Lecture 29

Content Management and WordPress

* Course logo spider web photograph from Morguefile openstock photograph by Gabor Karpati, Hungary.

Think About Workflow!

- Consider domains of expertise:
  - Design – art, communication, ..
  - Systems – CS, CIS, ..
  - Content – writers, photographers, ..
- First time up – build a site.
- From that moment forward
  - Maintenance?
  - Much much more than maintenance!

A Site is Like a …

- A Book
  - Major up front effort then walk away.
- A TV Miniseries
  - Effort over fixed period, then walk away.
- A Good Newspaper
  - What needs to be said today.
- A Good Restaurant
  - Yesterday's food holds little appeal.

More Newspaper than Book

- A website not in need of updating is a rare thing, and probably boring.
- How does content get onto a site?
- It comes from people, typically without web development skills.
- … and they want to contribute that content through a browser.

The Big Change

BCM (Before Content Management)

Content added/modified using files on a server.
No server access, no changing the site.
Content providers need some degree of training.
CT 310 is BCM focused.

ACM(After Content Management)

Content added/modified through a browser.
Web based access control is in place.
Contribution of content through WYSIG tools.
Behind the scenes, content in a database.

The Argument

BCM Pros

- Security
  - No browser updates
- Simplicity
  - No complex superstructure
  - Often, file<->page match
- Escape from WYSIG
  - Server tools for updating

BCM Cons

- Updating is hard !!!
  - Content changes require server access & expertise

ACM Pros

- Updating is easy!
  - Those responsible for content directly contribute

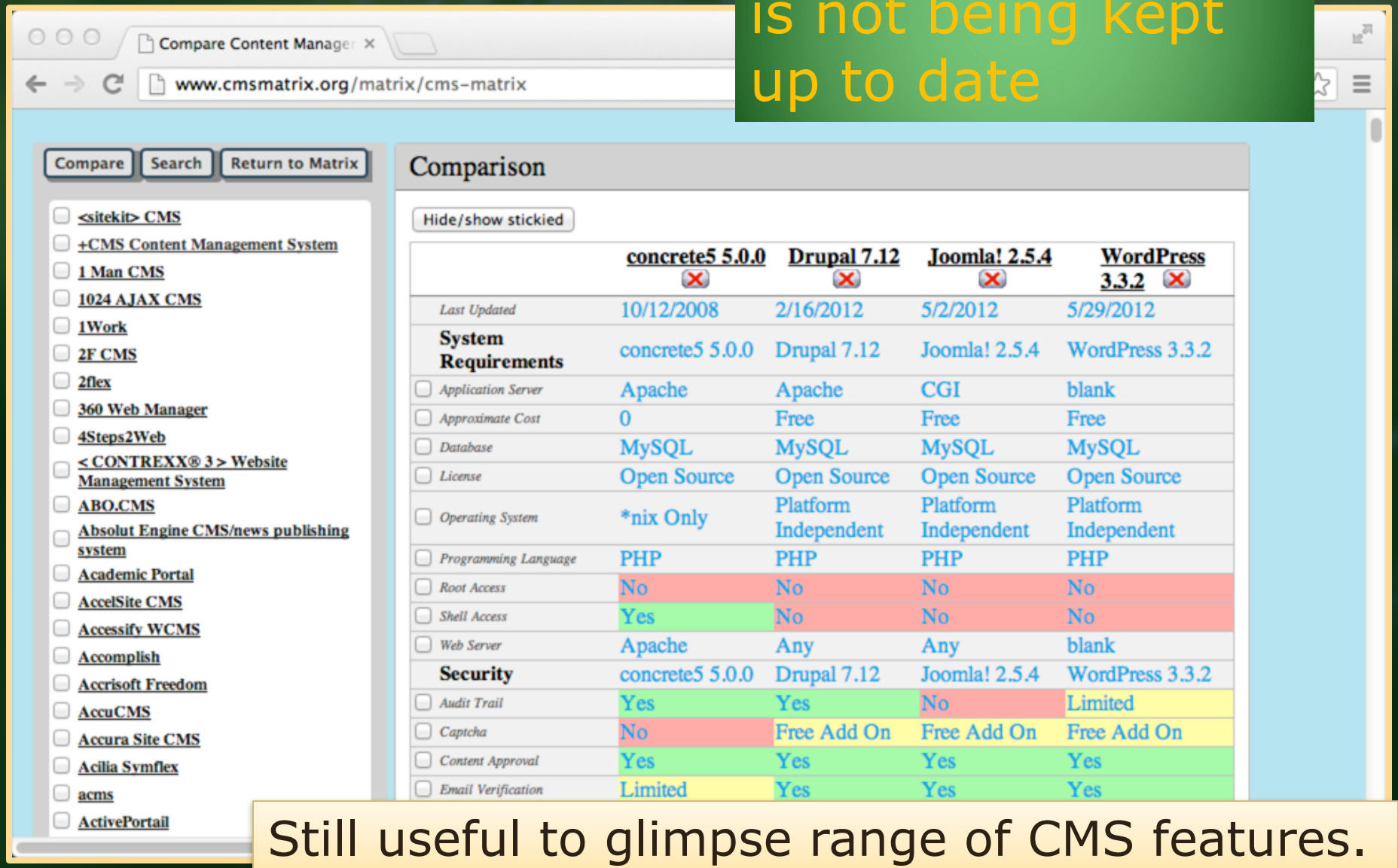
BCM Cons

- Complexity
  - CMS Superstructure
- Obscurity
  - Pages aren't files
- Security
  - One mistake and others with a browser own you

For all the ACM Cons, "Updating is easy!" wins. Expect to deploy some form of CMS in any project where real people are responsible for site content.

CMS Features

Warning, this site is not being kept up to date

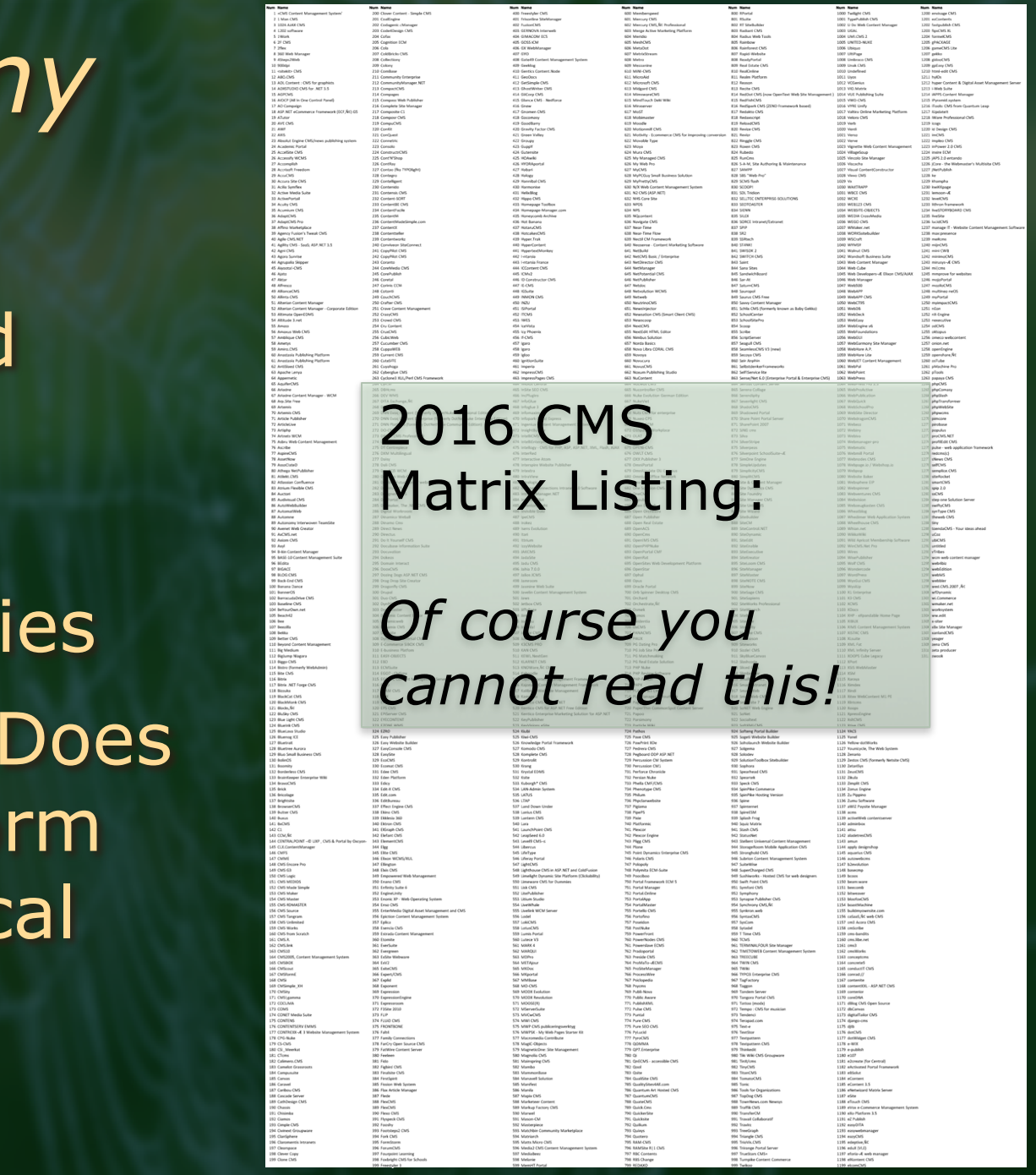


	concrete5 5.0.0	Drupal 7.12	Joomla! 2.5.4	WordPress 3.3.2
Last Updated	10/12/2008	2/16/2012	5/2/2012	5/29/2012
System Requirements	concrete5 5.0.0	Drupal 7.12	Joomla! 2.5.4	WordPress 3.3.2
Application Server	Apache	Apache	CGI	blank
Approximate Cost	0	Free	Free	Free
Database	MySQL	MySQL	MySQL	MySQL
License	Open Source	Open Source	Open Source	Open Source
Operating System	*nix Only	Platform Independent	Platform Independent	Platform Independent
Programming Language	PHP	PHP	PHP	PHP
Root Access	No	No	No	No
Shell Access	Yes	No	No	No
Web Server	Apache	Any	Any	blank
Security	concrete5 5.0.0	Drupal 7.12	Joomla! 2.5.4	WordPress 3.3.2
Audit Trail	Yes	Yes	No	Limited
Captcha	No	Free Add On	Free Add On	Free Add On
Content Approval	Yes	Yes	Yes	Yes
Email Verification	Limited	Yes	Yes	Yes

