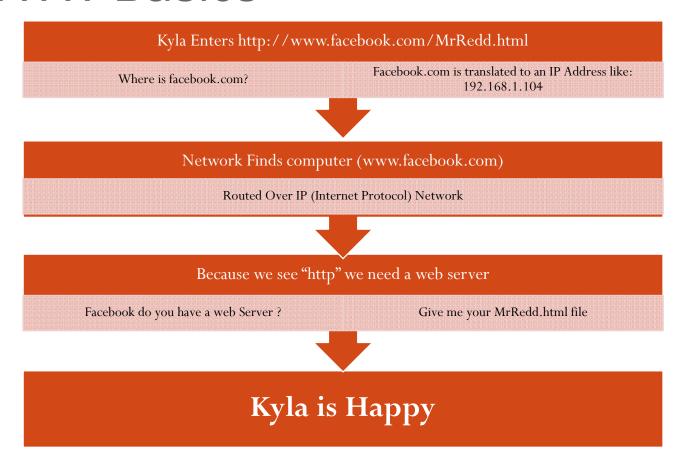
# Computer Science Intro

PACE Intro to Engineering

#### **WWW Basics**



#### What is an HTML File

- HTML (Hyper Text Markup Language)
  - HyperText (Meaning it can is used with HyperTextTrasmission Protocol (HTTP:The rules (protocol) of the world wide web)
  - Markup meaning it contains instructions for formatting (Bold, Italic, Font, Tables) text and images
- It's a flat text file. You can open and view it using notepad.
- It at the very least contains the <HTML>Tag

### What is a Tag?

- An HTML Instruction
- A Tag is always contained with brackets: < >
- A Tag is usually Opened <> and closed </>
- Example: <html> </html>
  - Open: <html>
  - Close: </html>
- Tags sometime contain attributes

#### What is an attribute

- Refined Instructions to accompany a Tag
- A tag can have none or many attributes
- Example: <h1 align="center">
  - H1 is the Tag
  - Align is the attribute
  - "center" is the value that attribute is being set to

#### **HTML File Basics**

- Need to Open and Close with <HTML>Tags
- Need <Header > Tag which contains descriptive information, such as subject
- <Title> is contained within the Header
- <Body> is where the content of the web page is stored
- HTML (within your tags) is not case sensitive so <HTML> is the same as <Html> is the same as <html>

# Simplest HTML File

<HTML>

</HTML>

#### Basic HTML File

```
<HTML>
 <HEADER>
  <TITLE> Any Title </TITLE>
 </HEADER>
 <BODY>
  Hello World!
 </BODY>
</HTML>
```

#### Also Basic HTML File

```
<HTML><HEADER><TITLE> Any Title
  </TITLE></HEADER><BODY>Hello World
!</BODY></HTML>
```

Spaces and New lines don't matter to HTML unless it's the text within a tag

# More HTML Tags

- Header Tags
  - <H1>
  - <H2>
  - <H3>
  - Etc
- Paragraph breaks <P>
- Line Break <BR>
- Bold <B>
- Italic <I>
- Underline <I>

# Using HTML Tags Together

What if I want to make text bold and Italicized:

Or

Not

Must maintain order of inner and outer tags

#### Color in HTML

- Colors are encoded in Hexidecimal (0-F) instead of Decimal (0-9)
- Colors are prefixed with a # sign
- This is encoded as how much Red, Green, and Blue you want your color to contain.
- Format

```
#RRGGBB
```

- 00 is for none
- FF is for all
- Example:

#FFFFF — Means all of the Red, Green and Blue you can add. This is actually the color white

#000000 — Means no Red, Green, or Blue. This is Black

• Experiment!

### Images in Your HTML

- Use the IMG Tag
- Use the src attribute within the tag
- Example:

```
<IMG src=c:\images\mrRedd.gif>
```

### Adding Hyperlinks to your HTML

- URL stands for Uniform Resource Locator. This locates any image or html file on the web. This is also used in your browser when
- The  $\leq a \geq tag$
- HREF attribute is set to URL
- Example
- <a href = "www.google.com">Click here to find something</a>

#### **Tables**

- Tags needed for Tables
  - <Table> : Table tag
  - <TR> : Table Row
  - <TH> : Table Header (Column Header)
  - <TD>: Table data (Cell)

# Table Example

```
<TABLE>
   <TR>
     <TH>Student</TH>
     <TH>Grade</TH>
   </TR>
   <TR>
     <TD>James</TD>
     <TD>D</TD>
    </TR>
   <TR>
     <TD>Latoya</TD>
     <TD>F</TD>
    </TR>
   <TR>
     <TD>Mike</TD>
     <TD>F</TD>
    </TR>
</TABLE>
```

#### Forms

- <FORM action=""> Start a table
- <INPUT> Various input widgets, such as radio buttons
- <TEXTAREA> Used to enter a lot of text
- <SELECT> Used for Drop downs
- <OPTON> Drop down options

#### Forms

```
<form action="">
Pick a Day:
<select name="day">
    <option value="monday">monday</option>
    <option value="funday">funday</option>
    <option value="tuesday">tuesday</option>
    <option value="wednesday">wednesday</option>
    <option value="thursday">thursday</option>
    <option value="friday">friday</option>
    <option value="saturday">saturday</option>
    <option value="sunday">sunday
</select>
<br />
Pick an Account Status:
<input type="radio" name="status" value="valid" /> Working
<input type="radio" name="status" value="not valid" /> vacation <br />
<input type="submit" value="Submit" />
```

### Scripts

- Used to add dynamic components to your page
- Only uses the <SCRIPT> tag:
- Sample:

```
<SCRIPTTYPE="text/javascript">
<!--
document.write("right now: " + new Date());
//-->
</SCRIPT>
```

#### Reference Sites

http://www.htmlcodetutorial.com

http://www.w3schools.com/html/html intro.asp

### Web Page Project

- Everyone has to complete one
- Must use notepad (If you don't we can tell)
- Page must contain Tables
- Page must contain a Form
- Page must be dynamic somehow
- You must be able to repair your page