

Computation Lab Presentation for Dart 444

Resources & Tips for portfolio website creation

To help you design & build a
web presence for your work.

The Computation Lab

- ❖ What is the Computation Lab?
- ❖ Coordinator: Sabine Rosenberg
- ❖ Website: clab.concordia.ca
- ❖ Location: EV7-760 (behind Cafe-X)
- ❖ Available Equipment & Resources
- ❖ Workshops

Presentation Goals

- ❖ **Outline** a step-by-step guide for building an online presence for your work
- ❖ **Present** various techniques for designing a *website* with the help of online solutions & tools

Why do you need an online portfolio

- ❖ Online portfolios become part of your overall online presence, especially if you include the link on your social media profiles (i.e. LinkedIn) so potential employers, clients or customers can easily find your work when they search for you.
- ❖ It's easy to provide a link to your site, and you don't have to worry about file sizes for email attachments or sending a large fax.
- ❖ You can include the link to your website on your resume, so potential hirers know exactly where they can find your work.

What an online portfolio should contain:

- ❖ **It showcases your work:** A portfolio website should actively show off the work so that it *builds interest in the portfolio owner and their services*. Portfolio websites tend to fail not because there are not enough examples. Rather, it is usually because the portfolio owner chooses a layout, navigation method, or other detail that *distracts* from the work to be viewed. The website is a *frame* for your work.
- ❖ **It's focused:** Your portfolio website should be the best representation of you and your work. Be selective in what you include, as every piece serves a purpose and carries its own weight.
- ❖ **It's targeted.** Target your intended audience and know your intended goals.
- ❖ **Straightforward navigation:** A key component is *easy-to-use navigation*, as you want people to *find* what they are looking for.
- ❖ Include **contact** information, an **about** section, and a link to your **resume**.

Requirements

- ❖ A *web domain name*: people need to be able to find you on the internet
- ❖ The *website* to be *hosted*: files must be stored on a *public* server
- ❖ Implement some *web pages*: content, layout, structure ...
- ❖ Implement some *features/plugins*: i.e. blogging tools, a gallery, contact & feedback forms...
- ❖ The website should be *optimized for search engines*: visible and easily retrieved by keyword queries

Overview of Options

- ❖ **Option 1: Full Control**

- ❖ Acquire a domain name and hosting package
- ❖ Design webpages using WYSIWYG editors & tools

- ❖ **Option 2: Use a CMS + Independent Hosting**

- ❖ Acquire a domain name and hosting package
- ❖ Download, and maintain a CMS (i.e Wordpress), through the hosting provider. The hosting provider may offer direct support for some CMS solutions.
- ❖ Utilize a website builder (off-the shelf web design tools) provided by hosting provider.

- ❖ **Option 3 : Use a Hosted CMS**

- ❖ Find a CMS solution which provides hosting and full support.

Step 1: Register a domain name

- ❖ **Domain name:** the name for your website.
i.e: *sabineRosenberg.com*
- ❖ Need to pay an annual fee (approx. \$10.00 per year)
- ❖ Register name with the *web hosting provider* or directly with the *domain name registrar*
- ❖ Having a domain name *does not* mean you have a website.

Step 1: Register a domain name

- ❖ To register your domain name: see the following links -(there are many more...). You can register online with a credit card or Paypal account.
- ❖ [GoDaddy.com](https://www.godaddy.com)
- ❖ [Register.com](https://www.register.com)
- ❖ [Host1Plus.com](https://www.host1plus.com)
- ❖ [hover.com](https://www.hover.com)

Step 2: Choose a web host

- ❖ **A web host:** the company which stores your website on their servers. When you place your website on their servers, the website is made *public*.
- ❖ To sign up - you need to pay a monthly fee - depending on the services offered, and type of account you choose.
 - ❖ Starting fees are approx. \$6.00 per month.
- ❖ If you already have a domain name (independently acquired) - you will need to point your domain name to the web host's *domain name servers*.
 - ❖ *Your web host will provide you with the necessary details when you sign up with them.*

Step 2: Choose a web host

- ❖ To sign up for an account with a web hosting company: see the following links - (there are many more...).
- ❖ GoDaddy.com
- ❖ netfirms.com
- ❖ lunarpages.com
- ❖ Host1Plus.com
- ❖ bluehost.com ** has student pricing, dedicated word press hosting ...
- ❖ siteground** has student pricing, dedicated word press hosting ...