Still useful to glimpse range of CMS features.

How Many Options

- A crowded field!
- There are 1311 entries
- Problem: Does any platform have critical mass?



Critical Mass: Yes

W3Techs
Web Technology Surveys

Usage statistics and market share of WordPress for websites

This report shows the usage statistics and market share data of WordPress on the web. See technologies overview for explanations on the methodologies used in the surveys. Our reports are updated daily.

> **WordPress is used by 59.4%** of all the websites whose content management system we know. This is 26.4% of all websites.

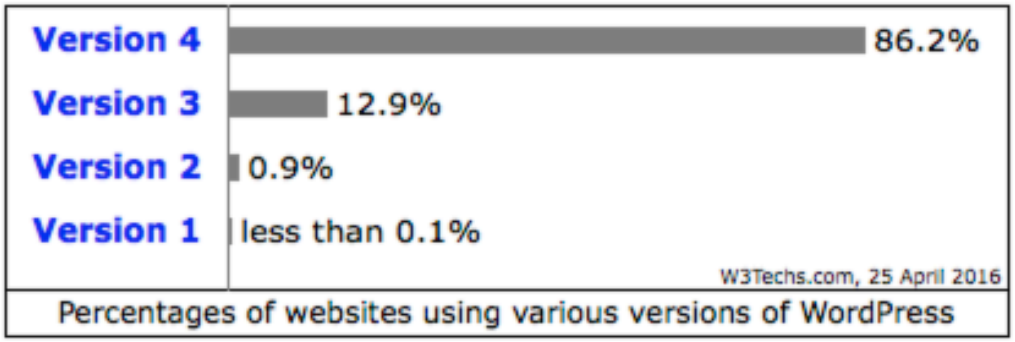
Request an extensive WordPress market report.

Learn more

Versions of WordPress

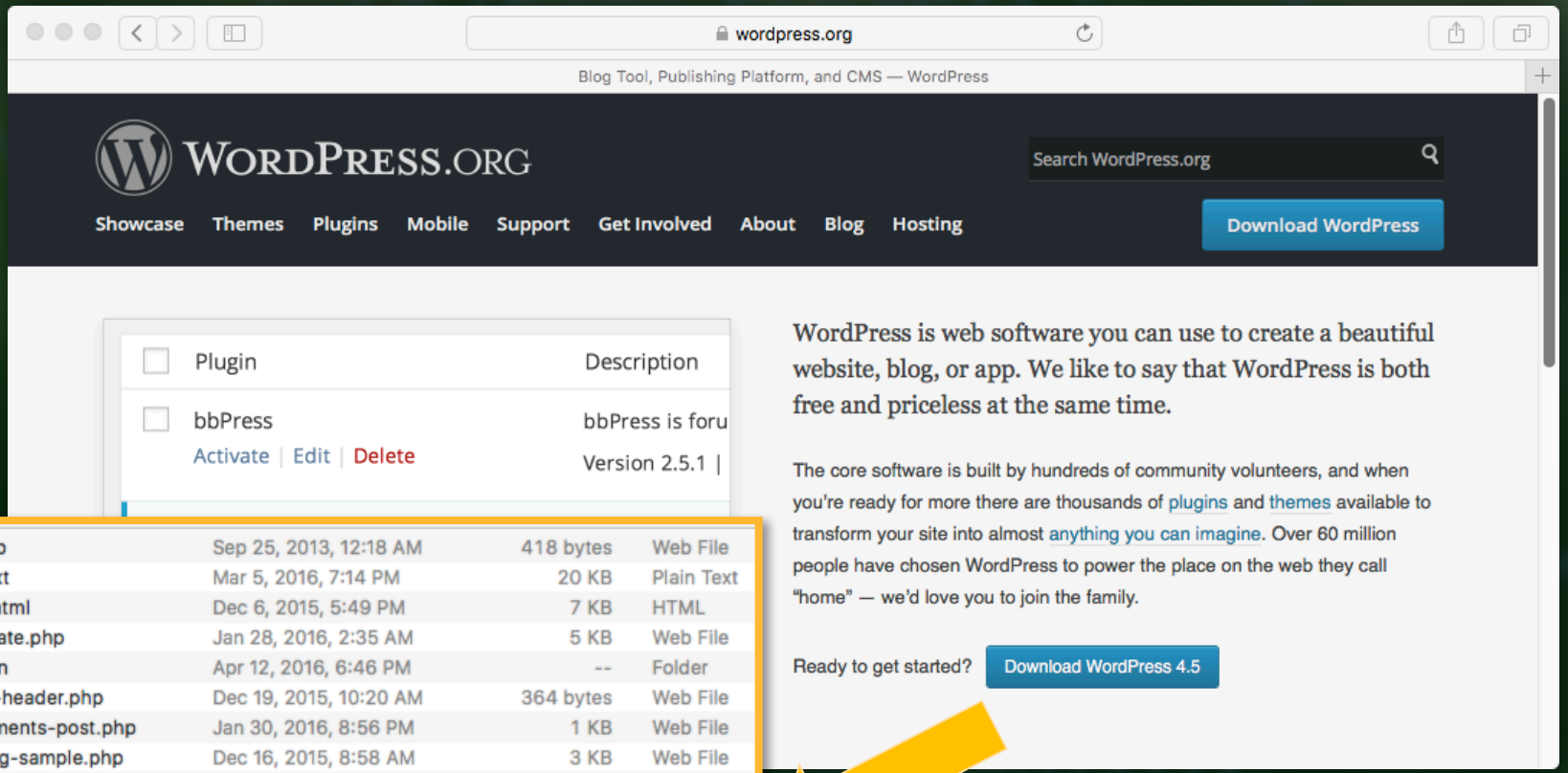
This diagram shows the percentages of websites using various versions of WordPress.

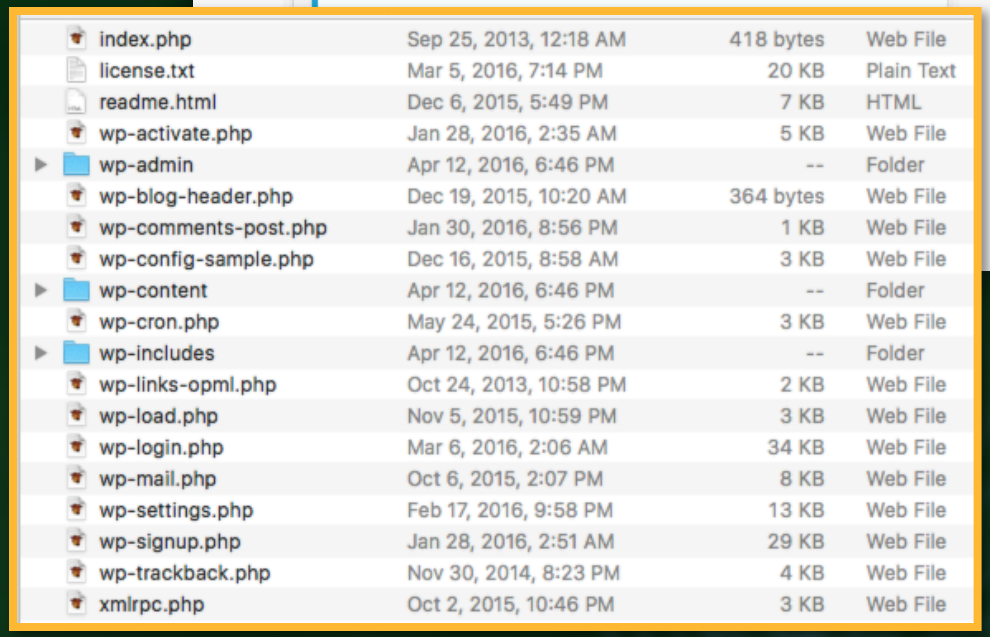
How to read the diagram:
Version 4 is used by 86.2% of all the websites who use WordPress.



