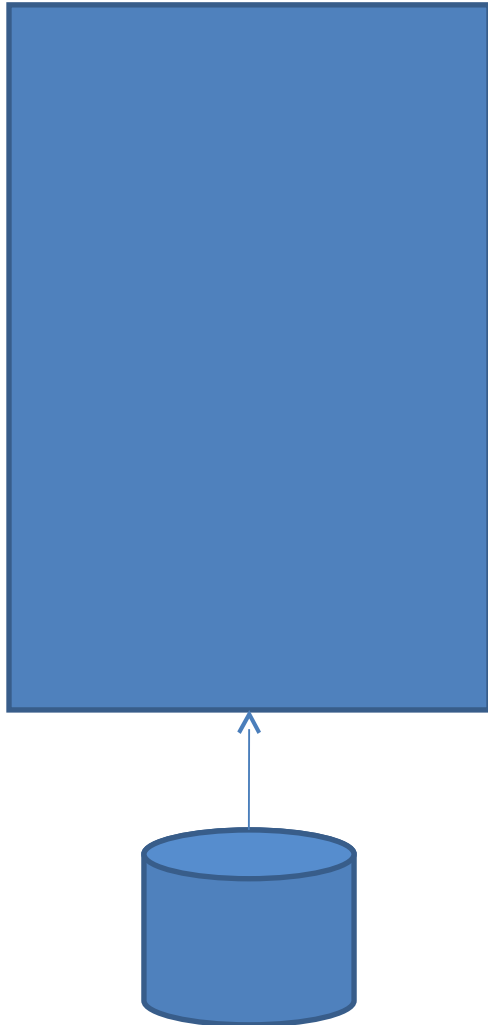
Benefits of CI

- Small
- Fast
- Simple
- Customer ready
 - a sys admin can install the CI framework in a few minutes
 - great documentation means easy hand over: new developers just learn the framework not your home grown MVC code
- Great for mash-up apps using multiple platforms
 - eg. Facebook apps
- Cleaner code