Step 3: Build your web site

- ❖ Content Management Systems (CMS)
- ❖ Website Scaffolds
- ❖ Create web pages using text editor or WYSIWYG editor

Content Management Systems

- ❖ A software system which provides website authoring, collaboration and admin tools designed to allow users to create and manage website content with relative ease.
- ❖ Separation of content (images, text...) & style (layout, colour choices, font choices... etc.)
- ❖ Content is usually stored in a *database*, and is combined with the visual representation (a set of *templates*) when the page is loaded.
- ❖ Enables the user to develop and use *themes* to change the appearance of the website independently of the content.
- ❖ A theme is a set of files (PHP, CSS, ...), that are assembled dynamically, with the resulting HTML styled using CSS.

Why use a CMS

- ❖ **Little Coding Knowledge needed:** A CMS will make light of the work needed to create, edit, and publish pages on the Internet with little to no HTML, CSS, or JavaScript knowledge.
- ❖ **Dynamic and Updatable:** A CMS is a viable solution for building a site that's more than a collection of static pages, and includes features for configuring the website, posting content, dynamically generating pages etc...
- ❖ **Extendibility/extensibility:** A range of extensions / plug-ins can provide extra functionality or provide advanced features and the sites are built to be fit for purpose as technology moves forward and evolves.
- ❖ **Integration:** Popular CMS's such as Wordpress provide the additional benefit of a range of ready-made and often free integrations that provide useful features such as *MailChimp* for newsletter subscription and integration, *AddThis* for social tracking etc...
- ❖ **Security:** In the case of the top open-source CMS's, teams of developers throughout the world work day and night to ensure that security loopholes are closed and you are protected from hackers and malicious threats.
- ❖ **Support and forums:** If you decide to use a CMS which has a thriving community of users and developers you will find it easy to find the answers to your queries or simply ask on the forums and others will help.

How to use a CMS

- ❖ A CMS may be downloaded, maintained and run by the user (through the host provider). The web host provider may offer direct support for some CMS solutions (for a fee) and extra setup is required.
- ❖ CMS solutions usually alternatively provide options to host and support the website themselves (a fee may apply).
- ❖ Upon signing up with a given CMS, you choose a default theme, and add / manage the content through the administration web interface (not locally on your machine).
- ❖ You may choose the option to customize or even create your own theme.

How to choose a CMS

- ❖ The main reason for using a CMS is to make **creating** and **editing** of content simple and easy. The trick is to find the CMS that provides the functionality without sacrificing ease of use for yourself.
- ❖ A good CMS will allow you to spend more time focused on the design of the front end then on implementing extensions or functionality.
- ❖ Tips of what to look for when choosing a CMS:
 - ❖ Quick and easy installation
 - ❖ Simple administration interface
 - ❖ Quick and easy extension of CMS for extra functionality
 - ❖ Simple template manipulation
 - ❖ Helpful user community
- ❖ There are many different flavours of CMS's and choosing the right one for your needs is super important!

WordPress

- ❖ One of the most popular CMS solutions: wordpress.org (independently hosted) and wordpress.com (hosted option)
- ❖ Consider using the independently hosted option:
 - ❖ It is far more versatile in terms of customization, and you'll have far greater control over how your site looks and works.
 - ❖ Registering your domain name means that you won't have the .wordpress.com subdomain, so your web address will look more professional.
- ❖ The initial software is free & open source.
- ❖ Setup and installation on a custom web host is straight forward.
- ❖ Numerous plugins/widgets available to extend the website capabilities and functionality.
- ❖ Extensive theme directory for adding new themes
- ❖ Content, functionality and basic styling management accessible via the admin interface
- ❖ Disadvantage: Creating a new theme or customizing an existing theme may be overwhelming to a new user - however the online documentation and online tutorials are extremely useful.

Getting started with Wordpress

- ❖ Choose a hosting option, and perform the initial Wordpress installation
- ❖ **Next, choose a theme for your site.** If you want to make your portfolio stand out you should have a theme that is designed to showcase portfolio content.
- ❖ Free themes are a great way to start, but they generally don't have the extra features or customization options you'll find in a premium theme. A premium theme can vary in price from \$2 to \$199. Themes can be purchased from several online marketplaces, such as [ThemeForest](#) , [Creative Market](#), [StudioPress](#), [Elegant Themes](#)
- ❖ **Another option:** add a portfolio plugin. There are a many free portfolio plugins in the WordPress repository that you can use to add a portfolio to almost any theme. To add a plugin, go to Plugins in your Admin menu and click Add New to browse your free options.
- ❖ There are also so many great [premium portfolio plugins](#), that have more features and functionality than their free counterparts.
- ❖ **Add your theme/ plugin to Wordpress and upload your media, then start adding content to your portfolio template:**
- ❖ For most themes and plugins, **adding a new portfolio post is as easy as adding a blog post.** For most portfolios you'll add a post title, description and featured image like normal.
- ❖ You may have additional fields available to enter extra information about your sample for location, date, context, etc. Some themes, like [Total](#), may even include **gallery metaboxes** where you can upload all of your gallery or slider images for your post.