Percentages of websites using various versions of WordPress

WordPress – Get It





Follow The Handy Guide

Installing WordPress « WordPress Codex

Famous 5-Minute Install

Here's the quick version of the instructions for those who are already comfortable with performing such installations. More detailed instructions follow.

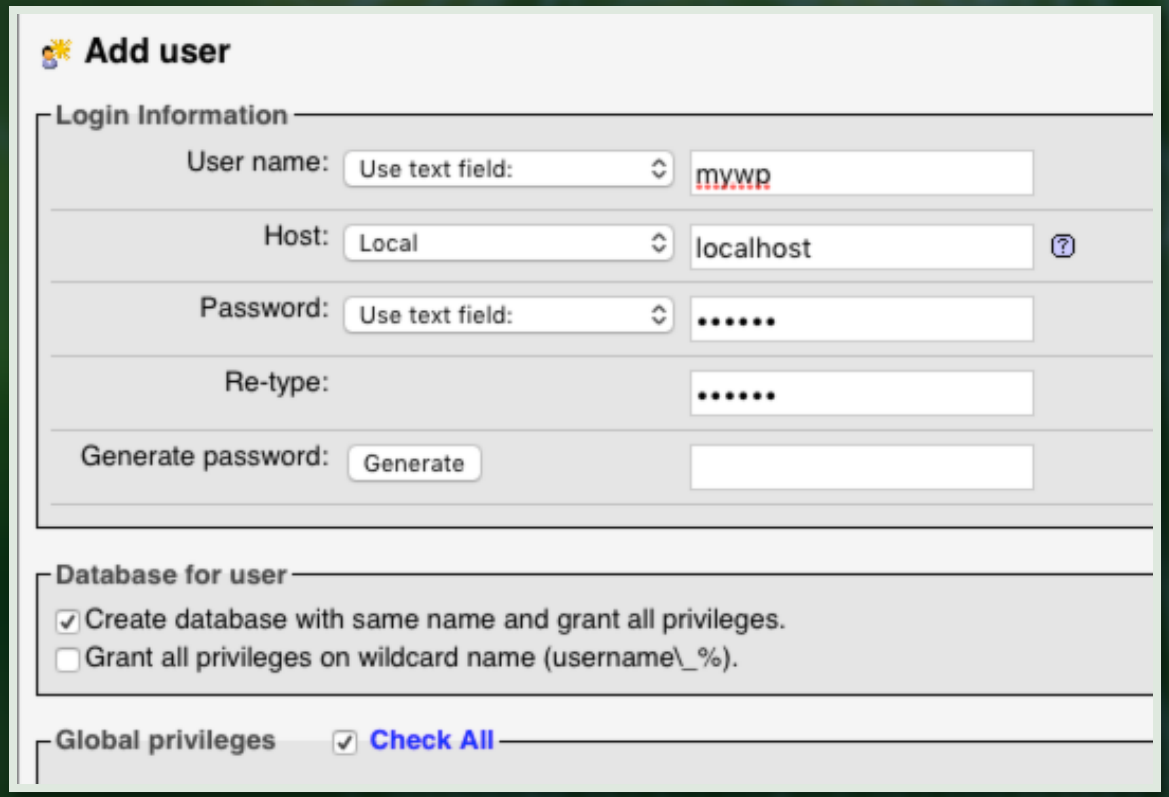
If you are not comfortable with renaming files, step 3 is optional and you can skip it as the install program will create the `wp-config.php` file for you.

1. Download and unzip the WordPress package if you haven't already.
2. Create a database for WordPress on your web server, as well as a MySQL (or MariaDB) user who has all privileges for accessing and modifying it.
3. (Optional) Find and rename `wp-config-sample.php` to `wp-config.php`, then edit the file (see Editing wp-config.php) and add your database information.
4. Upload the WordPress files to the desired location on your web server:
   - If you want to integrate WordPress into the root of your domain (e.g. `http://example.com/`), move or upload all contents of the unzipped WordPress directory (excluding the WordPress directory itself) into the root directory of your web server.
   - If you want to have your WordPress installation in its own subdirectory on your website (e.g. `http://example.com/blog/`), create the `blog` directory on your server and upload the contents of the unzipped WordPress package to the directory via FTP.
   - ***Note:*** *If your FTP client has an option to convert file names to lower case, make sure it's disabled.*
5. Run the WordPress installation script by accessing the URL in a web browser. This should be the URL where you uploaded the WordPress files.
   - If you installed WordPress in the root directory, you should visit: `http://example.com/`
   - If you installed WordPress in its own subdirectory called `blog`, for example, you should visit: `http://example.com/blog/`

- 8.3.1 WAMP
- 9 Installing WordPress at popular Hosting Companies
  - 9.1 Installing WordPress at Atlantic.Net
  - 9.2 Installing WordPress at AWS
  - 9.3 Installing WordPress at DigitalOcean
  - 9.4 Installing WordPress at Linode
  - 9.5 Installing WordPress at iPage Hosting
  - 9.6 Installing WordPress at Microsoft Azure
- 10 Installing through wp-cli
- 11 Moving an Existing WordPress Blog

Don’t try to read steps here, we will review them briefly today.

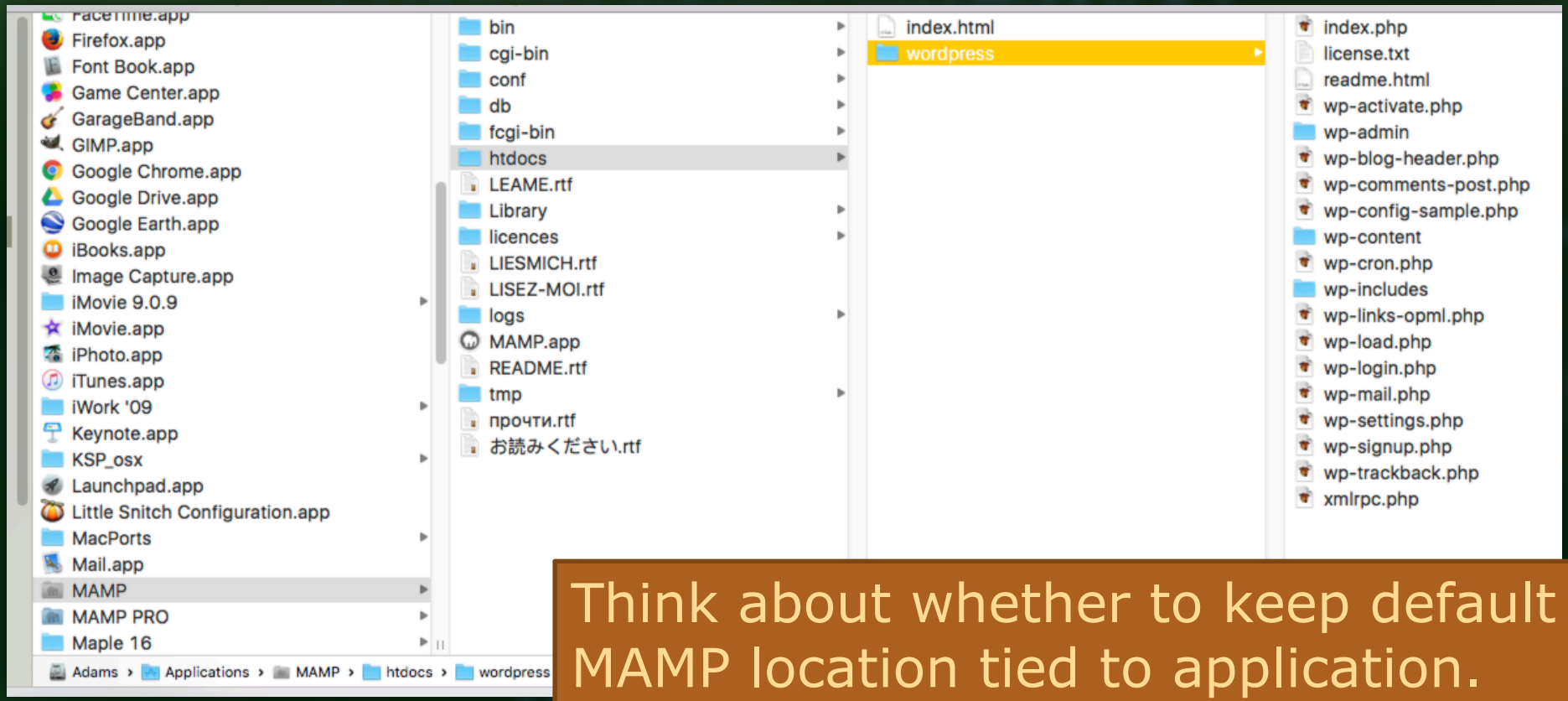
Step 2: New Database




```
CREATE USER 'mywp'@'localhost' IDENTIFIED BY '***';GRANT ALL PRIVILEGES ON *.*
TO 'mywp'@'localhost' IDENTIFIED BY '***' REQUIRE NONE WITH GRANT OPTION
MAX_QUERIES_PER_HOUR 0 MAX_CONNECTIONS_PER_HOUR 0 MAX_UPDATES_PER_HOUR 0
MAX_USER_CONNECTIONS 0;
CREATE DATABASE IF NOT EXISTS `mywp`;
GRANT ALL PRIVILEGES ON `mywp`.* TO 'mywp'@'localhost';
```

