

# Let's Build a Website!

U3A – 23<sup>rd</sup> January 2013

Peter Orchard

# myGardenBirds.com: Specification

About birds that use our garden in winter

- \* Our Garden: Introduction
- \* My Blog: Diary of notable events as they happen
- \* Identification Guide: Gallery of photographs
- \* Statistics: Weekly count data
- \* Data: Input of count data

# What will we need?

## These are the tools we will need to build our site:

- \* HTML: Hypertext Mark-up Language
- \* CSS: Cascading Style Sheets
- \* XML: Extensible Mark-up Language
- \* Javascript: Advanced function
- \* Linux or Windows: our operating system
- \* Apache: Server function controls
- \* PHP: Hypertext Pre-processor language
- \* MySQL: Structured Query Language
- \* jQuery: Library of standard JS functions
- \* Json: JavaScript Object Notation
- \* Javascript/XML processor
- \* And possibly others!

# What will we need?

These are provided by our **BROWSER**:

- \* **HTML: Hypertext Mark-up Language**
- \* **CSS: Cascading Style Sheets**
- \* **XML: Extensible Mark-up Language**
- \* **Javascript: Advanced function**
- \* Linux or Windows: our operating system
- \* Apache: Server function controls
- \* PHP: Hypertext Pre-processor language
- \* MySQL: Structured Query Language
- \* jQuery: Library of standard JS functions
- \* Json: Javascript extensions
- \* Ajax: Asynchronous Javascript/XML processor
- \* And possibly others!

# What will we need?

These are provided by our SERVER:

- \* **HTML: Hypertext Mark-up Language**
- \* **CSS: Cascading Style Sheets**
- \* **XML: Extensible Mark-up Language**
- \* **Javascript: Advanced function**
- \* **Linux or Windows: our operating system**
- \* **Apache: Server function controls**
- \* **PHP: Hypertext Pre-processor language**
- \* **MySQL: Structured Query Language**
- \* jQuery: Library of standard JS functions
- \* Json: Javascript extensions
- \* Ajax: Asynchronous Javascript/XML processor
- \* And possibly others!

# What will we need?

These are provided by our DRUPAL:

- \* **HTML: Hypertext Mark-up Language**
- \* **CSS: Cascading Style Sheets**
- \* **XML: Extensible Mark-up Language**
- \* **Javascript: Advanced function**
- \* **Linux or Windows: our operating system**
- \* **Apache: Server function controls**
- \* **PHP: Hypertext Pre-processor language**
- \* **MySQL: Structured Query Language**
- \* **jQuery: Library of standard JS functions**
- \* **Json: Javascript extensions**
- \* **Ajax: Asynchronous Javascript/XML processor**
- \* **And possibly others!**

# What is Drupal?

- \* It is a CMS: a Content Management System
- \* It is Open Source: It's free!
- \* Provides CORE function: standard needs
- \* Add CONTRIBUTED function: as needed
- \* Choice of 800+ layouts: called Themes
- \* A number of Distributions: pre-built sites

# How does Drupal work?

Drupal has FIVE layers:

- \* Database: user defined content and variables
- \* Modules: contain the programming code
- \* Pages, blocks and menus: structure to data
- \* Permissions: determines who can do what
- \* Template: governs appearance and display



# Advantages of Drupal?

- \* No programming necessary
- \* Focus on content not programming skills
- \* Uses a database for storing content
- \* To change content just change the database
- \* Changes are effective immediately (no FTP)
- \* Immense library of pre-built functions/themes
- \* Appearance changeable (user choice!)
- \* All basic function provided

# Contributed module bring ...

- \* Multiple contributions (including a forum facility)
- \* Secure organic groups
- \* Comments and ratings on content
- \* Voting and polls
- \* Map interfaces
- \* Media integration (images/sound/video)
- \* Integration with Facebook, Flickr, etc
- \* E-Commerce
- \* And much, much more

# About Structure Query Language

- \* Provides CRUD functions (create, read, update and delete of data records in tables)
- \* Allows for the sorting of data in tables by any field
- \* Allows to the selection of data from tables based on the value of fields
- \* Allows tables to be joined together using 'reference' fields
- \* Displays the output in a variety of view formats

# Getting started on our site ...

Going to adapt my demonstration site ...

- \* Domain registered and hosting established
- \* Drupal V7 core module uploaded to server
- \* Some contributed modules have been uploaded
- \* Database to hold content created
- \* A theme has been selected
- \* Basic site configuration complete
- \* Installation has been backed up