Resources & tutorials for using WordPress

❖ Word Press Documentation:

- ❖ codex.wordpress.org/Main_Page
- ❖ codex.wordpress.org/Installing_WordPress
- ❖ codex.wordpress.org/Page_Templates#Custom_Page_Template

❖ Using WordPress specifically for an on-line portfolio:

- ❖ onextrapixel.com/2010/06/14/the-ultimate-guide-for-an-online-portfolio-using-wordpress/
- ❖ elegantthemes.com/blog/tips-tricks/creating-a-killer-online-portfolio-website-using-wordpress
- ❖ smashingmagazine.com/2009/04/29/ultimate-guide-to-using-wordpress-for-a-portfolio/
- ❖ creativebloq.com/web-design/wordpress-tutorials-designers-1012990/
- ❖ <http://www.creativebloq.com/netmag/build-responsive-wordpress-portfolio-91413037>
- ❖ wpvkkp.com/best-wordpress-portfolio-themes/
- ❖ <https://colorlib.com/wp/free-wordpress-portfolio-themes/>
- ❖ <http://www.vandelaydesign.com/best-responsive-portfolio-wordpress-themes/>

❖ Learning WordPress:

- ❖ premium.wpmudev.org/blog/teaching-wordpress-to-absolute-beginners-part-1-the-build/
- ❖ lynda.com/WordPress-3-0-tutorials/Create-an-Online-Portfolio-with-WordPress/83096-2.html
- ❖ learn.wordpress.com
- ❖ code.tutsplus.com/tutorials/create-a-multi-layout-portfolio-with-wordpress--net-20304
- ❖ www.presscoders.com/wordpress-theme-customization-guide/

Other popular large CMS solutions

- ❖ drupal.org
- ❖ joomla.org
- ❖ These solutions are similar to WordPress - however they are more complex to use and manage. Consequently, they provide the capability for building more complex sites.
- ❖ Comparison of the three solutions:
 - ❖ www.rackspace.com/knowledge_center/article/cms-comparison-drupal-joomla-and-wordpress

Smaller CMSs

- ❖ CMS solutions like WordPress may prove to be too complicated and extensive for your needs.
- ❖ Luckily, there exist many *smaller* CMS solutions which provide support and functionality targeted for specific website genres.
- ❖ These Content Management systems do not necessarily offer the extensive features, rather they provide more custom, directed and easy to use solutions.
- ❖ These systems are sometimes free or are subscription based, and may also offer the option to host and maintain the website for you.

squarespace

- ❖ squarespace is a company created by Anthony Casalena in 2004. It offers an excellent *drag and drop website builder solution* for users with low skills in HTML and coding, and aims to make the process of starting a website or a blog simple and uncomplicated.
 - ❖ offers one-click packages that integrate everything you needed to get started: a domain, a theme and various hosting options.
 - ❖ Offers a free trial with limited options or paid subscriptions (starting at \$8 per month).
 - ❖ Known for its **friendly, easy to use editor**: *squarespace* allows you to create galleries, pages, posts and blogs with one click. The idea is to simplify any tech savvy process and focus on your content needs.
 - ❖ gives you **extensive styling options** that a lot of other website builders do not have - allowing you to fine tune your chosen theme easily.
 - ❖ has a diverse set of very well designed theme/ templates that are all responsive (compatible with mobile devices).