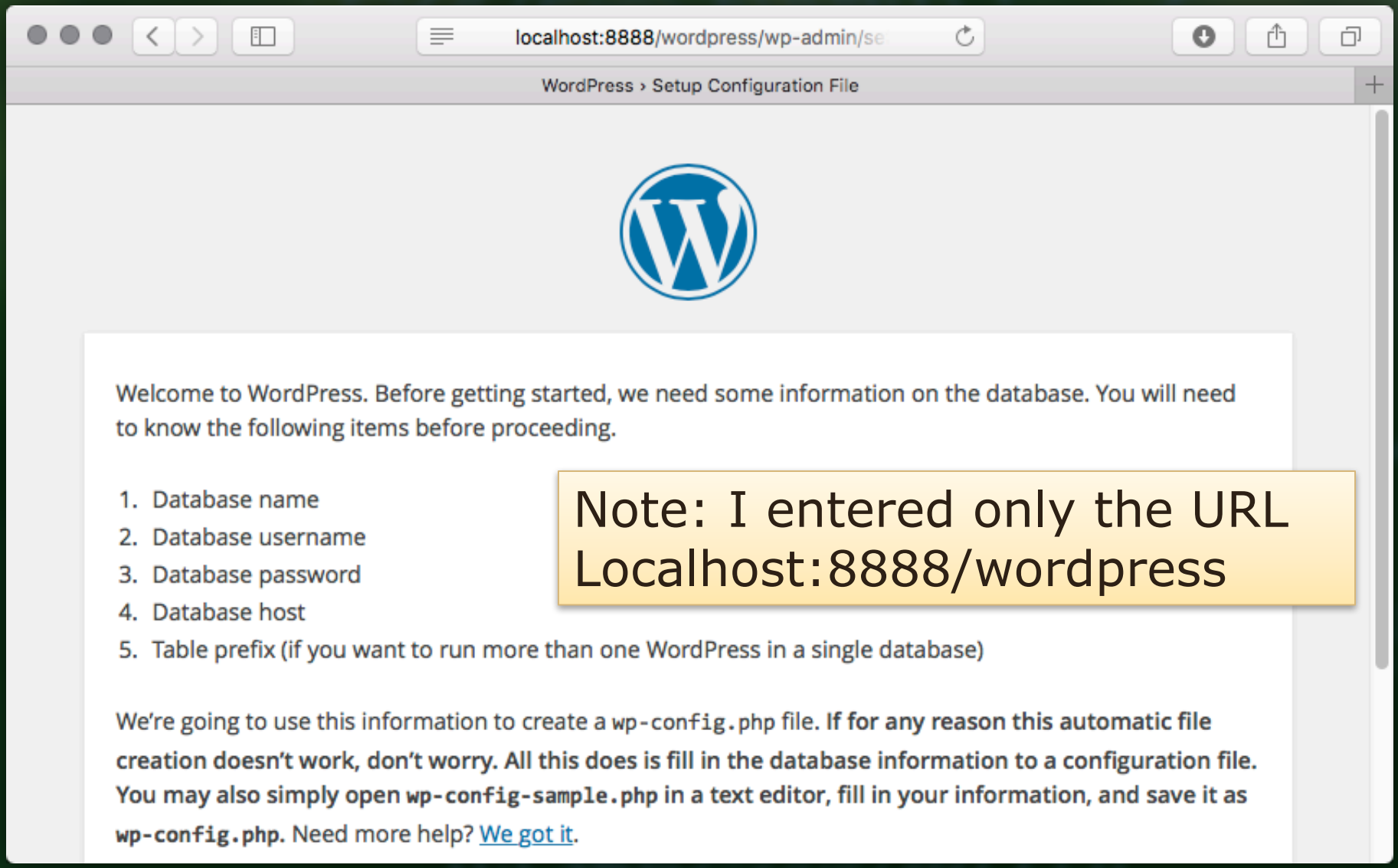
Step 3: Move Download

- Place all WordPress files in your server's root directory.



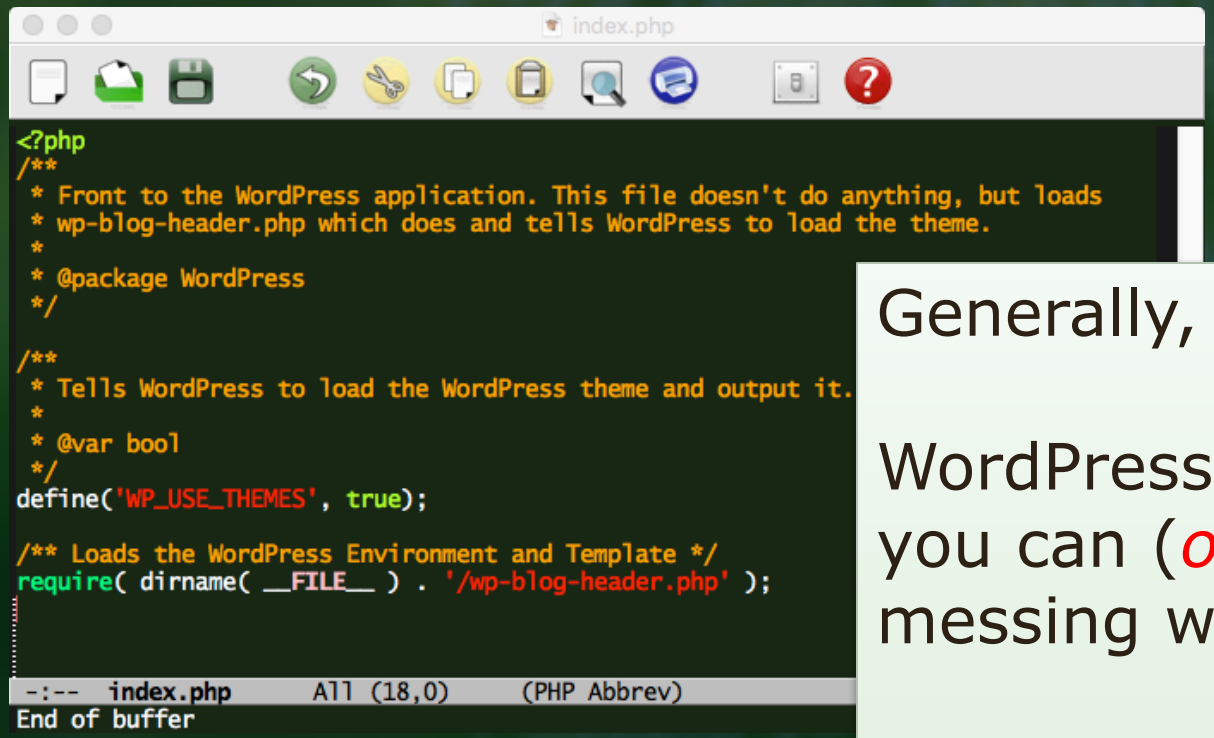
Think about whether to keep default MAMP location tied to application.

Step 4: Start Setup



Note: I entered only the URL Localhost:8888/wordpress

What Happened?

