

Web UI/Forms and Web Applications



Web Application

- Also **web app, webapp, weblication**
- An application that is accessed by a web browser (from a server) via intranet or Internet.
- Take/Imagine a generic desktop application* being accessed by a browser by typing in its URL.

Web Application

- Examples:
 - Webmail : E.g. Gmail, Yahoo Mail
 - Online Retail Sales
 - Online Auction
 - Blogs
 - Wiki
 - MMOGs/MMORPGs
 - Discussion Boards
 - Etc...

Web Application: Selling Point

- No distribution problems*
 - No client installation problems*
 - Easy to develop*
 - Easy to deploy
 - Easy to standardize (version)
-
-

Creating User Interfaces In Web Apps

- The **Rich Client** approach:
 - Use plugins like Java or Flash or ActiveX
 - Requires software installation.
- For “Rich” user experience.
- Extensible and Expandable Browsers
 - Most web browsers can render specialized contents using plugins.
 - Browsers may come with Plugin APIs for developers.

Facebook (1)Google DocsGmail - AllisoCircles - GocAtMail - frgleWhat Did YoHTML FormsForms - CMS

https://plus.google.com/circles?tab=mh

+Fermin RobertoGmailCalendarDocumentsPhotosReaderWebmore

Fermin Roberto Lapitan0Share...


Google+


Find people


People in your circles (15)People who've added you (13)Find and invite (103)Selected (1)


Sort by: Relevance


RemoveClear selectionView profileMore actions


Juan Miguel Bawagan


Robenie Fernandez


Arian Jacildo


Bayani Benjamin Lara


Rodolfo Duldulao


Reinald Adrian Pugoy


Joe Ramir Ramirez


Katrina Joy Magno

Lanie Danila

Allison Quicoy

Enay Sayao

Rozano Maniaol

Jeremiah Pascual

Drag people to your circles to follow and share

Drop here to create a new circle

Friends0


Family1

Acquaintances0

Following0

Blocmates3

ICS12

Arian Jacildo

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Send feedback

Creating User Interfaces in Web Apps

- Thin Client Approach
 - Uses HTML form elements, hyperlinks, images, CSS, and simplest of Javascript to build/constitute user interface.
 - No installation required.
 - Very limited in terms of UI features and user experience.
 - E.g. No DnD, advanced/customized events, etc.





Registration



English
Español



English
Français

Anyone who is interested in getting paid to share your opinions and participate in easy online surveys can qualify to become a Greenfield Online community member.

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Country	United States
Language	English
First Name	
Last Name	
Email	
Gender	Select
Password	
Date of Birth (MM/DD/YYYY)	
Postal Code	

Save

Web Application Examples



Examples: GMail

The screenshot shows a Gmail inbox in a web browser. The browser's address bar displays the URL `https://mail.google.com/mail/?hl=en&shva=1#inbox`. The Gmail interface includes a top navigation bar with links for Mail, Calendar, Documents, Photos, Reader, and Web. A search bar is located at the top, with buttons for 'Search Mail' and 'Search the Web'. Below the search bar, there are links for 'Show search options' and 'Create a filter'. A banner for desktop notifications is visible, along with a link to 'Preview Gmail's new look'.

The left sidebar contains a 'Mail' section with links for Contacts and Tasks, and a 'Compose mail' button. Below this is the 'Inbox (105)' section, which lists various email categories: Buzz, Starred, Important, Sent Mail, Drafts (1), Spam (1), CMSC 100 (61), IT 1 (11), Travel, and 6 more. The 'Send SMS' section is also visible, with a field for the phone number. The 'Chat' section shows a list of contacts, including Koy Lapitan, Set status here, Call phone, ggccebanico, Avery Joseph Garcia, eLaine Dizon, Luis Cortez, Mary Rose Garra, Miguel Abriol-Santos, and Miguel Abriol-Santos. The 'Invite a friend' section is at the bottom of the sidebar.

