Week 5: Strings

What you should know by now (1)

- [Week 1]

    - All the directions for how to turn in your homework.

- [Week 2]

    - How to make an HTML web page on your home computer.

    - How to upload the HTML web page to the Mission College server and run it there.

    - How to make a link on your home page. You need this to link your homework.

    - How to make the proper directory structure for your homework.

What you should know by now (2)

- Where to put your files:
  - Windows: c:\wamp\www
  - Mac: /Applications/MAMP/htdocs
  - Mission College server: ca86_xx/public_html

- How to start the server on your computer

- How to view your files under PHP control

What you should know by now (3)

- What to name your files:
  - `index.html` or `index.php` (note: all lower case)
  - Case sensitive: <u>I</u>ndex.html and <u>I</u>ndex.php will not work
    - (it might work at home, but it won't work on the Mission College server)
  - `HomePage.html` etc. will not work

- What is the URL of your home page:
  - php.missioncollege.edu/~ca86_xx/
  - Note: there is no index.html in your URL
  - index.html is selected automatically

What you should know by now (4)

- [Week 3]
  - PHP script delimiters and code blocks
  - Variables and constants
  - Operators + – / * % || && < >

- [Week 4]
  - Functions
  - Decisions: if and switch
  - Loops: for, while, foreach

What we will learn next

- [Week 5]
  - Strings
  - Regular expressions

- [Week 6]
  - Forms
  - Form data: Autoglobals
  - Templates

This will give us everything we need to do the midterm exam.

Beware of
PowerPoint copy and paste

- PowerPoint uses "smart quotes" when I type these presentations.

- Notice that the quotation marks on this slide are curly. This means they are "smart quotes."

- You cannot use "smart quotes" in your C++ code. You must use the plain old straight dumb kind.

- So, if you copy and paste from this presentation into your code, things will not work.

Good ideas

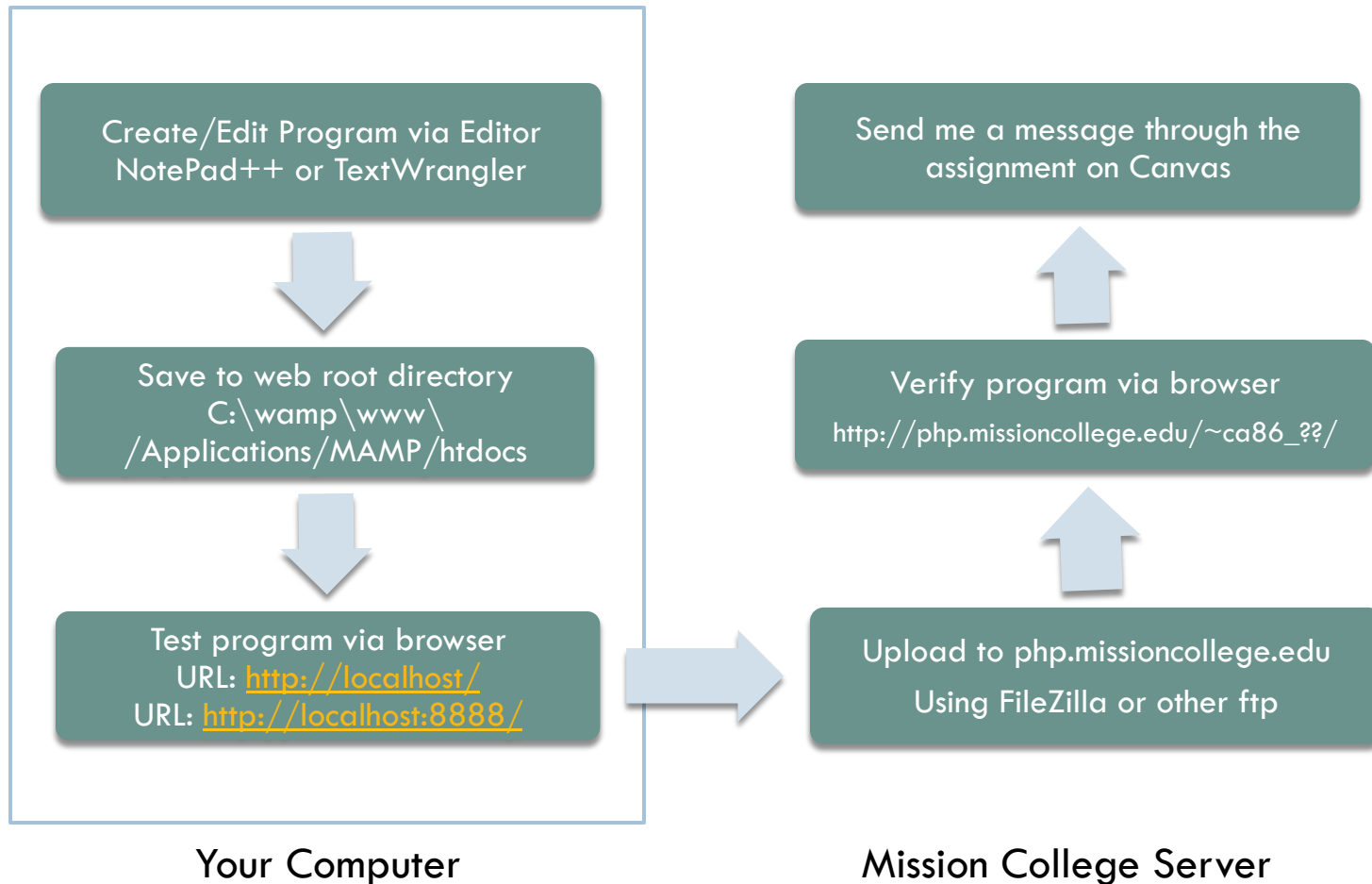- Putting your name in a comment in the code.