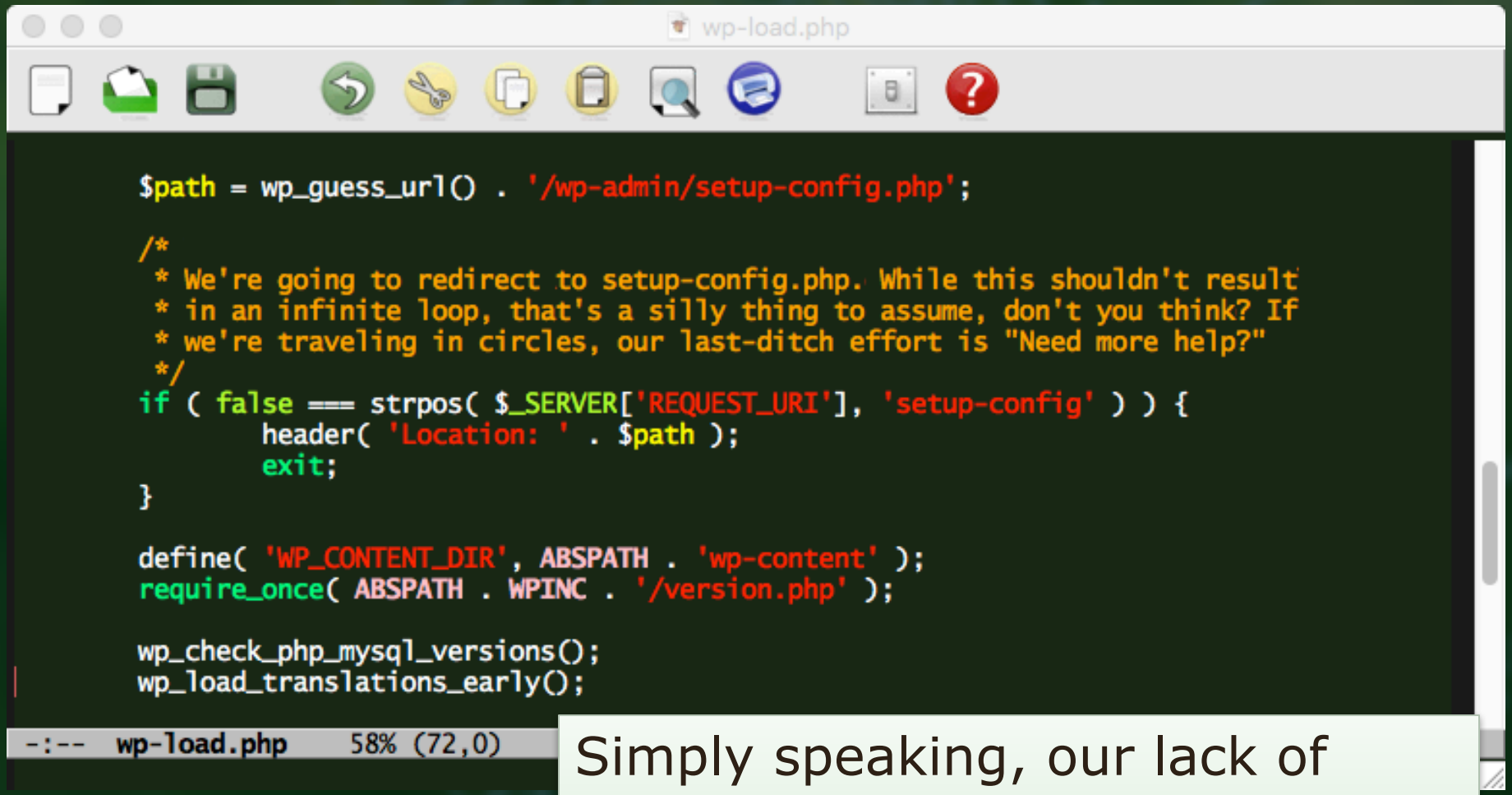


Generally, don't ask!!!!!!!

WordPress is not written so you can (*or should*) start messing with the the PHP!

But, in CT 310 you are aware enough of PHP that you should at least think about what is going on.

Can't Help It– On More Peak



Simply speaking, our lack of DataBase setup is detected and we're going to be asked to fix it.

Welcome

Welcome to the famous five-minute WordPress installation process! Just fill in the information below and you'll be on your way to using the most extendable and powerful personal publishing platform in the world.

Information needed

Please provide the following information. Don't worry, you can always change these settings later.

Site Title redpanda

Username red

Usernames can have only alphanumeric characters, spaces, underscores, hyphens, periods, and the @ symbol.

Password DenverZooHamlet13 Hide

Strong

Important: You will need this password to log in. Please store it in a secure location.

Your Email ross.beveridge@colostate.edu

Double-check your email address before continuing.

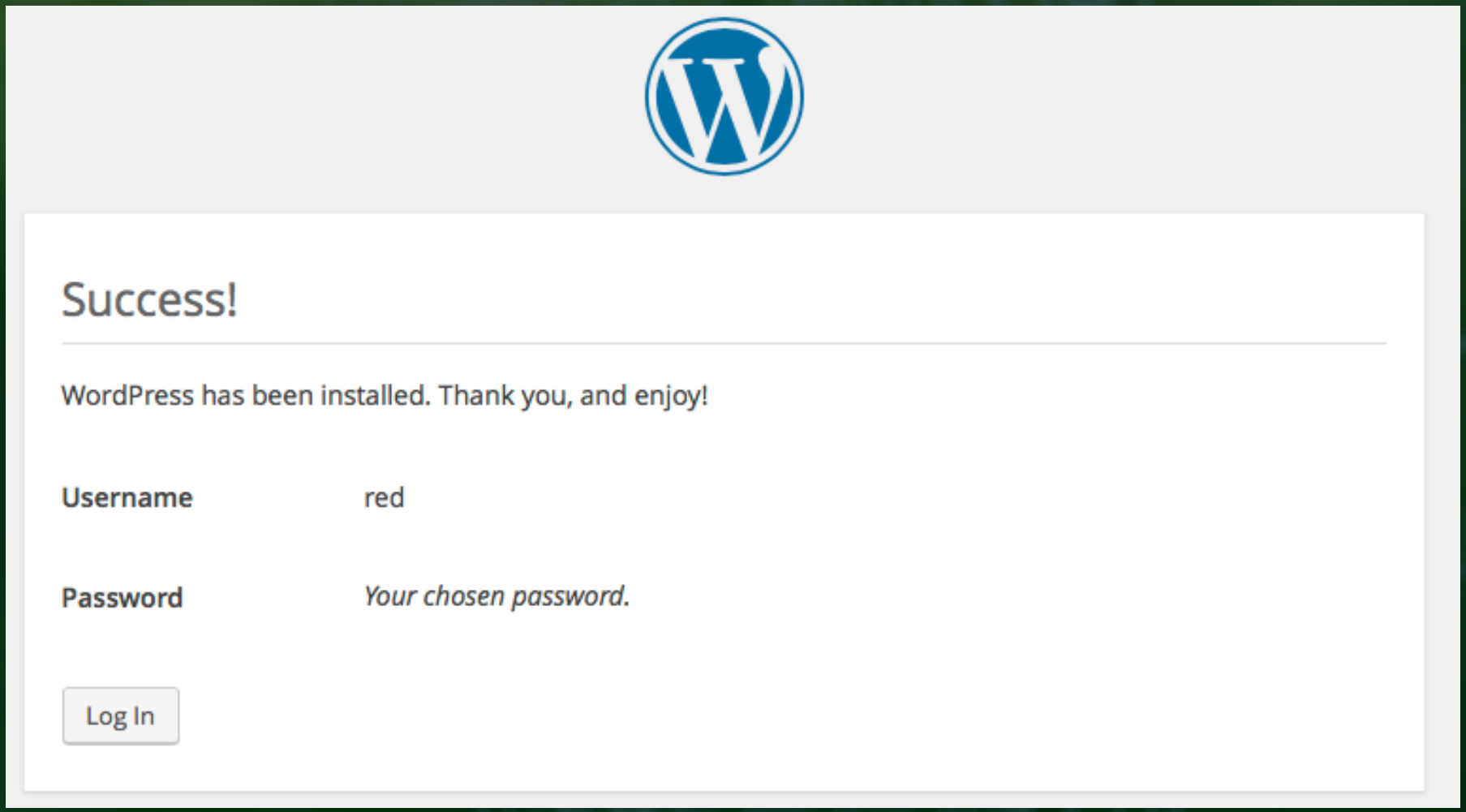
Search Engine Visibility Discourage search engines from indexing this site

It is up to search engines to honor this request.