squarespace

- ❖ Additionally:
 - ❖ Has less features and no plugins (unlike Wordpress) , rather it has “inbuilt plugins” **designed to allow you to manage everything from one admin interface.** i.e.: *squarespace* allows you to create and manage galleries in a way you’ve never seen before. Instead of looking for 1 (or perhaps 15) plugins to manage galleries in WordPress, you have everything you need right on your dashboard.
 - ❖ 24/7 support – 1 hour email response turnaround time.
 - ❖ Excellent documentation, including articles, videos, live chat, email support, and community forums
 - ❖ A wide range of analytics are at your fingertips, including statistics on blog traffic, mobile usage, subscribers, referrers, popular content, search queries, and detailed activities
 - ❖ SEO is built in, you just have to be conscious of how you name files, links and caption
 - ❖ offers e-commerce solutions
- ❖ For more info: see the [getting started guide](#)
- ❖ For inspiration see [their templates + example solutions](#)
- ❖ [General info](#)

weebly

- ❖ Founded in 2006: [wikipedia page](#), a direct competitor to squarespace.
- ❖ Weebly is an easy to use platform (drag & drop website builder) which allows users to create a mobile friendly website quickly and easily.
- ❖ Users can select from a database of pre-designed themes and then customize the look and feel. Weebly traditionally was quite weak in theme design, but over the years they have improved considerably:
 - ❖ Allows for customization of themes / templates
 - ❖ Implements responsive designs
- ❖ However - if you are looking to thoroughly redesign the css and html due to stylistic considerations - weebly has limited support.
- ❖ Has free and paid features / options i.e. blogging tools, e-commerce, hosting...
- ❖ What really separates Weebly from other website builders is their new *App Center*.
- ❖ The App Center lets you install custom “apps” that extend Weebly functionality. i.e. SimpleTable, MapJam ...

WIX

- ❖ Founded in 2006: wikipedia page, a direct competitor to squarespace + weebly. Also offers a one-stop solution (domain name, hosting...)
- ❖ Based on a user-friendly drag-and-drop editor, Wix also offers rich media capabilities, with both Flash and HTML5 support.
- ❖ Hundreds of quite advanced templates are available, categorized by genre/usage.
- ❖ Con: Wix doesn't allow any CSS customization (unlike squarespace), so you're really stuck with whatever templates they have.
- ❖ But: Wix does offer "blank" templates, allowing pro users to design their own layout from scratch.
- ❖ The service is based on a *freemium* model: users create free accounts, and upgrades cost between \$4 and \$16 per month for features like custom domains, hosting and e-commerce designs.

Adobe Portfolio

- ❖ Adobe Portfolio is a new tool (a website builder) that promises to make it easier than ever for designers to build a portfolio website. Free with any Adobe Creative Cloud plan, it will enable you to create and customize your portfolio sites with knowing very little code.
- ❖ A small set of fully responsive custom layouts specifically geared for portfolio creation
- ❖ Optional Personalized URL, password protection and Typekit (Adobe's font service) fonts
- ❖ Works like a regular site builder, allowing users to create portfolios using a click & point along with a live-editing experience.
- ❖ \$9.99 or \$49.99 per month plans incl. hosting
- ❖ Distinct from squarespace:
 - ❖ Powered by Behance (a powerful portfolio networking platform for introducing talent to opportunity): means you can sync your portfolio website to Behance Projects pages enabling you to be discovered due to the extensive Behance membership base
 - ❖ Full integration with the Adobe Creative Cloud
 - ❖ No Blog functionality (as of yet).

More Smaller CMS links

- ❖ portfoliobox.net
- ❖ subfolio.com
- ❖ imcreator.com
- ❖ koken.me
- ❖ krop.com
- ❖ foliodrop.com
- ❖ coroflot.com
- ❖ carbonmade.com
- ❖ virb.com
- ❖ cargocollective.com
- ❖ viewbook.com
- ❖ dunked.com
- ❖ portfoliolounge
- ❖ Comparisons & Reviews of Popular Options
 - ❖ <http://www.vandelaydesign.com/tools-to-build-your-portfolio/>
 - ❖ ca.complex.com/pop-culture/2012/01/the-9-best-services-for-building-an-online-portfolio/
 - ❖ <http://graziadiovoice.pepperdine.edu/8-tools-for-creating-an-online-portfolio/>
 - ❖ <http://www.noupe.com/business-online/freelance/building-an-online-web-design-portfolio-tools-themes-and-templates.html>

Summary: CMS Solutions

- ❖ CMS solutions provide the user an almost immediate web presence: layout, structure, advanced feature options and support.
- ❖ Hosted CMS solutions are secure, as well as providing services such as automatic back ups.
- ❖ Some CMS solutions require the web host provider to support specific technologies (PHP, SQL, etc...) so you need to make sure to choose the right package.
- ❖ CMS solutions can provide a new community - new contacts and exposure. They may also provide tools for marketing your web site (i.e Google AdWords).