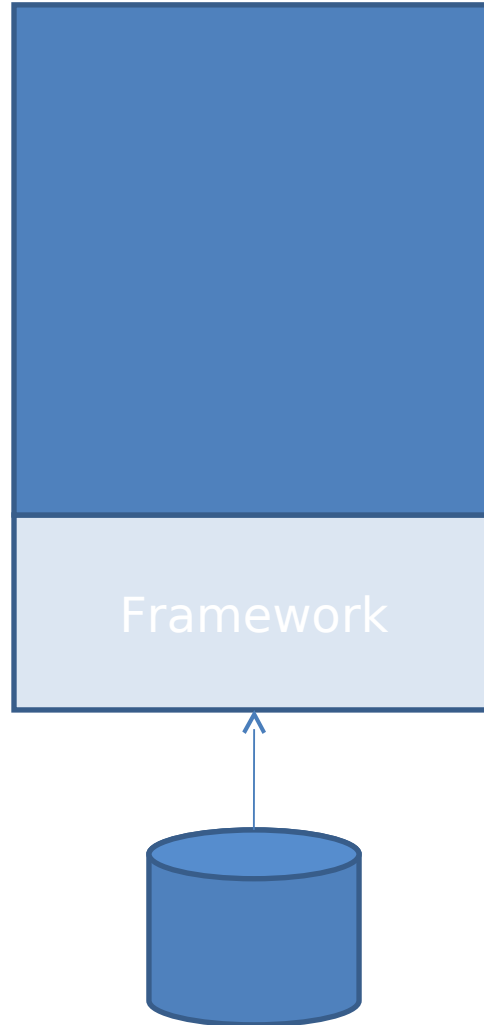


Why Frameworks

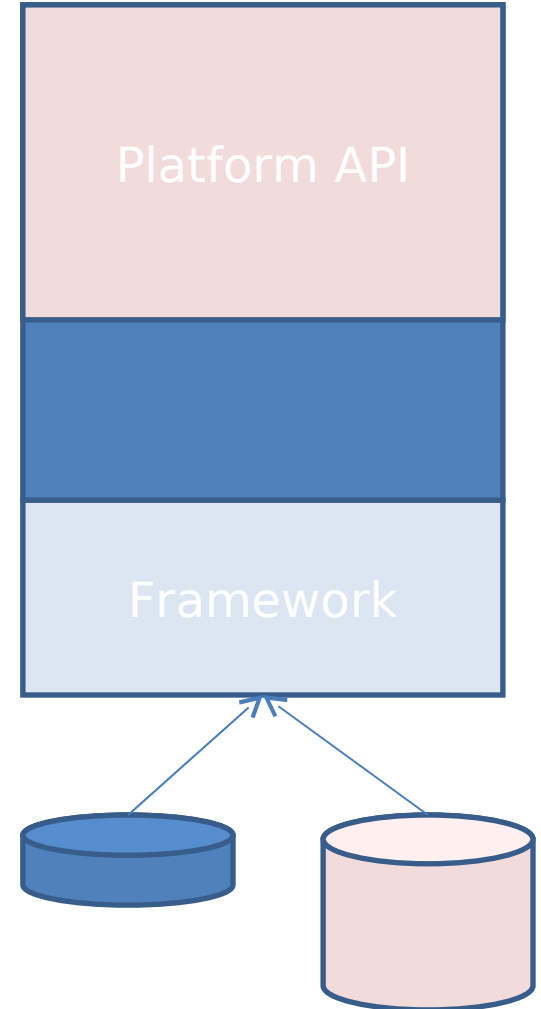
No framework



Me and my framework



Me, my framework and a Platform API





MVC

View (views/frog_count.php)

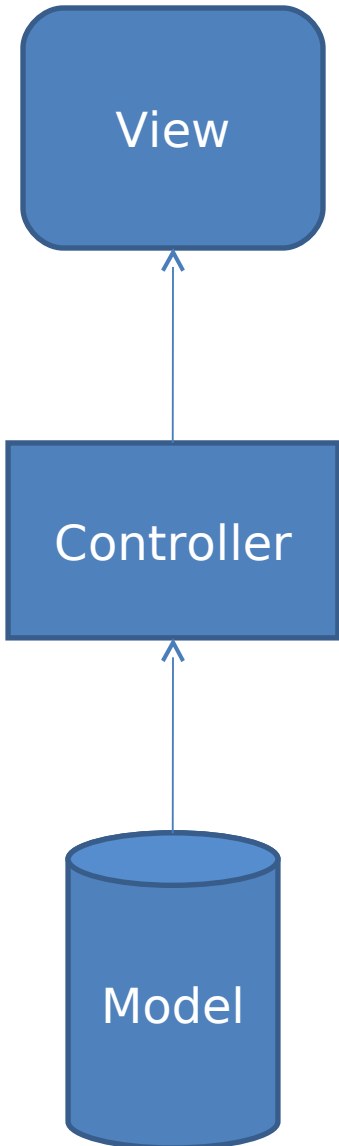
```
<html>
  <body>
    <h1> You've <?=$froggies;?> items in list</
    h1>
  </body>
</html>
```

Controller (controllers/my_controller.php)

```
function total_frogs () {
  $this->load->model("frogs");
  $number_of_frogs = $this->frogs-
  >count_frogs();
  $data['froggies'] = $number_of_frogs;
  $this->load->view("frog_view", $data);
}
```

Model (models/frogs.php)

```
function count_frogs() {
  $this->db-
  >where("type", "frog");
  $this->db->from("animals");
  $query = $this->db->get();
  Return $query->num_rows();
}
```





How to run a CI method

- `http://www.my_server.com/index.php/my_controller/my_frog`

Where you've installed CI


Your main controller file:

`System/application/controllers/my_controller.php`

The name of a method in your controller



Download from www.codeigniter.com





The screenshot shows the CodeIgniter website homepage. At the top, there is a navigation bar with links for Home, Downloads, News, VideoTutorials, User Guide, Forums, Wiki, Projects, and Bug Tracker. The main content area features a large banner with the CodeIgniter logo and the text: "CodeIgniter is an Open Source Web Application Framework that helps you write kick-ass PHP programs". To the right of the banner are four links: "Download CodeIgniter Version 1.6.1", "Read the User Guide", "View the Video Tutorials", and "Talk About it in the Forums". Below the banner, there is a "Welcome to CodeIgniter!" section with a paragraph of text and a list of reasons why CodeIgniter is right for you. On the right side, there is a "CODEIGNITER NEWS" section with three news items: "CodeIgniter 1.6.1 Released", "CodeIgniter 1.6 hits the streets", and "Calling all CodeIgniter-ers - join us at South By Southwest!".

CodeIgniter® Hello, tobyberesford | Logout | Your Account

Home Downloads News VideoTutorials User Guide Forums Wiki Projects Bug Tracker

 CodeIgniter is an Open Source Web Application Framework that helps you write kick-ass PHP programs

-  [Download CodeIgniter](#)
Version 1.6.1
-  [Read the User Guide](#)
CodeIgniter is clearly documented
-  [View the Video Tutorials](#)
Build a weblog in under 20 minutes!
-  [Talk About it in the Forums](#)
Join the growing community

Welcome to CodeIgniter!