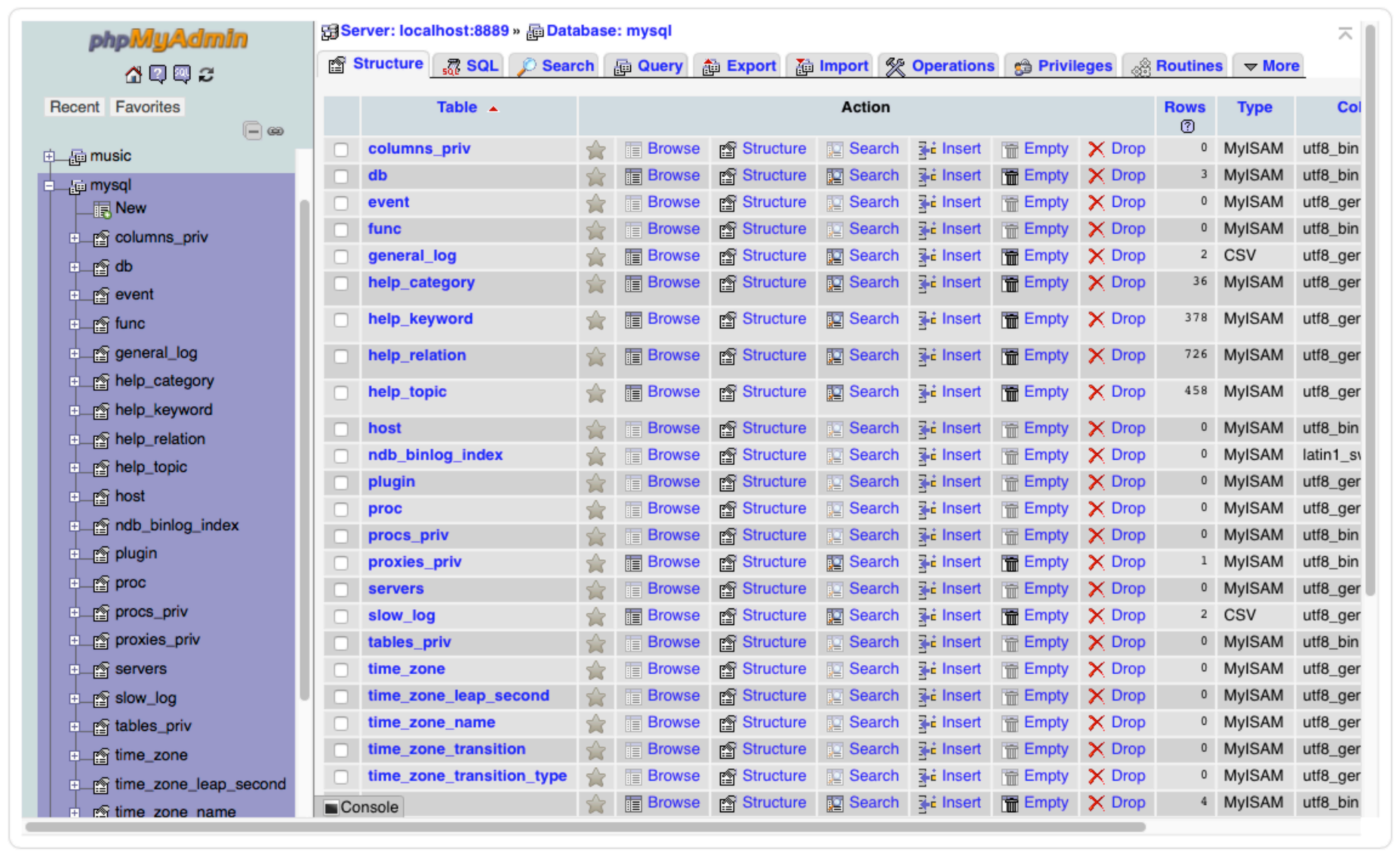
Install WordPress

Step 4: Setup Complete

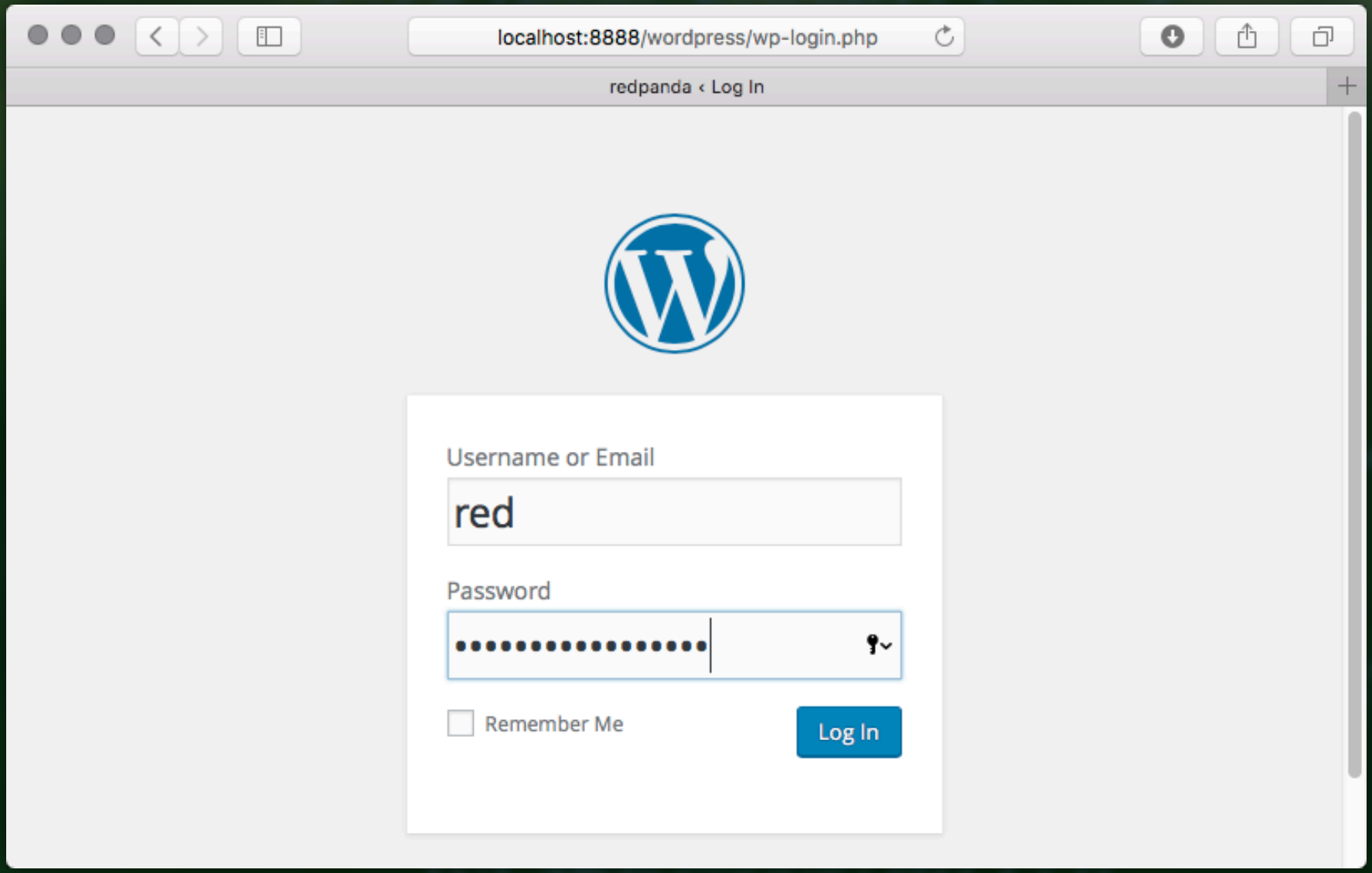
- Now connected to your database



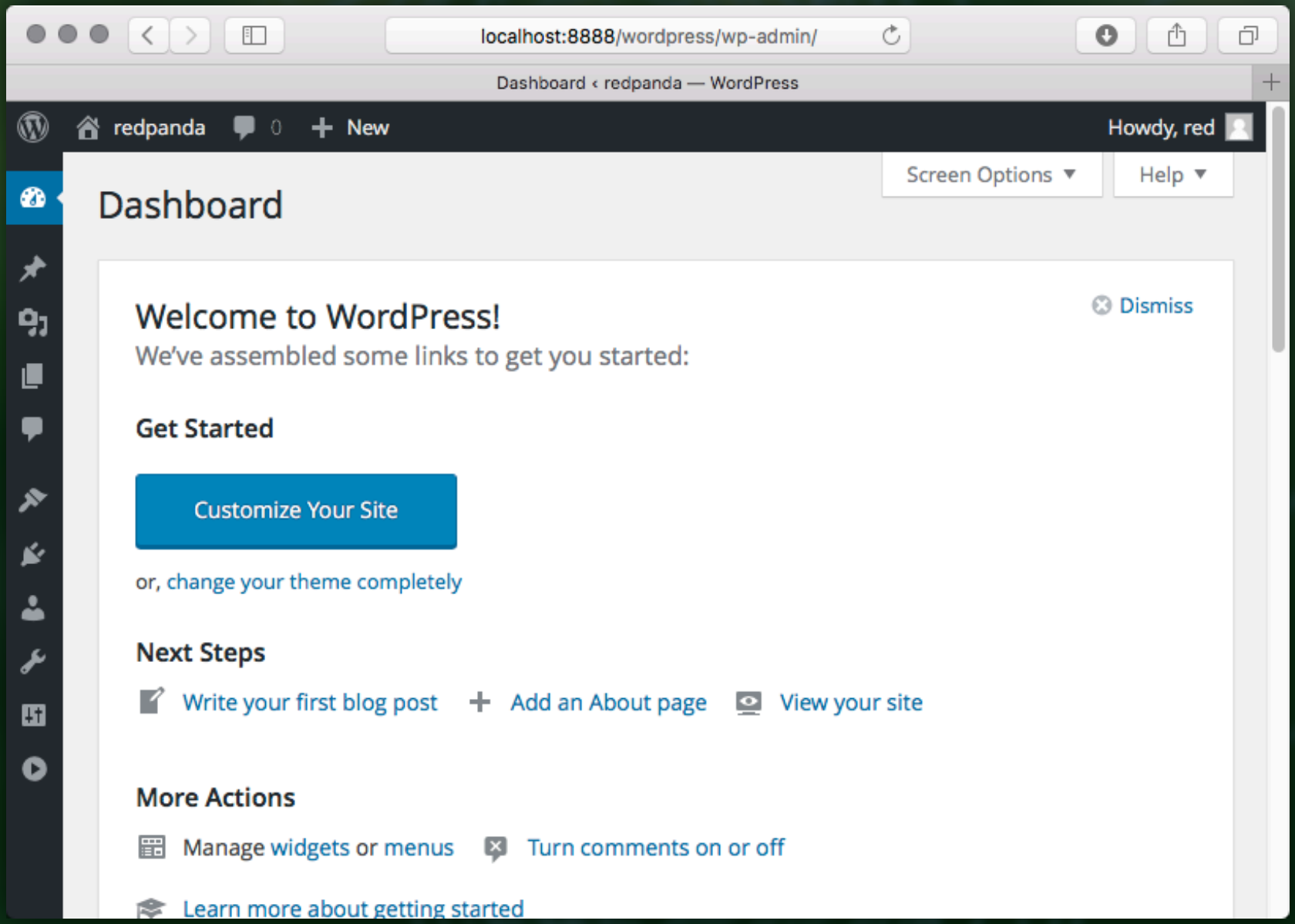
Want Proof


phpMyAdmin
Recent
Favorites
music
mysql
New
columns_priv
db
event
func
general_log
help_category
help_keyword
help_relation
help_topic
host
ndb_binlog_index
plugin
proc
procs_priv
proxies_priv
servers
slow_log
tables_priv
time_zone
time_zone_leap_second
time_zone_name
Server: localhost:8889 » Database: mysql
Structure
SQL
Search
Query
Export
Import
Operations
Privileges
Routines
More
Table
Action
Rows
Type
Col
columns_priv Browse Structure Search Insert Empty Drop 0 MyISAM utf8_bin
db Browse Structure Search Insert Empty Drop 3 MyISAM utf8_bin
event Browse Structure Search Insert Empty Drop 0 MyISAM utf8_ger
func Browse Structure Search Insert Empty Drop 0 MyISAM utf8_bin
general_log Browse Structure Search Insert Empty Drop 2 CSV utf8_ger
help_category Browse Structure Search Insert Empty Drop 36 MyISAM utf8_ger
help_keyword Browse Structure Search Insert Empty Drop 378 MyISAM utf8_ger
help_relation Browse Structure Search Insert Empty Drop 726 MyISAM utf8_ger
help_topic Browse Structure Search Insert Empty Drop 458 MyISAM utf8_ger