The main inbox area displays a list of emails. The first email is from 'Renault Parts' with the subject 'renaultparts.us - 4cv, Dauphine, Caravelle, R8, R10 Large inventory: Jacques Renault'. Below this is a list of emails from various contacts, including John, Dulce, Rochelle, Luna, Vera, Kim, Christian, Joy, Hannah, Kasurin, Joneva, Gene, Melvin, Marianne, Ana, Francis, Marlo, Maricris, Cexzur Jimenez Jr., John Joseph Sinang, Ian Dave Invierno, Roinand Aguila, and Verna Banasihan. Each email entry shows the sender's name, the subject, and the date. The interface also includes a 'Move to' dropdown menu and a 'Labels' dropdown menu. The bottom of the screen shows the Windows taskbar with the Start button and several open applications, including Gmail, CMSC 100 New Form, Lectures and Exams, CMSC 100 Lecture 6, and The Other Road Ahe.

Sender	Subject	Date
John, me (2)	IT1Postcard - John Paul V. Guim V-3L	Jul 7
Dulce, me (2)	SNAIL MAIL - Good Morning sir. This is my snail mail project. =) (view attachments)	Jul 7
Rochelle, me (2)	IT 1 IT1 Postcard (additional pictures) - Cruz, Rochelle L. V-6L 2011-32332 CDC/BSDC	Jul 7
Rochelle, me (2)	IT 1 IT1 Postcard - Cruz, Rochelle L. V-6L 2011-32332 CDC/BSDC	Jul 7
Luna, me (2)	Snail Mail - Hi Sir, here are the pictures of the postcard with the stamp. I'm sorry I sent the wrong ...	Jul 7
vera, me (2)	IT 1 IT 1 Postcard - Vera Mae Angelica S. Villan 2011-50616 V-3L	Jul 7
kim, me (2)	IT 1 IT1(G-4L)	Jul 6
christian, me (2)	IT 1 IT1 Post card - done	Jul 6
Joy, me (2)	Post Card - Name: Gumatay, Joy Dianne J. Student Number: 2011-19009 Section: G-5L Professor: Sir Fermin ...	Jul 6
Luna, me (2)	IT 1 Snail Mail - IT1 Submitted by: Luna P. Solon Section G-6L	Jul 6
Hannah, me (2)	Post card	Jul 6
Joy, me (2)	(no subject) - Name: Joy Dianne J. Gumatay Student Number: 2011-19009 Section: G-5L Professor: Professor Fermin ...	Jul 6
Kasurin, me (2)	Postcard - Hello sir :) Here are the pictures of the postcard that I sent to my friend in S. Korea ...	Jul 5
joneva, me (2)	IT 1 IT 1 Postcard - Sir I'm Joneva Aniceto from V-5L	Jul 5
gene, me (2)	CMSC_100_Web_App_Assign - Llanto, Gene Ryan F. 2009-34541 EF-1L A web application is an application that is accessed over a ...	Jun 23
Melvin, me (2)	CMSC 100 CMSC 100 Web App Design - Melvin Joseph S. Tecson 2009-15796 CMSC 100 EF-2L 1.) What are web applications? - a web ...	Jun 22
marianne, me (2)	CMSC 100 CMSC 100 Web App Assign - What are web applications? -are applications that can be accessed over a network such as the ...	Jun 22
ana, me (2)	CMSC 100 CMSC 100 Web Application Assign - Defining web application - A web application is an application that is accessed over a network ...	Jun 22
Francis, me (2)	CMSC 100 CMSC 100 WEB APP ASSIGN - Name: Francis Xavier S. Antazo Section: EF-1L Student No.: 2007-21433 CMSC 100 WEB APP ASSIG	Jun 22
Marlo, me (2)	CMSC_100_Web_App_Assign - Kasala, Marlo Ian G. 2009-33934 EF-1L Web Applications -A web application is an application which ...	Jun 22
maricris, me (2)	CMSC 100 CMSC 100 Web App Assign	Jun 22
Cexzur Jimenez Jr.	CMSC 100 CMSC 100 Web App Design - Cexzur C. Jimenez, Jr. 2009-24234 CMSC 100 EF-1L 1. List down web applications that you have used ...	Jun 22
johnjoseph sinang	CMSC 100 cmc100 web app design - John Joseph R. Sinang 2009-08973 CMSC 100 EF-1L 1. A web application is any application or ...	Jun 22
Ian Dave Invierno	CMSC 100 CMSC100 Web App Assign	Jun 22
□□□□□	CMSC 100 CMSC100 Web App Assign	Jun 22
Roinand Aguila	CMSC 100 CMSC 100 Web App Design	Jun 21
Verna Banasihan	CMSC 100 CMSC 100 Web App Assign - 11. 1. What are Web Applications? A web application is an application that is accessed over a ...	Jun 21