CodeIgniter is a powerful PHP framework with a very small footprint, built for PHP coders who need a simple and elegant toolkit to create full-featured web applications. If you're a developer who lives in the real world of shared hosting accounts and clients with deadlines, and if you're tired of ponderously large and thoroughly undocumented frameworks

CodeIgniter is right for you if...

- You want a framework with a small footprint.
- You need exceptional performance.
- You need broad compatibility with standard hosting accounts that run a variety of PHP versions and configurations.
- You want a framework that requires nearly zero configuration.
- You want a framework that does not require you to use the command line.
- You want a framework that does not require you to adhere to restrictive coding rules.
- You are not interested in large-scale monolithic libraries like PEAR.
- You do not want to be forced to learn a templating language (although a template parser is optionally available if you desire one).
- You eschew complexity, favoring simple solutions.
- You need clear, thorough documentation.

CODEIGNITER NEWS

CodeIgniter 1.6.1 Released
[Read More...](#)
Posted by Derek Allard on Feb 12, 2008

CodeIgniter 1.6 hits the streets
[Read More...](#)
Posted by Derek Allard on Jan 30, 2008

Calling all CodeIgniter-ers - join us at South By Southwest!
[Read More...](#)
Posted by Derek Allard on Jan 27, 2008

CodeIgniter 1.5.4 Released
[Read More...](#)
Posted by Rick Ellis on Jul 12, 2007

[View Past News](#)



Upload to your server

The screenshot displays the Ipswitch WS_FTP Home application window. The title bar reads "Ipswitch WS_FTP Home". The menu bar includes "File", "Edit", "View", "Tools", and "Help". The toolbar contains "Connect...", "Disconnect", "Connection Wizard", "Options...", and "Views". The address bar shows "ftp://ftp.microaidstore.com/" with "UserID" set to "microaid" and "Password" masked as "*****". A "Go" button is visible next to the password field.

On the left, a window titled "My Computer" shows the local file system at "C:\Users\Toby\Documents\Proje...". It contains a table of files:

Name	Size	Type	Modified
system		File ...	25/02/2008
user_guide		File ...	25/02/2008
index.php	4 KB	PHP...	21/01/2008
license.txt	3 KB	Text ...	15/04/2007

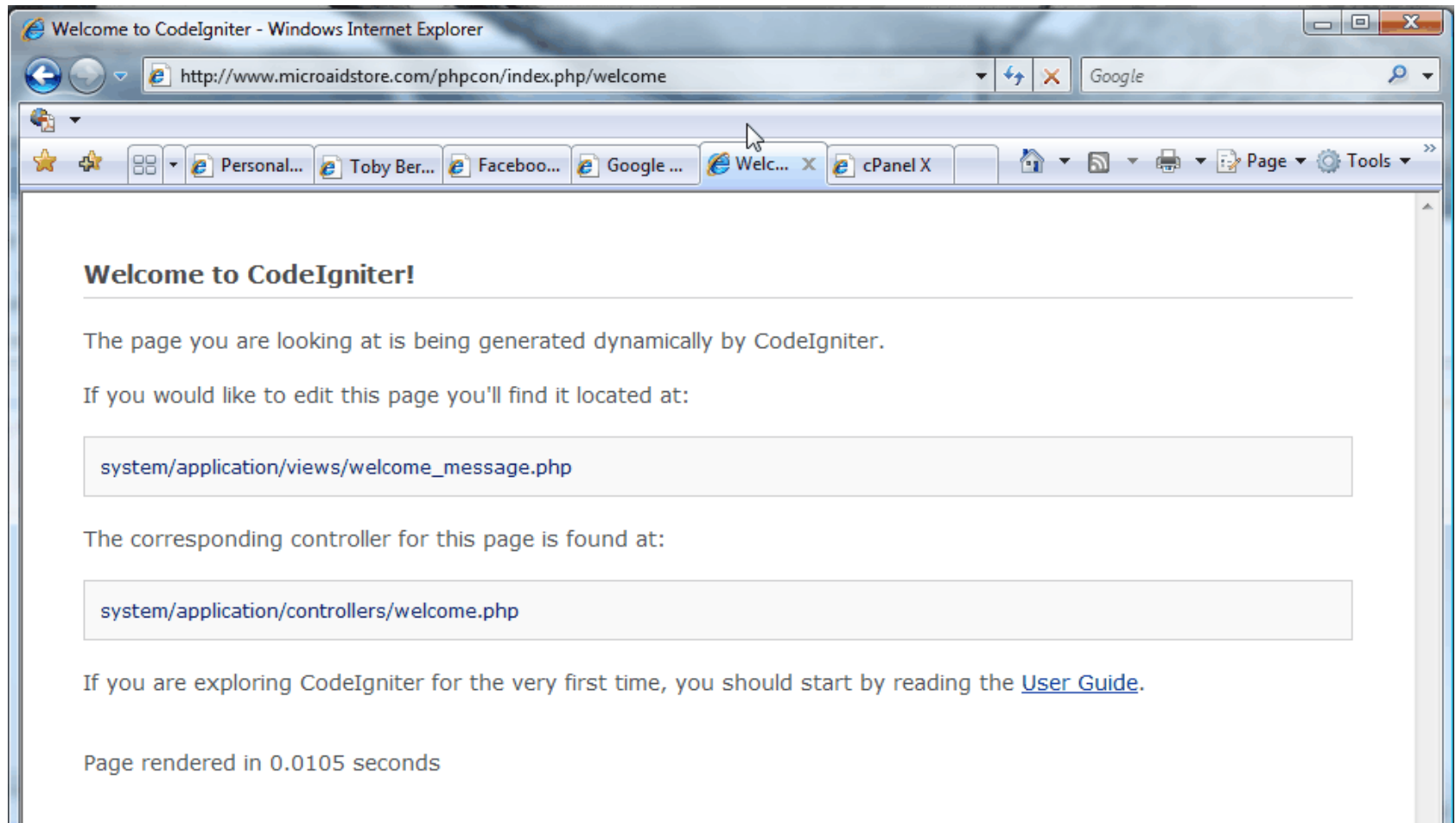
On the right, a window titled "summerhol" shows the remote server directory structure at "/public_html/phpcon". It contains a table of files:

Name	Size	Type	Modified
assets		Folder	27/02/20
system		Folder	27/02/20
user_guide		Folder	27/02/20
index.php	4 KB	PHP File	27/02/20

Two green arrows are positioned between the two windows, pointing from the local files to the remote files, indicating the upload process.



See the welcome screen





Create your database

phpMyAdmin

Server: localhost ▶ Database: microaid_phpcon ▶ Table: item

[Browse](#) [Structure](#) [SQL](#) [Search](#) [Insert](#) [Export](#) [Import](#) [Operations](#) [Empty](#)

[Drop](#)

Table 'microaid_phpcon`.`item` has been created.

SQL query:

```
CREATE TABLE `microaid_phpcon`.`item` (  
  `id` INT NOT NULL AUTO_INCREMENT PRIMARY KEY ,  
  `content` VARCHAR(255) NOT NULL  
) ENGINE = MYISAM
```

[Edit] [Create PHP Code]

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/>	id	int(11)			No		auto_increment	
<input type="checkbox"/>	content	varchar(255)	latin1_swedish_ci		No			

↑ [Check All](#) / [Uncheck All](#) With selected:

[Print view](#) [Propose table structure](#)

[Add](#) 1 field(s) At End of Table At Beginning of Table After id [Go](#)

Indexes:					Space usage		Row Statistics	
Keyname	Type	Cardinality	Action	Field	Type	Usage	Statements	Value
PRIMARY	PRIMARY	0		id	Data	0 B		
Create an index on 1 columns Go					Index	0 B		
					Total	0 B		

Configure CodeIgniter Base URL



```
1 <?php  if (!defined('BASEPATH')) exit('No direct script access allowed');
2
3 /*
4 -----
5 | Base Site URL
6 -----
7 |
8 | URL to your CodeIgniter root. Typically this will be your base URL,
9 | WITH a trailing slash:
10 |
11 |     http://www.your-site.com/
12 |
13 */
14 $config['base_url'] = "http://www.microaidstore.com/phpcon/";
15
16 /*
17 -----
18 | Index File
19 -----
20 |
21 | Typically this will be your index.php file, unless you've renamed it to
22 | something else. If you are using mod_rewrite to remove the page set this
23 | variable so that it is blank.
24 |
25 */
26 $config['index_page'] = "index.php";
27
```