host Browse Structure Search Insert Empty Drop 0 MyISAM utf8_bin
ndb_binlog_index Browse Structure Search Insert Empty Drop 0 MyISAM latin1_sv
plugin Browse Structure Search Insert Empty Drop 0 MyISAM utf8_ger
proc Browse Structure Search Insert Empty Drop 0 MyISAM utf8_ger
procs_priv Browse Structure Search Insert Empty Drop 0 MyISAM utf8_bin
proxies_priv Browse Structure Search Insert Empty Drop 1 MyISAM utf8_bin
servers Browse Structure Search Insert Empty Drop 0 MyISAM utf8_ger
slow_log Browse Structure Search Insert Empty Drop 2 CSV utf8_ger
tables_priv Browse Structure Search Insert Empty Drop 0 MyISAM utf8_bin
time_zone Browse Structure Search Insert Empty Drop 0 MyISAM utf8_ger
time_zone_leap_second Browse Structure Search Insert Empty Drop 0 MyISAM utf8_ger
time_zone_name Browse Structure Search Insert Empty Drop 0 MyISAM utf8_ger
time_zone_transition Browse Structure Search Insert Empty Drop 0 MyISAM utf8_ger
time_zone_transition_type Browse Structure Search Insert Empty Drop 0 MyISAM utf8_ger
Console
Browse Structure Search Insert Empty Drop 4 MyISAM utf8_bin

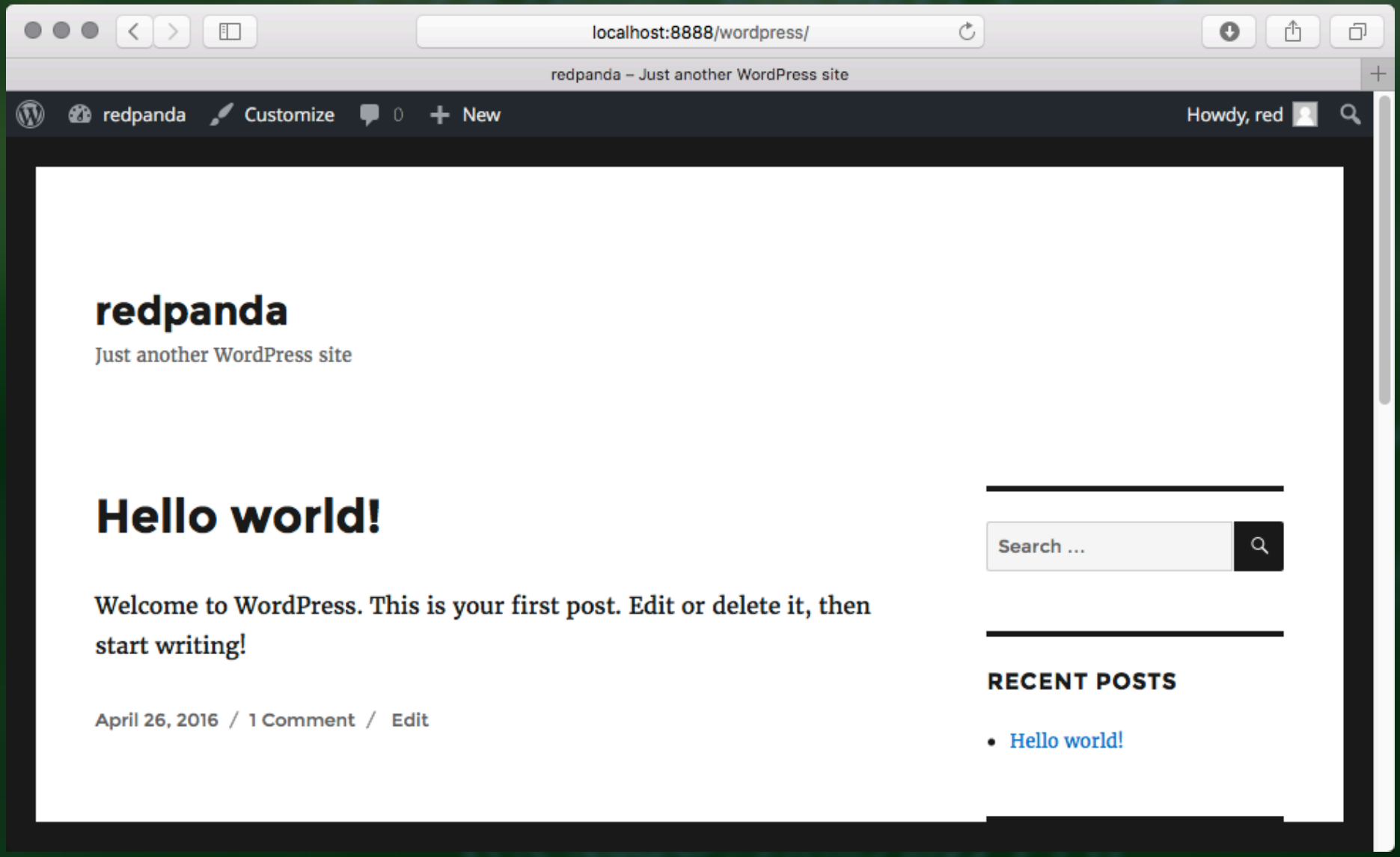
Now Login


localhost:8888/wordpress/wp-login.php
redpanda ‹ Log In
Username or Email
red
Password
Remember Me
Log In

