

# DMIT2503 – ADVANCED WEB CONCEPTS

## CODEIGNITER MVC PHP FRAMEWORK – DAY 6

### ION AUTH – AN AUTHENTICATION LIBRARY FOR CODEIGNITER

**Overview:** CodeIgniter does not have Authentication built in. One of its drawbacks since some others (like Laravel) do have auth built in. However, there are several Auth libraries built by 3<sup>rd</sup> parties available for CI.

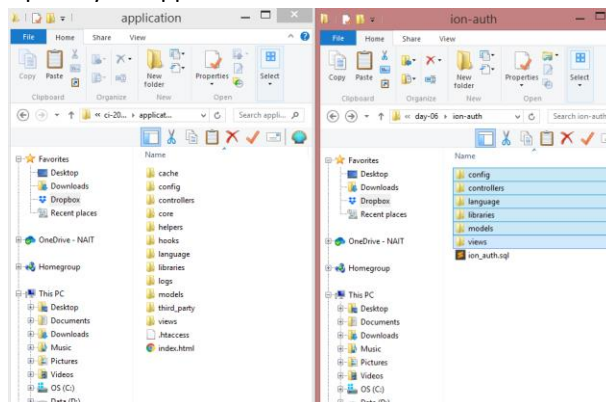
- **Tank Auth:** Very old (about 2008) and does not work with PHP 7. I was using this after upgrading it to CI3+ and upgrading the password encryption, but not working with PHP 7 is a deal-killer.
- **Ion Auth:** Quite a bit of support, but no registration page. (Only admin can add users).
- **CodeInsect** (<http://www.codeinsect.com/>)
- <https://community-auth.com/>
- Etc.

I have used Ion Auth several years ago, and the author (Ben Edmonds) has released some upgrades recently, so that is the one we'll use.

We are not using the GitHub download of Ion Auth. I have taken that and removed some un-needed files and folders while adding a Registration page. Since Ion Auth does not come with a registration page, I have added one I found in a tutorial (<https://avenir.ro/authentication-system-with-ion-auth-and-ci3/register-users-using-ion-auth-in-codeigniter-3/>) and modified that a bit.

### INSTALLATION

1. Take the unzipped ion-auth folder and merge it with your ci2020 application folder locally. Might be a good idea to save a backup of your local folder first (I just copy/paste it in case I need to restore that).
  - Open both the ion-auth folder and your application folder.
  - Copy the ion-auth folders
  - Paste to your application folder.
  - This will copy all the new ion-auth files to their respective directories.
  - Upload your application folder.



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2. Install the ion\_auth.sql DB tables to your database using phpMyAdmin.
  - Open the file (ion\_auth.sql) in a text editor. Copy it all.
  - In phpMyAdmin, select your database.
  - Select the SQL tab,
  - Paste and hit Go.
  - You should now have 4 new tables in your DB.
3. Browse to the /register/ segment of your app.
  - <http://username.dmitstudent.ca/dmit2503/ci-2020/register>
  - Register a couple users.
    - Keep your password simple and feel free to use the same one for all users to test.

**Login page:** Apparently, you need to use your *email address*, not your *username* to login. This is a feature currently being discussed on their GitHub site, but not incorporated yet. Some devs have incorporated this their own way, but for now, just use the email address to login.

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## USING ION AUTH IN OUR APP

Create a new controller called Authtest.php

```
// controllers/Authtest.php

<?php
defined('BASEPATH') OR exit('No direct script access allowed');

class Authtest extends CI_Controller {
function __construct()
{
    parent::__construct();
    $this->load->database();
    $this->load->library('ion_auth');
}

    public function index()
    {
        if (!$this->ion_auth->logged_in())
        {
            redirect('/auth/login/');
        }else{
            $data['user_id'] = $this->ion_auth->user()->row()->id;
            $data['username'] = $this->ion_auth->user()->row()->username;
        }

        $this->load->view('includes/header');
        $this->load->view('authtest_view',$data);
        $this->load->view('includes/footer');
    }
}
```

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Create a new view called `authtest_view.php`

```
// views/ authtest_view.php

<h1>Auth Test</h1>
<h3>User Logged in is <?php echo $username ?></h3>
<p>Their ID is <?php echo $user_id ?></p>
```

After you have created a user and logged in, please test that.

Log out and test it again.

## MAKE IT PRETTY

There is a lot lacking in our auth and reg sections. Let's start to incorporate Ion Auth a bit better.

1. Create a link in your app to `/auth/login/`
2. In your login view, create a link to Register a New Account. (figure it out please )
3. You may have noticed that the login page, etc. are all lacking your app header/footer. Open `Controllers/Auth.php` and start adding them. Note how I am simply loading the header/footer around anything that is loading the auth views. The `_render_page` is part of some templating engine that Ion Auth is using. Just leave it alone and use our way of loading the header/footer.

```
// controllers/Auth.php ~ line 115 in login()

$this->load->view('includes/header');

$this->_render_page('auth' . DIRECTORY_SEPARATOR . 'login', $this->data);

$this->load->view('includes/footer');
```

4. Try Bootstrapping some of the Auth views like login. Check the BS4 docs and use the correct class names and markup to make these forms look like they belong.

## USING AUTH IN OUR APP

In order to utilize Auth in our app, we should load it globally. Open `config/autoload.php` and add `ion_auth` to our global libraries:

```
$autoload['libraries'] = array('session','database', 'ion_auth');
```

Now, let's try adding the incorporating auth into our CRUD section.

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```
// controllers/Crud.php

public function write()
{
    if (!$this->ion_auth->logged_in())
    {
        redirect('/auth/login/');
    }else{
        $data['author_id'] = $this->ion_auth->user()->row()->id;
    }
}
```

Note that we have added a new item to the \$data array that will be inserted into the DB.

In our DB table (ci\_animals), let's record that item. In phpMyAdmin, add a new field to your ci\_animals table called *author\_id*.

Name	Type
animal_name	varchar(255)
description	text
author_id	int(11)
animal_id	int(11) 

Now, test that and make sure that any new animal you enter has the ID of a user you have registered and logged in as. It cannot be 0.

Feel free to manually change all the existing animals to have the ID of a current user.

## ACTIVITY

Ok. Now for the big challenge (MUHAHAHAHA).

If you can record the ID of the user who has added a new animal, can you retrieve that and add the username of the author when retrieving that data in the detail view?

- In your Crud\_model, modify the get\_animal\_detail(\$id) {} to include a JOIN statement.
  - [https://codeigniter.com/user\\_guide/database/query\\_builder.html](https://codeigniter.com/user_guide/database/query_builder.html)
  - If the docs say \$builder, you can use \$this. I haven't delved into this but my mine works fine with \$this->db->METHOD

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- In your model function, the correct order of db methods should be WHERE, JOIN, GET.
- If you get an ambiguous columns name error, you can be more specific in your WHERE clause by adding *tablename.fieldname* to your WHERE clause.
- If all this works, then you should be able to retrieve and echo the username of the author who added this animal in your detail view at your detail page.

Don't expect this to be easy or for me to give you all the code. This is all based on simple relational DB concepts which we have covered in this class and many devs already understand.

We will have a deliverable based on this entire CRUD feature with the Ion Auth incorporated next week.

Good luck!

## Dog

The domestic dog (*Canis familiaris* of the wolf) is a member of the ge abundant terrestrial carnivore.

The dog and the extant gray wolf domesticated,which implies that tl domesticated,and has been select

Added by *phlr*