Configure Database Connection

The screenshot shows an FTP client window titled "EditPlus - [ftp(2)ftp.microaidstore.com:/public_html/phpcon/system/application/config/database.php *]". The window contains a file explorer on the left and a code editor on the right. The file explorer shows the directory structure: /, public_html, phpcon, system, application, and config. The file "database.php" is selected. The code editor displays the following PHP code:

```
35 */
36
37 $active_group = "default";
38 $active_record = TRUE;
39
40 $db['default']['hostname'] = "localhost";
41 $db['default']['username'] = "microaid_develop";
42 $db['default']['password'] = "###";
43 $db['default']['database'] = "microaid_phpcon";
44 $db['default']['dbdriver'] = "mysql";
45 $db['default']['dbprefix'] = "";
46 $db['default']['pconnect'] = TRUE;
47 $db['default']['db_debug'] = TRUE;
48 $db['default']['cache_on'] = FALSE;
49 $db['default']['cachedir'] = "";
50 $db['default']['char_set'] = "utf8";
51 $db['default']['dbcollat'] = "utf8_general_ci";
52
53 ?>
```



Create a controller

The screenshot shows the EditPlus FTP client interface. The title bar indicates the connection to `ftp(2)ftp.microaidstore.com:/public_html/phpcon/system/application/controllers/items.ph`. The menu bar includes File, Edit, View, Search, Document, Project, Tools, Window, and Help. The toolbar contains various icons for file operations and editing. The left pane shows the directory structure: `[ftp2] ftp.microaidstor` with subdirectories `/`, `public_html`, `phpcon`, `system`, `application`, and `controllers`. The right pane displays the code for `items.php`, which is a PHP class extending `Controller`. The code is as follows:

```
1 <?php
2
3 class Items extends Controller {
4
5     function Items ()
6     {
7         parent::Controller();
8     }
9
10    function index ()
11    {
12        $this->load->view('home');
13    }
14 }
15 ?>
```


Send variables to the view via an array



VIEW

```
9 <div id="wrap">
10 <h1>Is my framework better than yours?</h1>
11 <h2>Reasons why <?=$FRAMEWORK;?> rocks:-</h2>
```

CONTROLLER

```
12 $data['FRAMEWORK']="CodeIgniter";
13 $this->load->view('home', $data);
```




Model: Get item

- Uses ActiveRecord

```
26     function get_item($id) {
27         $this->db->where("id", $id);
28         $query=$this->db->get('item');
29         return $query->row_array();
30     }
31
```




Model: Put Item

```
10     function put_item($item) {
11         if ($item['id']>0) {
12             #update
13             $this->db->where("id",$item['id']);
14             $this->db->update("item",$item);
15         } else {
16             #add
17             $this->db->insert("item",$item);
18         }
19     }
```



Model: Get all

```
32     function get_all_items() {
33         $query=$this->db->get('item');
34         if ($query->num_rows>0) {
35             return $query->result_array();
36         } else {
37             return false;
38         }
39     }
```

A mouse cursor is positioned over the closing curly brace of the function on line 39.



Model: Delete Item

```
21     function delete_item($id) {  
22         $this->db->where("id", $id);  
23         $this->db->delete('item');  
24     }
```



Controller: Add

```
27     function add()  
28     {  
29         $data['recordId']=0;  
30         $data['reason']="";  
31         $this->load->view('addedit', $data);  
32     }  
--
```