Example: Online Spreadsheet (Google Docs)

Unsaved spreadsheet - Google Spreadsheets - Mozilla Firefox

File Edit View Go Bookmarks Tools Help 8.9 minutes saved

http://2w1.spreadsheets.google.com/ccc?id=o12490884610484283603.5092755156562043836.15949149943944644339.5452554385979000277

Online Spreadsheet Search RSS New Torrents [375 new] E-mail Notifier Online Spreadsheet

Google Spreadsheets LABS File Save New Open rnduldulaojr@gmail.com | Send feedback | Help | My Account | Sign Out

Unsaved spreadsheet Share this spreadsheet

Format Sort Formulas Cut Copy Paste Undo Redo

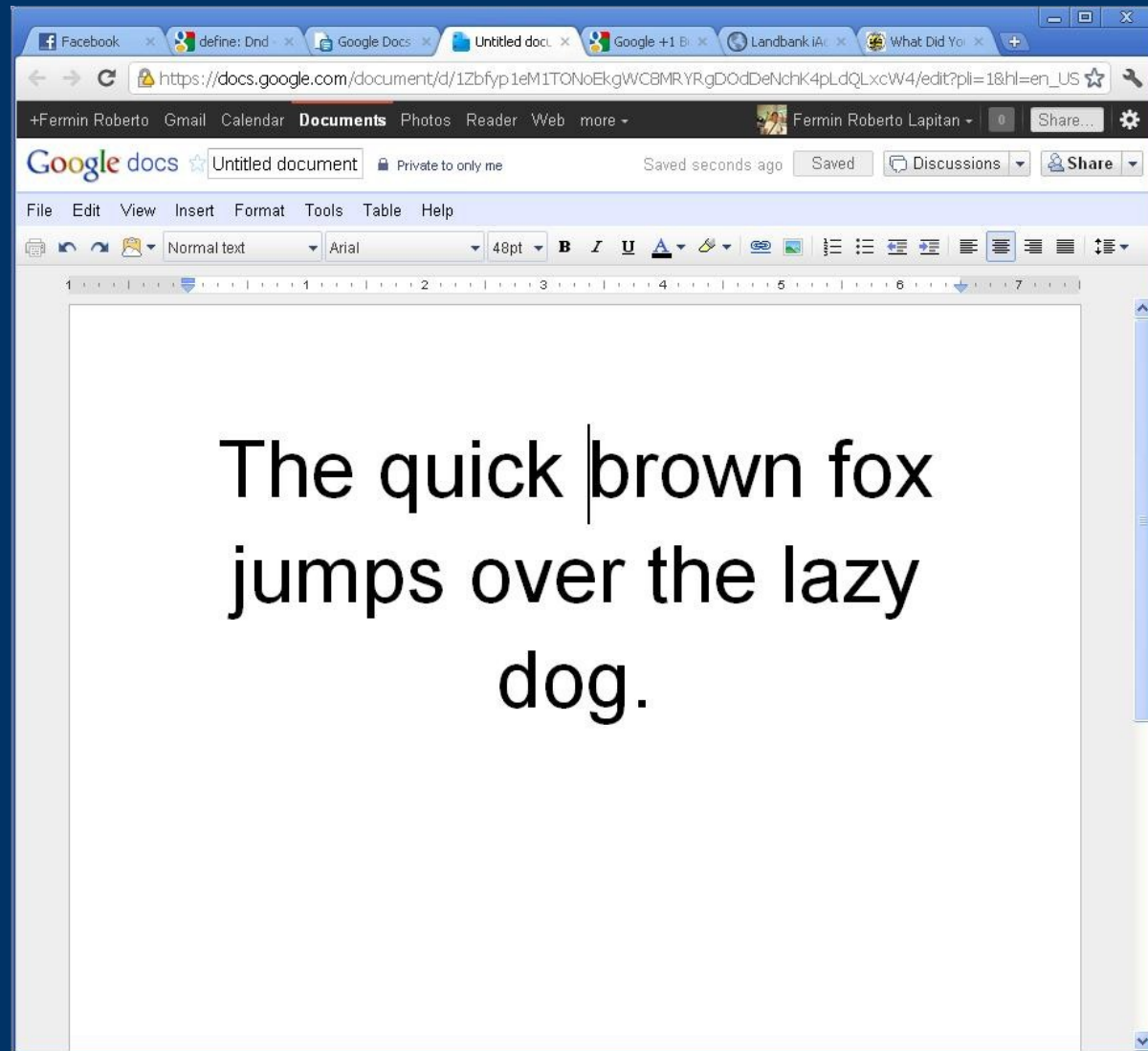
Choose Format B I U F T T G A Align Insert Delete Wrap Text Merge across