Static Website Builders

- ❖ An alternative solution to a CMS is to use a *static website builder*
 - ❖ Provide off-the-shelf, self contained web site solutions
 - ❖ No hand-coding needed: code is generated by the website builder.
 - ❖ Some options will allow for integration with a CMS (hosted / non hosted options).
 - ❖ May provide contemporary & *responsive* (i.e mobile ready) web solutions:
 - ❖ webflow:
monthly subscription (\$14), multiple hosting options
 - ❖ adobe edge reflow:
Part of Adobe Creative Cloud family - a tool for creating responsive designs: need a monthly subscription, currently no hosting option. **No longer being actively developed.
 - ❖ macaw:
\$179 - no monthly plan, no hosting

Website Scaffold Solutions

- ❖ If you are not convinced by a CMS solution, and want to have more control in the implementation of your website: content, functionality, layout and design.
- ❖ If you are still weary of terms like HTML, CSS & Javascript ...
- ❖ A Web Scaffold solution may be the answer for you.

Website Scaffold Solutions

- ❖ Provide a framework consisting of a combination of HTML, CSS and Javascript files, making it easy to build robust websites without a lot of extra coding.
- ❖ User is required to download and install the framework (free) on to a local machine.
- ❖ The user has the responsibility for finding a hosting solution, and designs and implements the website on a local machine, using a text editor.
- ❖ In order to make the website *live* - the user is required to upload the site to the web host via an FTP program.
 - ❖ FileZilla
 - ❖ Cyberduck
 - ❖ Transmit

Bootstrap

- ❖ The Bootstrap framework: getbootstrap.com
- ❖ Provides extensive documentation, installation guide and examples.
- ❖ Uses a default grid system which can be customized for a specific layout.
- ❖ Comprehensive CSS - allowing for elegant styling of buttons, tables, navigation and text.
- ❖ Incorporates Javascript plugins such as JQuery: enabling for interactive elements to be easily implemented.
- ❖ Supports *Responsiveness* - Bootstrap automatically adapts the web pages for different screen sizes.
- ❖ The Framework may be extended upon and customized by the user.

Alternative Website Scaffold Solutions

- ❖ gumbyframework.com
- ❖ www.getskeleton.com
- ❖ html5boilerplate.com
- ❖ lessframework.com
- ❖ foundation.zurb.com
- ❖ compass-style.org
- ❖ sitejam.com
- ❖ ...

HTML / CSS Tools & Editors

- ❖ Brackets (Free)
 - ❖ Runs on Windows, Mac OS X, Linux
- ❖ Google Webdesigner (Free)
 - ❖ Runs on Windows, Mac OS X, Linux
- ❖ Text Wrangler (Free)
 - ❖ Runs on Mac OS X
- ❖ Sublime Text (Trial)
 - ❖ Runs on Windows, Mac OS X, Linux
- ❖ Adobe Dreamweaver (Not free) - newest version has seamless integration with bootstrap
 - ❖ Runs on Windows, Mac OS X, Linux
- ❖ Less (css preprocessor tool): provides extensions to css
 - ❖ Used on the command line via node, downloaded as a script file browser usage or can be used in a wide variety of third party tools
- ❖ Sass (css preprocessor tool): provides extensions to css
 - ❖ Requires a supporting application to run or use through the Command Line Terminal

Some Javascript Libraries

- ❖ jQuery
- ❖ d3
- ❖ snap.svg
- ❖ fullpage
- ❖ modernizr
- ❖ ...

Search Engine Optimization

- ❖ The acronym *SEO* (*Search Engine Optimization*) describes a series of techniques which improve the visibility of a website in search engine result pages.
- ❖ The goal of such optimization is to rank as highly as possible for a certain search query...
- ❖ Invaluable resource of tutorials for implementing SEO:
 - ❖ webdesign.tutsplus.com/series/seo-fundamentals-for-web-designers--webdesign-9715
- ❖ A high level discussion of tips and tricks for SEO:
 - ❖ webdesignerwall.com/general/seo-guide-for-designers
- ❖ More tips and tricks:
 - ❖ malphursinteractive.com/10-simple-seo-tips-for-web-developers-designers

Learning Web Design Resources

- ❖ Mozilla
- ❖ W3 Schools
 - ❖ HTML, Javascript, CSS ...
 - ❖ w3schools.com
- ❖ Code Academy
 - ❖ Interactive tutorials in HTML, Javascript, CSS ...
 - ❖ www.codecademy.com
- ❖ Coursera
 - ❖ coursera.com
- ❖ Udacity
 - ❖ multiple courses in web based applications
 - ❖ udacity.org
- ❖ Udemy
 - ❖ multiple courses in web based applications
 - ❖ udemy.com