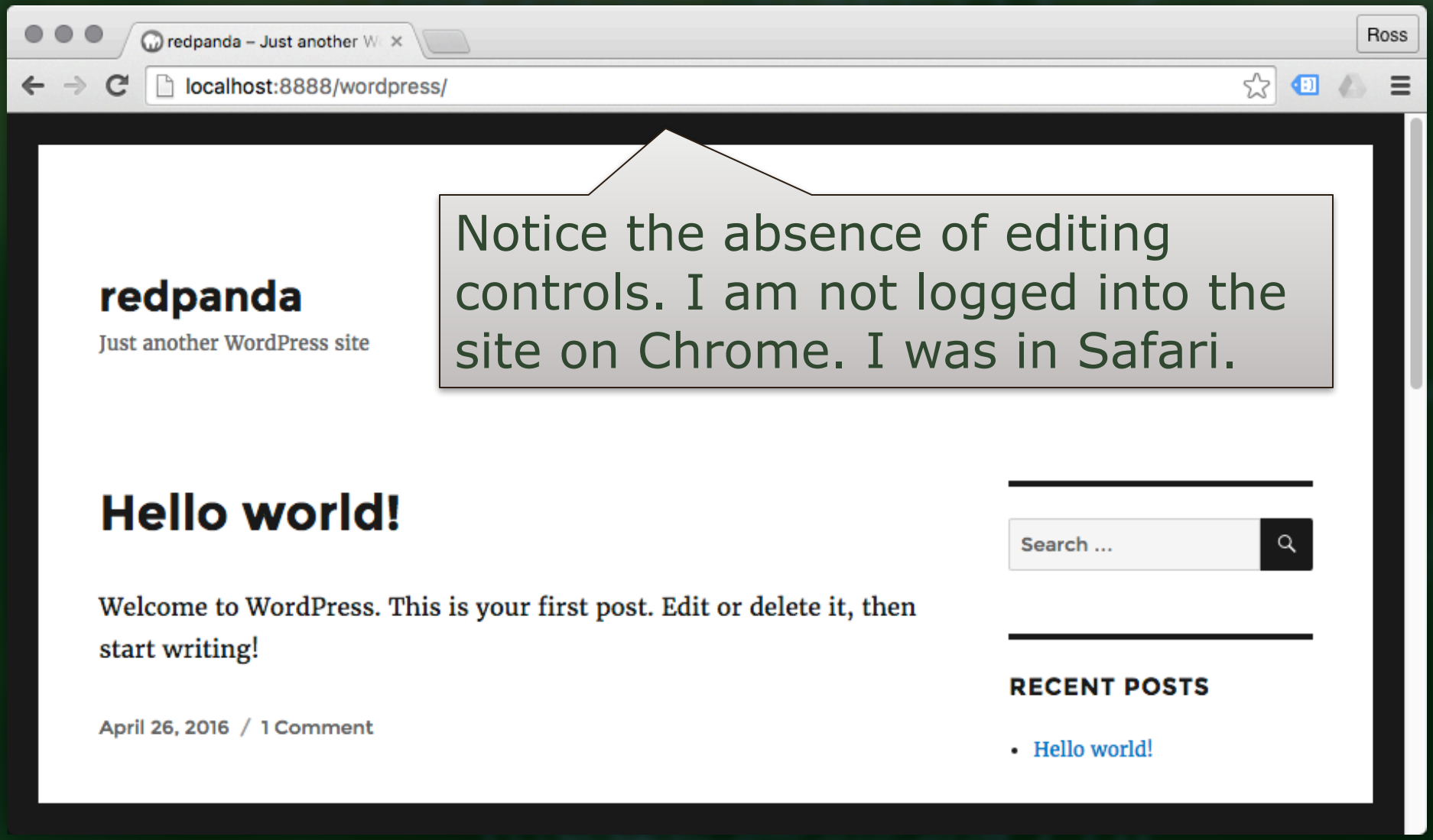
Done? No! Just Started …



Now Build Your Site

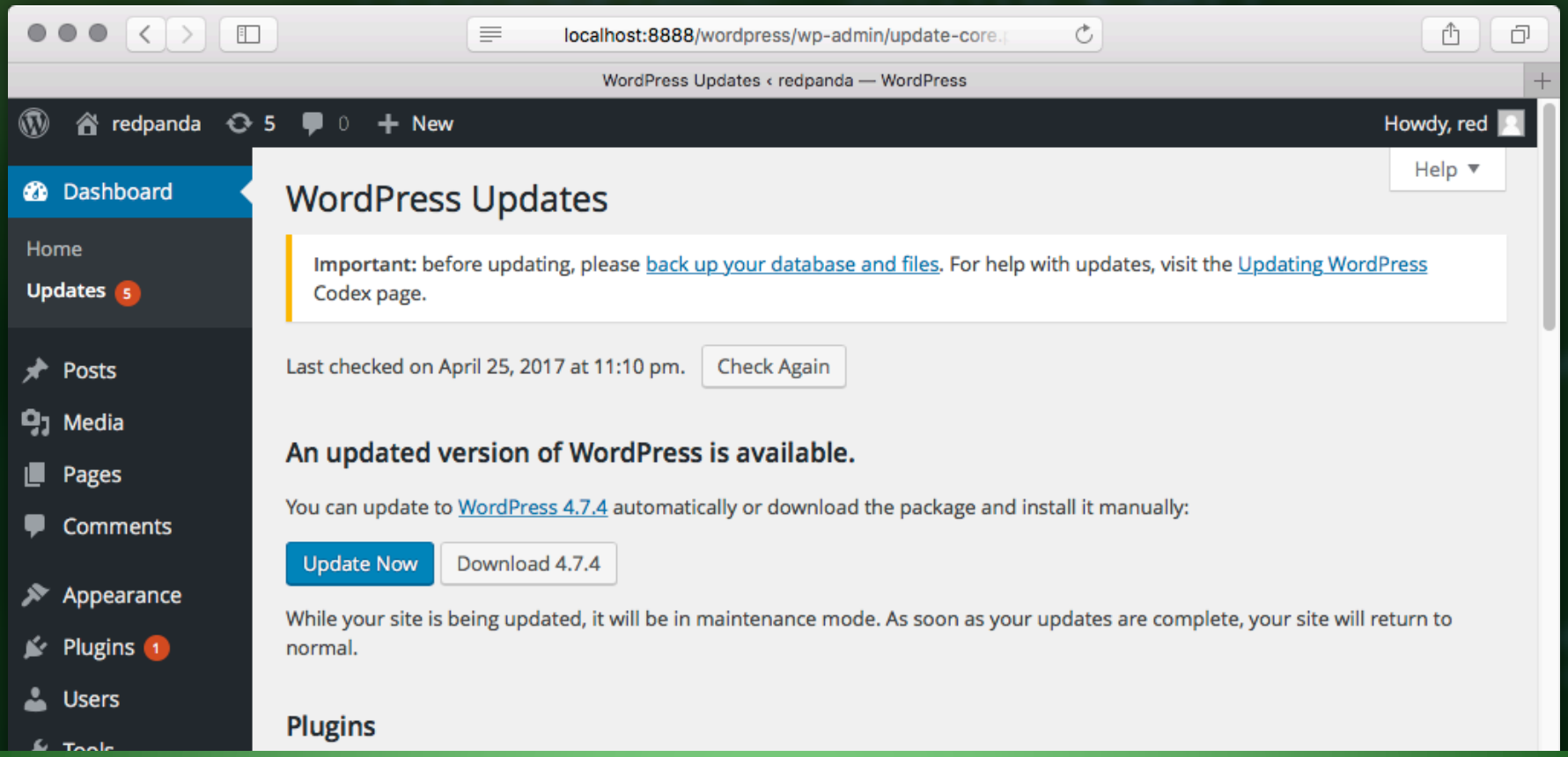


Now You See It – Now …



Speaking of Maintenance

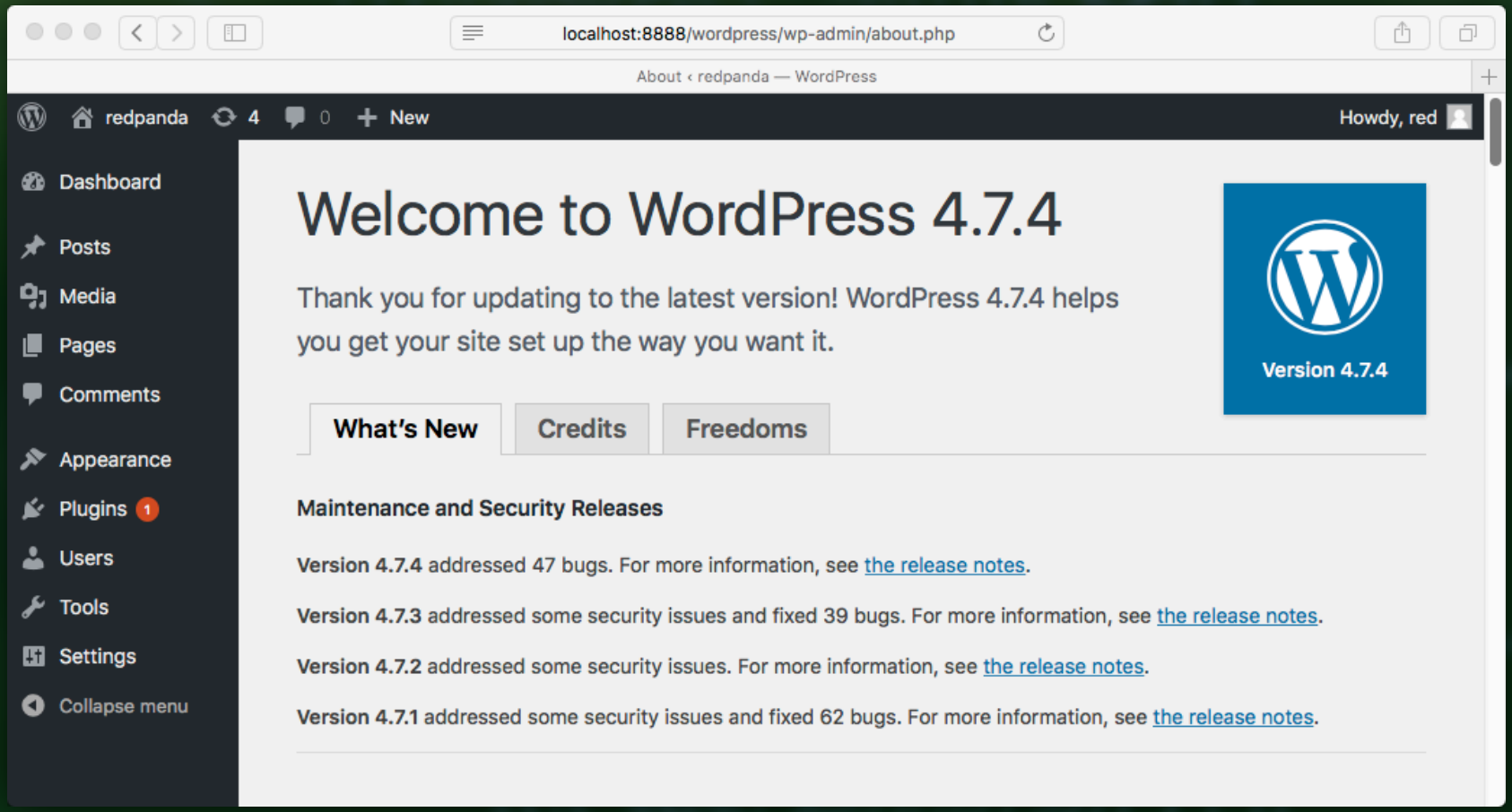
- This is important!



Keep in mind my test site is ONLY visible on localhost.

Push a Single Button

- Good to know – update succeeded



WordPress: Two Views

How does it work inside?

- Overall design
- Use of MySQL
- Use of PHP
- Use of JavaScript
- Use of jQuery
- (Bootstrap Themes)

As students in CT 310 you could, with sufficient time and motivation, begin to decipher how WordPress is put together.

How do I use it?

- Install (easy part)
- Build out a site
- What about themes
- What about features
- What about users
- Maintenance

As students in CT 310 you have learned nothing about WordPress in particular and the rich ecosystem it supports. Next week – a glimpse.