Drupal

Drupal is a free and open-source content management system (CMS) and content management framework (CMF) written in PHP. Initially released in 2001, Drupal has a robust community of Web developers and allows for fully customizable website design. Your Bluehost account supports Drupal and provides an easy installation method. We will be doing a test install on your server, but our main project will be with a single installation that will be hosted on my account.

Drupal 6 and 7 are currently supported, but we will be working with Drupal 7.

We will be working with modules, themes and views to learn the features of Drupal.

Drupal Installation

You will be adding a new folder and then doing a Drupal installation, much like we did when we did a Wordpress installation. Later, you can convert the folder to a subdomain, if you wish.

1. In Fetch, create a new folder under public_html.
2. Go to your control panel of your new host www.yourdomain.com/cpanel (where "yourdomain" is actually the name of your domain). Alternatively, you can go to Bluehost.com and choose the control panel login button.
3. Login with your domain name and password.
4. Under Software/Services, click on Simple Scripts. Find the Drupal link under Content Management.
5. Click Install New Version. Then choose the most current version, and choose your folder.
6. Open the Advanced options. Setup your admin pw (remember these). Check the box to Automatically Create a New Database.
7. Click the Terms and Conditions and choose Complete. That's it. In a few seconds, you should be directed to your Drupal installation.
8. You will see the database created in PHPMyAdmin (probably something that starts with _drp; you should also see any _wrd wordpress databases).
9. When you go to your url, you can login at the top. You should be at the Welcome to Drupal page. You should see the Drupal Admin menu across the top.

Adding Content

Pages
Content is stored in nodes, by content type. The two basic content types are articles and pages. You can decide what fields each content type takes. And you can create custom content types, if need be. We'll start with setting up the structure of your site

with Pages.

1. Choose Add Content. Then Basic Page
2. Fill out the information that you want to have on the page. Drupal allows a few html tags under Filtered HTML, more if you choose Full HTML as a text format. You can add tags that you will allow under Filtered HTML via Configuration, Text Formats. Full HTML should be used sparingly on a site with multiple, anonymous users.
3. Under Menu Settings, Choose Provide a Menu Link. You can also adjust weighting for order on page and choose another menu other than Main Menu, if you have them.
4. You don't need to change other settings. Comment settings allows comments. Authoring information changes Author (you might want to do this if you are logged in as admin, but want it to show as someone else).
5. Under Publishing Options, choose Published. We will use the other options for other types of posts.
6. Save it. You should see two tabs at the top. Add additional pages as necessary.
7. You can also add pages via the Structure, Menus area. Allows you to edit the menus and menu items.
8. You may have noticed that there aren't any icons to help you style the body text. You have to add a module to allow that. More under modules.

Articles

Next you can add an article to see how that can be placed on the site.

1. Choose Add Content. Then Article.
2. Add your content.
3. You can upload an image. There will be other ways to add images to the post, but this is the predominant post image.
4. Under the Settings, do not provide a menu link. We want these to go to the home page as blog items. Under Publishing Options, keep Published checked, but also check Promoted to Front Page. In some cases, you want a post to remain at the top, even if there are newer posts. In this case, you would use the Sticky option.
5. Choose Save. If you go back to the Home page, you will see how the article is presented there. Click on the Article and you can edit. You can add a summary, if you don't like the way Drupal cuts off the post on the home page. You can also use <!--break--> to break the text where you want for the home page.

Under Find Content, you can see all the content you have created, edit those items and even filter by content type.