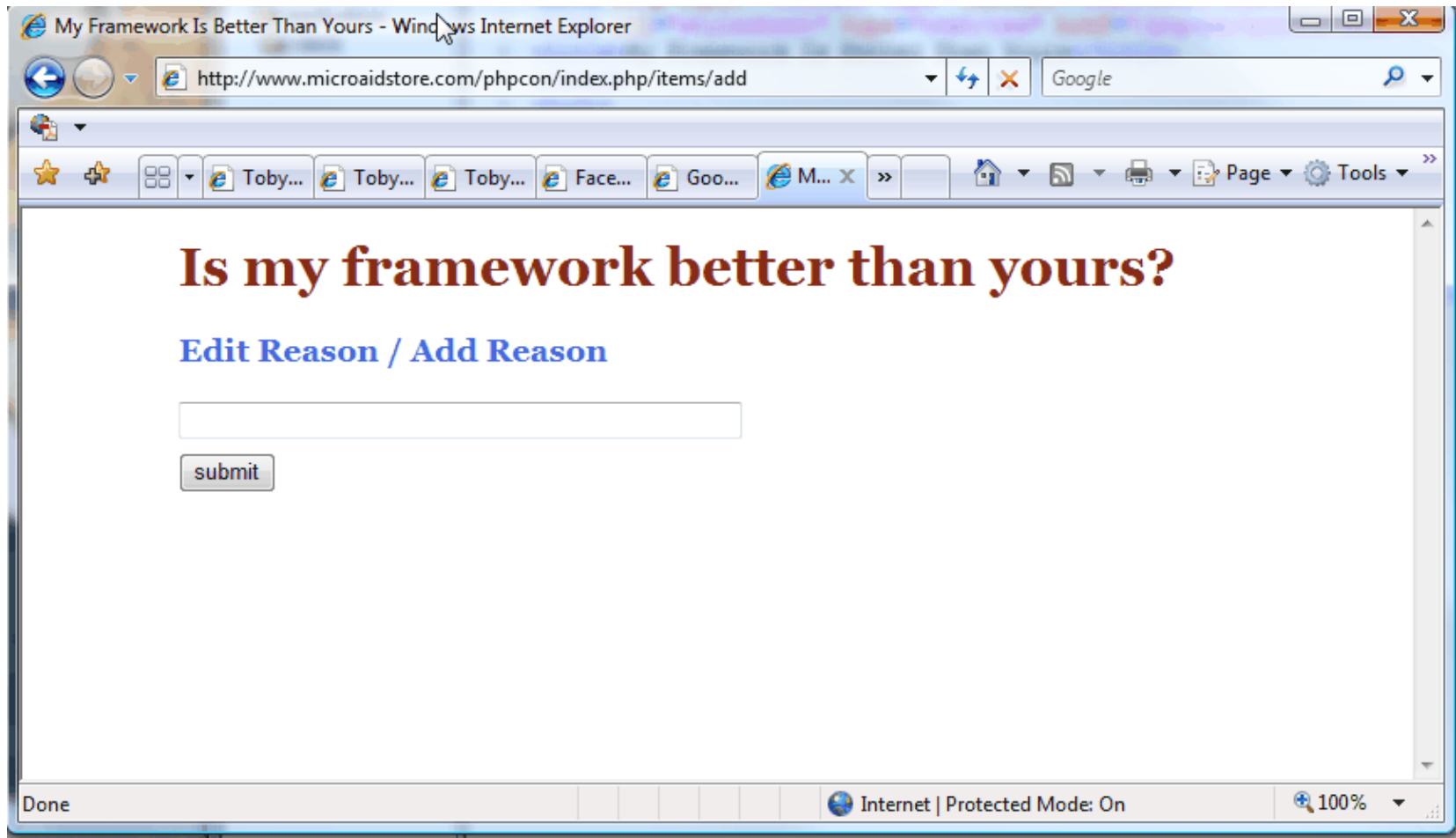


View: Add/Edit

```
6 <title>My Framework Is Better Than Yours</title>
7 </head>
8 <body>
9 <div id="wrap">
10 <h1>Is my framework better than yours?</h1>
11 <h2>Edit Reason / Add Reason</h2>
12 <form action="save" method="post">
13 <p>
14 <input type="hidden" name="id" value="<?=$recordId;?>" />
15 <input type="text" name="reason" value="<?=$reason;?>" size="50" />
16 <input type="submit" value="submit" />
17 </p>
18 </form>
```



User Interface: Add





Controller: Save

```
34     function save()
35     {
36         $item['id']=$this->input->post("id");
37         $item['content']=$this->input->post("reason");
38         $this->dblink->put_item($item);
39         $this->index();
40     }
41     ..
```