Bad Ideas

- Don't use print_r or var_dump for production sites.

- Some home pages do not link to your homework.

- Not following directions.

Homework Protocol

1. Upload all assigned exercises and projects to the Mission College server.

2. Make sure to test after you upload!

3. Link all exercises and projects to your personal home page.

4. Do not upload any files or post file attachments in the drop box.

Homework Flow Chart

Create/Edit Program via Editor NotePad++ or TextWrangler

⬇

Save to web root directory
C:\wamp\www\
/Applications/MAMP/htdocs

⬇

Test program via browser
URL: http://localhost/
URL: http://localhost:8888/

➡

Upload to php.missioncollege.edu
Using FileZilla or other ftp

⬆

Verify program via browser
http://php.missioncollege.edu/~ca86_??/

⬆

Send me a message through the assignment on Canvas

Your Computer

Mission College Server

Computer Science Foundations

- ☐ **Conditionals**
  - ☐ If .. Else
  - ☐ Switch

- ☐ **Loops**
  - ☐ For
  - ☐ While
  - ☐ Do .. While

- • **Functions**
  - • Modularizing your code

- • **Strings**

- • **Arrays**
  - • Used together with loops

- • **Files**

What is a string?

- A string is a sequence of characters.

- A character is a grapheme or symbol that is part of a written language.

- Examples of characters include numbers, letters, punctuation, white space, and control characters.

- White space includes spaces, hard spaces, tabs, and vertical tabs.

- Control characters include carriage return, line feed, and others.

Commonly-used string functions

- explode
- htmlentities
- htmlspecialchars
- implode
- join
- lcfirst
- levenshtein
- money_format
- number_format
- printf

- similar_text
- sprintf
- str_replace
- strcasecmp
- strchr
- strcmp
- strip_tags
- stripos
- stristr
- stripslashes

- stristr
- strlen
- strpos
- strrpos
- strtolower
- strtoupper
- substr
- trim
- ucfirst
- ucwords

Splitting a string into parts

- explode == (split)
- implode == join
- strip_tags
- substr
- trim
- preg_split

Comparing strings

- levenshtein
- similar_text
- strcasecmp
- strcmp

Searching within a string

- str_replace
- strchr
- stristr
- strstr
- strpos
- strrpos

Formatting a string

- lcfirst
- ucfirst
- ucwords
- printf
- sprintf

- money_format
- number_format
- strtolower
- strtoupper

similar_text

- Calculates the similarity between two strings.
- http://php.net/manual/en/function.similar-text.php

levenshtein

- Calculates the minimal number of characters you have to replace, insert or delete to transform one string into the other.
- http://php.net/manual/en/function.levenshtein.php

Regular Expressions

- Form Validation (later)
- preg_match ( )

Include files

- include ("otherfile.php");

Page Templates

- include ("headers.php");

- include ("navigation.php");

- // insert your custom page code here

- include ("footers.php");