Blocks

Under the Structure menu, find Blocks. Blocks are just areas of content on your site. Your theme dictates which kind of blocks you have on the site. Under Blocks, you can choose Demonstrate Block Regions to see the sections in your theme.
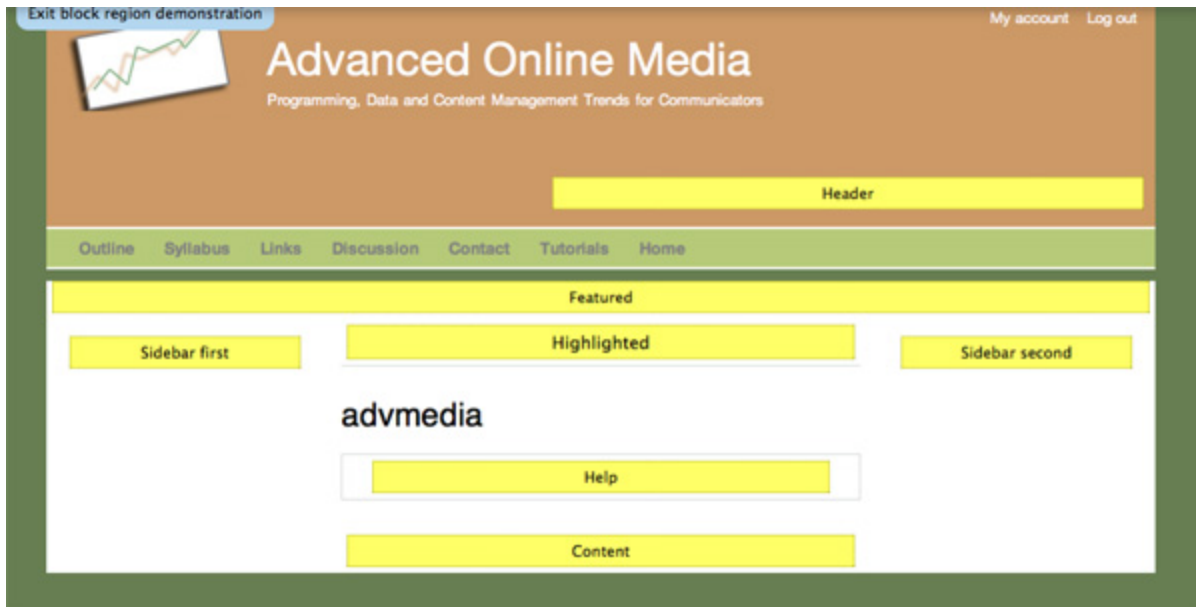
1. Exit the Block Region Demonstration and Choose Add Block
2. Add the content you want for the block.
3. Choose the region on your theme that you want to add it.
4. Then you have several visibility settings. You can choose which pages you want it to appear (you can even do this by Content Type), which types of users get to see it, and whether it is customizable by users. You don't need to change any of these to try it out.
5. Go back to your home page. You should see the block in the sidebar.
6. For most items you create (content, blocks), when you are logged in, you will see the little options gear, which allows you to edit. Drupal provides a lot of ways to do the same thing.
7. Add another block that sticks to the top of the home page. Hint: use the Highlighted Region and make sure you use <front> for the page you want it to show on.

Additional Block Features
1. On the Blocks page, you will see the items in your regions. You can configure, change or move them. Choose Save Block each time you make a change.
2. If your theme already has a Search form, you can move it to another region. Drag the little anchor tool to Sidebar second.
3. You can remove any blocks you don't want by choosing None for Region. They go into the Disabled section at the bottom of the Blocks page.
4. If there is no block in the region on the page, then that space will be filled with content from another block (not just left blank). For instance, if you only want the Text Block in the 2nd Sidebar to show on the home page, the content region will be wider on subsequent pages or articles.

Modules
You often have to enable core modules or add new modules. This is easy to do, but you have to make sure you also enable all dependent modules.

Installing Wysiwyg Module for Editing Posts

1. First, we'll add a wysiwyg editor, so we can style our pages and posts a little easier.
2. Go to Drupal.org and find the wysiwyg module. drupal.org/project/wysiwyg.
3. Scroll down to the section with the downloads and right click (or ctrl click) on the recommended version 7. Copy the link location.
4. Then, back on your site, under Structure, Modules, choose Add Module. Add that link in the first box to install with a url. You will see instructions. This requires the download of an editor.
5. Download the CKEditor and unzip it on your computer.
6. You will load the ckeditor folder via Fetch to sites/all/libraries (you may have to add the libraries folder). This may take a couple minutes.
7. Refresh the wysiwyg profile page. Now you can add your editor and edit the appearance of the icons. Under Buttons and Plugins, choose which features you want.
8. Now when you add content, either a basic page or an article, you should see the icons above the Body field.

Adding an RSS Feed to Sidebar
Next, we will add the Feed modules, so we can add an RSS Feed to the sidebar. When you look under Modules, you will see if any dependent modules are missing. The Feeds News module needs several other modules, including Chaos Tools, Job Scheduler and Views and Features.

1. Choose Install New Module at top of Modules page.
2. Go to drupal.org and find the module you want to install. Copy the link location of the tar package for the Recommended Release for your version (6 or 7).
3. Go Back to your site and paste this link in the Install from a URL field. Choose Install.
4. Once it is installed, you will want to enable it, and any other dependencies. Install and enable anything else you need for this to work.
5. When you install a module, it goes under the "sites/all/modules" folder. The modules that come with the Drupal installation are found under "modules." You can see this via Fetch.

Tip: There are many Core Modules, so you can collapse that section by clicking on its name.

RSS Feed
1. You can set up RSS feeds under Configuration, Feed Aggregator (make sure you have all the Feeds Modules and dependencies set up). If you don't see it, then

you probably don't have it installed.
2. Choose Add Feed.
3. Give it a title and provide the feed url.
4. Choose the number of items you want to show.
5. Now, under Structure, Blocks, you should be able to find the feed and assign it to a region.
6. Save Blocks. Now you should see it in the sidebar. You can configure if you only want it to show on certain pages.
7. If you don't see it, you may have to go into Configuration, Feed Aggregator and update items.