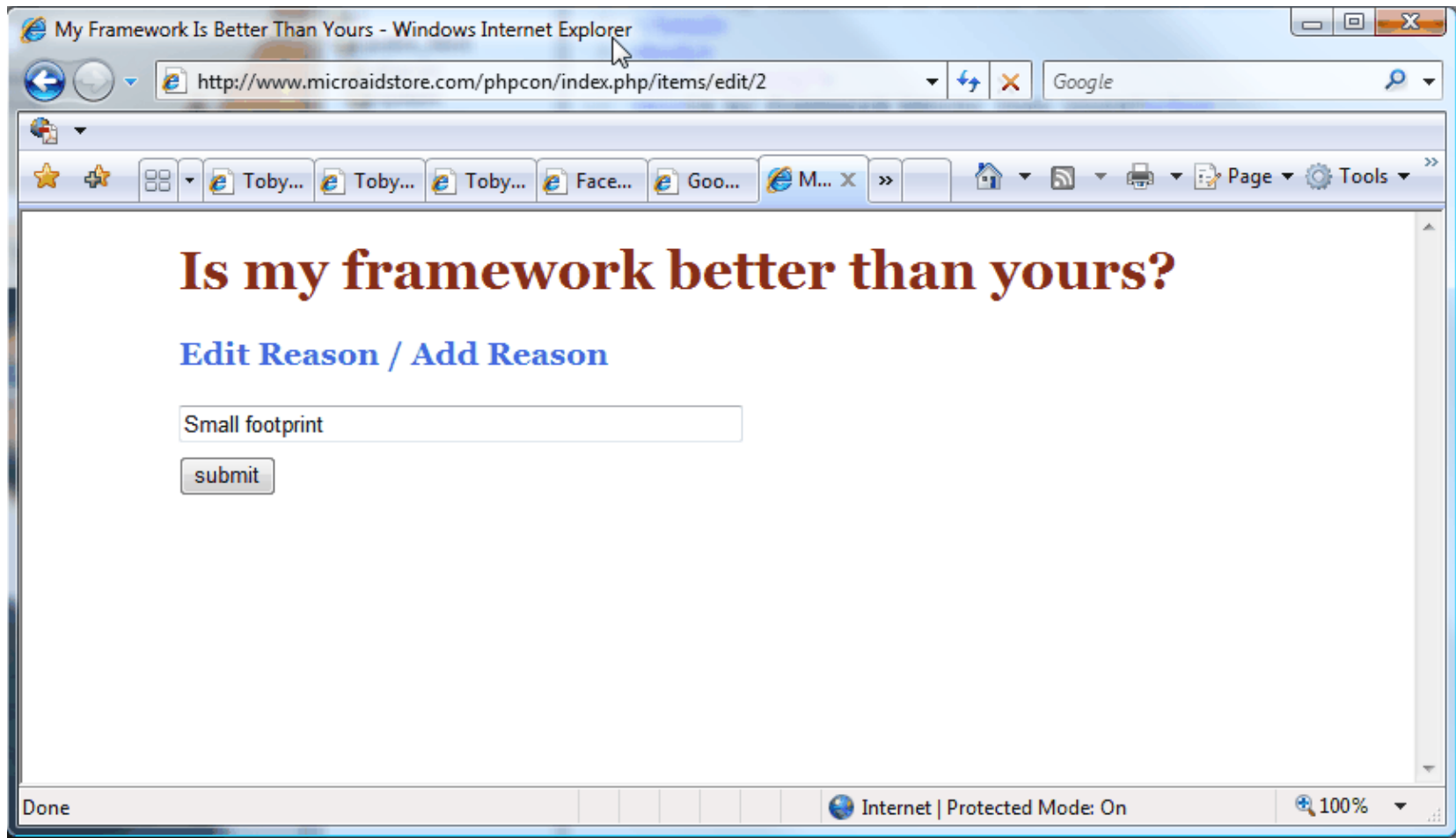


Controller: Edit

```
18     function edit()  
19     {  
20         $id=$this->uri->segment(3);  
21         $item=$this->dblink->get_item($id);  
22         $data['recordId']=$id;  
23         $data['reason']=$item['content'];  
24         $this->load->view('addedit', $data);  
25     }
```



User Interface: Edit





Controller: List all

```
11     function index()  
12     {  
13         $data['items']=$this->dblink->get_all_items();  
14         $data['FRAMEWORK']="CodeIgniter";  
15         $this->load->view('home', $data);  
16     }  
17
```



Views: List

```
13 <?
14 if ($items) {
15     ?><ol><?
16         foreach ($items as $i=>$item) { ?>
17         <li>
18             <?=$item['content'];?><span class="actions"><a
19                 href="edit/<?=$item['id'];?>">edit</a> / <a
20                 href="delete/<?=$item['id'];?>">delete</a></span>
21             </li>
22         <? } ?>
23     </ol>
24 <?
25 } else {?>
26     <p>List is empty</p>
27 } ?>
```

- Note we can use ordinary PHP in the views, no template language to learn



User Interface: List

The screenshot shows a Windows Internet Explorer browser window. The title bar reads "My Framework Is Better Than Yours - Windows Internet Explorer". The address bar contains the URL "http://www.microaidstore.com/phpcon/index.php/items/save". The browser's toolbar includes a search box with "Google" and various navigation and utility icons. The main content area displays the following:

Is my framework better than yours?

Reasons why CodeIgniter rocks:-

1. No command line necessary [edit](#) / [delete](#)
2. Small footprint yeah [edit](#) / [delete](#)
3. Ultra fast [edit](#) / [delete](#)

The status bar at the bottom indicates "Internet | Protected Mode: On" and a zoom level of "100%".



