



# Websites

## Tips and Tricks

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Content borrowed from previous BAA Website Presentations  
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# Overview

- Website Content
- Let's talk code...
- Best practices
- Our style
- Questions



# I'm No Expert

- By no means is this the end-all guide to an amazing website
- I learned this all through trial and error and help from the FIRST community



What should go on your website?

# WEBSITE CONTENT



# Content: The Main Focus

- Content is the most important thing about your website
- Content should include
  - Strong team identity
  - Team background
  - Resources (information to help other teams)
  - Team media



# Recommended Pages

- About pages
  - FIRST
  - Your team
    - 1 page with brief overview
    - 1 page with detailed team history
  - The current game
  - Your website



# Recommended Pages cont.

- Resources
  - Links to sites your team finds helpful
  - Resources your team has developed
    - Documents
    - Plans
    - Ideas
- Sponsors
  - Who are your sponsors



# Target Audience

- Primarily targeted towards general public
  - Some who has no idea what FIRST is about
  - Current and potential sponsors
- Main content should not be focused towards the team
  - Keep that content as a small part but not hidden!
    - Helps show your website is actively used while not overflowing onto the public





# General tone

- Keep the tone of your website professional
  - You are trying to attract (and keep!) sponsors
- K.I.S.S.
  - Keep It Super Simple
- Don't over share
  - Private information is a turn away



# Media

- Photos
  - Resize all images to display size
    - Trying to load a 4000px image can be taxing
  - Choose the best 5-10 images from an event
    - An outsider looking through 100 photos can get distracted
- Videos
  - Videos should have a purpose and show off aspects of your team you want people to see



Website backbone

# LET'S TALK CODE...



# Terminology

- HTML
  - The language of the web, defines different sections of the site
- CSS
  - Cascading Style Sheets. These define how elements on a page look
- Javascript
  - This language runs in the browser, and is used primarily to provide interactivity on a site
- PHP
  - A back end language that runs on a server to deliver dynamic content



# Building your site: the options

- From scratch
- Template engine
- Content management systems (CMS)
- Combination Template + CMS
  - SQUARESPACE etc..



# From scratch

- Designing a site from scratch by using direct HTML or PHP backend to display content
- Pros:
  - You can learn a lot about HTML, CSS, Javascript
- Cons:
  - You have to know a lot about HTML, CSS, Javascript
  - If you are new, it can take A LONG time
  - If designed poorly, updating with new information can be a nightmare
  - You will most likely focus on design/implementation more then content



# Template Engine

- There are a number of template engines out there
  - Offer a good mix of DIY power and code reusability
- Pros:
  - Can still learn a lot about HTML, CSS, Javascript
  - Makes it easier to handle content updates
- Cons:
  - Still a lot of manual configuration and work



# Content Management Systems (CMS)

- Content management systems are powerful
  - They let you focus directly on content
  - Separate design and data, so changing one does not affect the other
- Pros:
  - Focus on delivering content
  - Customizable
    - You can write your own themes and modules
- Cons:
  - Requires setup, updates and user accounts
- Examples include: Wordpress, Drupal and Joomla





Best practices for a FIRST award winning website

# BEST PRACTICES



# Content Management Systems!

- Content management systems are the best option to develop an award-winning site
  - You can focus solely on content
    - Multiple people can contribute to that content
  - Popular CMS have huge user bases with constant updates and improvements
  - Hundreds of stock themes or the ability to create your own
    - Themes can be easily swapped without data loss



# Good Stuff

- jQuery
- CSS 3 effects
  - Be sure to make sure the features you use are backwards compatible
- Firebug for Firefox or Developer panel in Chrome
  - Helps debug issues with code and allows quick adjustments
- PHPbb for message boards / forums



# Page Size

- Try and keep your page size small
  - Even with broadband today users are still impatient!
  - Ideally < 200kb for non media pages
  - Use smaller versions of Javascript like jQuery
  - Resize all images to the size you want them displayed at



# Tables

- Tables are for tabular data only
- Don't use tables for layouts
  - They may be easy to learn, but it's wrong
  - Use DIV's and CSS instead
    - Cleaner!



# Cross Browser Compatibility

- Design in a single browser but don't forget about the others
  - A lot of companies still use outdated browsers
  - The government still uses IE6 and IE7



Our approach at website design

# OUR STYLE



# Custom CMS

- From scratch written CMS
  - Developed by students and mentors
  - Allows students to learn code while focusing on content
- All systems developed by The RoboBees
  - Built upon over the past 5 years
  - Design overhauled every 2 years





Any?

**QUESTIONS?**





# Media

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# Media Subteam Purpose

- Create material for public relations
- Support Chairman's Award video submission
- Produce photos and videos for website throughout the year
- Maintain a "Face" on Chief Delphi
- Season wrap-up video



# Workflows & Process

## Photo

- Planning
  - What types of photos?
  - What is the story?
  - Where?
  - Read the manual (camera)
- Techniques
  - Style (angles, lighting, personalities)
  - Experiment
  - Quality or quantity?
- Production
  - Rank photos as “keepers” and “maybes”, delete the rest
  - Edit (white balance, crop)
- Publicize

## Video

- Planning
  - Script
  - Storyboard scenes (what do they look like)
  - Organize shooting location, times, extras
- Techniques
- Audio, audio, audio
  - Don't have a dedicated microphone? Get one.
  - eBay is a good source of used audio equipment
- Post-planning production time
  - 20%: Capturing video
  - 80%: Editing
- Publicize



# Equipment and Software

- The best camera is the one on you
  - *Cell phone cameras work just fine when your DSLR is in your car*
- Software
  - Use what is comfortable and within budget
  - Windows Live Movie Maker is good enough
  - Use something that students have access to



# Considerations



- Copyrights and Fair Use
- Music
  - Themes
  - Lyrics
- Views and publicity
- Adults vs. Students
  - Consent and Release waivers
  - *FIRST* events are covered
  - Some schools have C&R



# Resources

## Training

- Lynda.com
- YouTube
- Vimeo
- Adobe
- *Google...*

## Content

- videoblocks.com
- freemusicarchive.org
- ccmixer.org
- Many, many more...



**QUESTIONS?**