Add a Contact Form or Forum
1. Under Modules, enable Contact Form and Forum. Make sure the Comment module is also enabled. Choose Save Configuration.
2. Now, under Structure, you should see items for Contact Form and Forum.
3. You can use the site-wide contact form and add it to the Main Menu as a link. Use Menu Administration from within the Contact Form page or go to Structure, Menus. When you add a link, give it a title and path (contact form is "contact")
4. Adding a forum uses the same process. Go to Structure, Forum. There is already a "General Discussion" forum set up. You can add a forum. Or you can group forums in containers. Each forum will show up on your Forum page. Add the link via Structure, Menus the same way you did for the Contact Form (path for forum is "forum").

At this point, we have four tabs. You can change the order by moving the names around under Structure, Menus. Then list links for the desired menu.

Appearance
There will be a few themes that you can change out under Appearance. Once you select a theme, you can go to settings to change some of the options. When you change the colors, you can see a preview of what it will look like before you Save Configuration. Some themes already have a few color set options that you can also try. You can also change which elements appear or not and add a logo and favicon image.

You can install a new theme by searching at drupal.org/project/themes. Install in the same way we did with the modules, using the Install from a URL method. Enable the theme and choose Set Default. Some of the newer themes have responsive designs built in that allow for optimal viewing on mobile devices.

When you install a theme, it goes under the "sites/all/themes" folder. The themes that come with the Drupal installation are found under "themes." You can see this via Fetch.

If you have a core theme that you like, it is a good idea to clone that theme under "sites/all/themes" instead of editing it in the main "themes" folder. Simply make a copy of

it giving the folder a new name. You have to also change the name of the .info file, making it match the name of the folder you just created. There are a few changes you need to make within that file, as well.

> First line should remove everything except:
> ; $Id:$
>
> Last section, remove all the text after the ;
> Change name and description.

This file also tells you what the names of the css pages are and some information about regions, if the theme has them.

Place in your "sites/all/themes" folder and then enable and set as default. This way, you can dig into the php/html/css to fully customize your site. Some use a clone of the Stark theme, which is very basic, as a starting point. For our class site, I started with a clone of the Bartik theme.

You can go into the "css" folder under the theme, so you can access the css and change the appearance of your site. Look for layout.css and/or styles.css for the main styles on the site.

Views
A View is basically a collection of content. You can aggregate content types or other types of content, and then repackage and filter and sort it via the powerful Views settings. You must have the Views module installed as well as all its dependencies (requires CTools).

If you have Views installed properly, you will see Views under Structure. Select it, and you will see a list of the Views on the site. You can add a View or edit existing Views.

Views can be sorted into a Page or a Block (or both). You can choose the Format, which Fields you want to display and how you filter or sort. There are many ways you can use Views, but I will show you an example that aggregates all content based on a new Content Type. We will also be using Views to display data for the VIDI modules.

1. First, we must add a special content type for Tutorials. Go to Structure, Content Types. Choose Add Content Type.
2. Give it a name and adjust any of the settings. Make sure it is Published, under Publishing Options (doesn't need to be Promoted to Front Page), and you add it to the Main Menu under Menu Settings. Save the Content Type.
3. Then you can add the fields (Manage Fields) you want the form to take. Make sure it has a title and a body.
4. For each field, you can edit its settings.
5. Now, let's set up a View that will automatically aggregate all the Tutorials, once we post them. Under Structure, Views, choose Add New View.

6. Give it a View Title (Tutorials). Have it show Content of the type "Tutorials". Make it display "titles(linked)". Choose Create a Menu Link. Save it. Go ahead and create a page and a block (in case you need both).
7. This should create the Tutorials tab, and aggregate the content type Tutorials on that page.
8. Then under the Views page, you can see/edit the Tutorials View.
9. Make sure the format is "unformatted list; show "fields";
10. Fields "Content: Title"
11. Filter Criteria – choose Add. Under Filter Criteria, you should see Content: Type (=Tutorial)
12. For Menu, it should be Normal:Tutorials, if you set that up when you added the View. If not, add it now. Select Main Menu for it to display.
13. When you Save the View, you should be able to see Tutorials now in your menu.
14. Now that you have a Content Type for Tutorials, add a post with that content type. Add a few posts with the Tutorials content type and see how they automatically get added to the Tutorials page.

Advanced Design Options
Add the Nivo Slider (or other slider module) to the site.
1. Go to drupal.org/project/nivo_slider; copy the link location for your version.
2. You also need the Libraries API module; install it.
3. Enable all the Modules associated with the Nivo Slider; some are core modules.
4. Then under Structure, you should see an item for Nivo Slider. This is where you enter/edit your images and captions.
5. Under Structure, Blocks – you can place the slider and even specify which pages it should or should not be on.

Other Features of Drupal

Configuration
Site information – Change title and slogan
Performance – may need to use this area to clear cache.
Regional Settings – Time Zone
Date and Time – Display format

People
Add users, set up roles and permissions

We will be working with the VIDI modules for data visualization. More instructions to come on that.