Controller: Delete

```
42     function delete()
43     {
44         $id=$this->uri->segment(3);
45         $data['recordId']=$id;
46         $this->load->view("delete", $data);
47     }
48
49     function delete_confirm()
50     {
51         $id=$this->input->post('id');
52         $confirm=$this->input->post('confirm');
53         if ($confirm=="Yes") {
54             $this->dblink->delete_item($id);
55         }
56         $this->index();
57     }
58 }
```

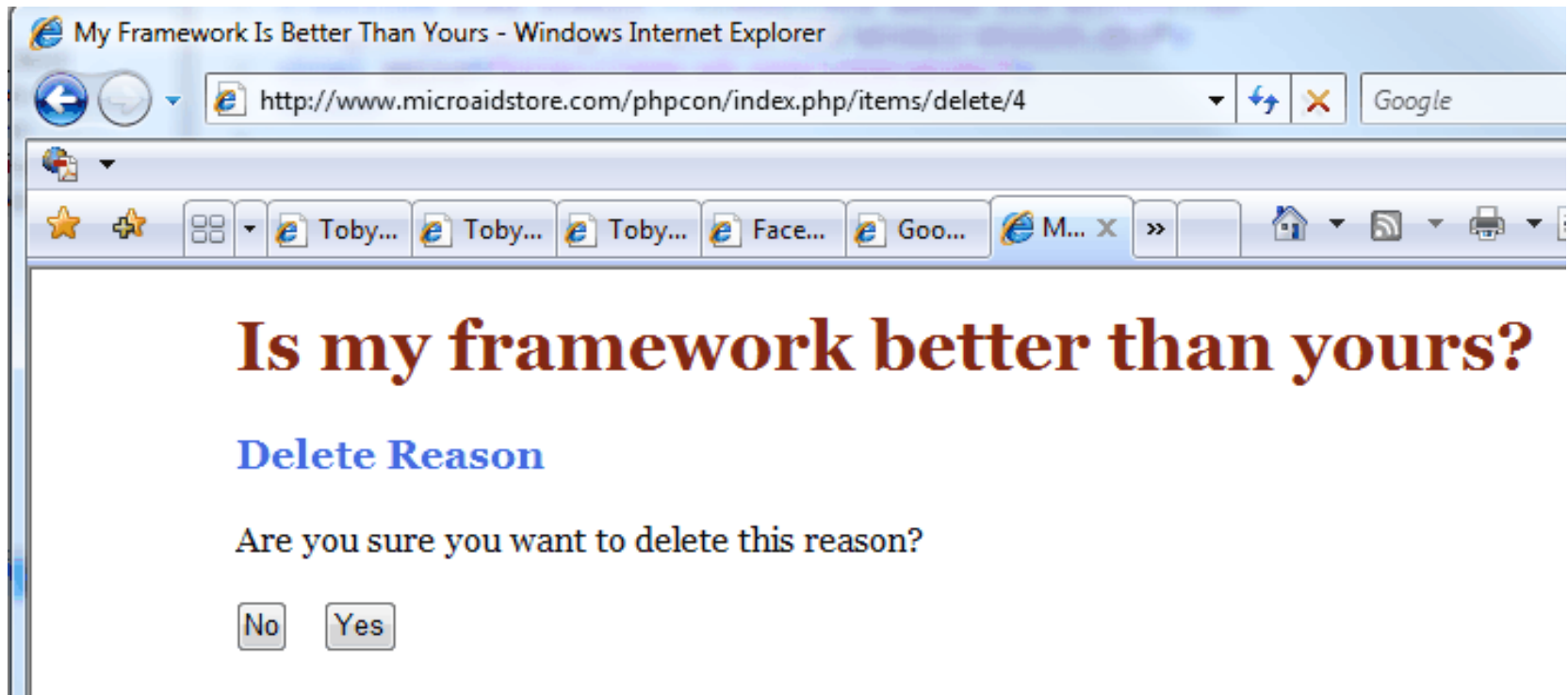


Views: Delete Confirm

```
12 <h2>Delete Reason</h2>
13 <p>Are you sure you want to delete this reason?</p>
14 <form action="../../../delete_confirm" method="post">
15 <p>
16 <input type="hidden" name="id" value="<?=$recordId;?>" />
17 <input type="submit" name="confirm" value="No" class="submit" />
18 <input type="submit" name="confirm" value="Yes" class="submit" />
19 </p>
20 </form>
```



User Interface: Delete





Summary

- CI is fast to run, light to deploy and easy to learn
- Great for mash-up applications in the platform world
 - Wishlist = Eg. AffiliateWindow retailer list API, product API, Facebook UI, Facebook User tables, + PayPal mass pay for commissions



Useful links

- www.codeigniter.com
 - User manual, community forums, releases
- www.kohanaphp.com
 - PHP5 CodeIgniter fork
- www.phpframeworks.info
 - All the frameworks side by side
- www.people4web2.com
 - Search engine optimised contractor site with a skills category for the major PHP Frameworks
- LondonGarage06.eventbrite.com
 - Facebook Developer Garage - 5th March
- Questions?
tohy@tohyberesford.com