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1																			
2																			
3																			
4																			
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40																			

Add Sheet Sheet1 V1.1.4d

Done

Example: Online Word Processor (Google Docs)



Example: Online Retail/Auction eBay

My eBay Summary - Mozilla Firefox

File Edit View Go Bookmarks Tools Help 8.9 minutes saved

http://my.ebay.com/ws/eBayISAPI.dll?MyeBay

Online Spreadsheet Search RSS New Torrents [375 new] E-mail Notifier Online Spreadsheet

home pay site map Start new search Search Advanced Search

Buy Sell My eBay Community Help

Hello, master_dulds! (Sign out.) | You have 3 alerts.

Java™ TECHNOLOGY POWERED BY Sun

Home > My eBay > Summary

My eBay

My eBay Views

- My Summary
- All Buying
 - Watching
 - Bidding
 - Best Offers
 - Won (3)
 - Didn't Win
 - Personalized Picks
- Start Selling!
- Want It Now
- My Messages
- All Favorites
 - Searches
 - Sellers
 - Categories
- My Account
 - Personal Information
 - Addresses
 - Preferences
 - Feedback
 - PayPal Account
 - Subscriptions
- My Reviews & Guides

Hello, [master_dulds](#) (0) ☺

Earn rewards on every purchase
PayPal Plus Credit Card

My Summary

Customize Summary

💡 eBay Wiki - [Write an Article to share what you know!](#)

My Messages

⚠️ I have [3 alerts](#).

[Back to top](#)

Buying Reminders (Last 31 days)

⭐ I need to leave feedback for [3 items](#).

[Back to top](#)

Buying Totals

[Back to top](#)

Bidding:	Bidding on: 0	Winning: 0	Winning cost: \$0.00
Won:	Quantity: 3	Amount: \$104.90	(Last 31 days)

[Back to top](#)

Items I've Won (3 items)

Customize Display

Show: All | Awaiting Payment (0) | [Awaiting Feedback](#) (3)

Period: Last 31 days

Example: Amazon

Facebook define: Dnd - H Google Docs - Amazon.com: Google +1 But: Landbank iAcce What Did You B

www.amazon.com

amazon.com Hello. Sign in to get personalized recommendations. New customer? [Start here.](#) [Your Amazon.com](#) [Today's Deals](#) [Gifts & Wish Lists](#) [Gift Cards](#) [FREE 2-Day Shipping: See details](#) [Your Digital Items](#) [Your Account](#) [Help](#)

Shop All Departments Search All Departments GO Cart Wish List

- Unlimited Instant Videos
- MP3s & Cloud Player
16 million songs, play anywhere
- Amazon Cloud Drive
5 GB of free storage
- Kindle
- Appstore for Android
Get Fieldrunners HD free today
- Digital Games & Software
- Audible Audiobooks
- Books
- Movies, Music & Games
- Electronics & Computers
- Home, Garden & Tools
- Grocery, Health & Beauty
- Toys, Kids & Baby
- Clothing, Shoes & Jewelry
- Sports & Outdoors
- Automotive & Industrial

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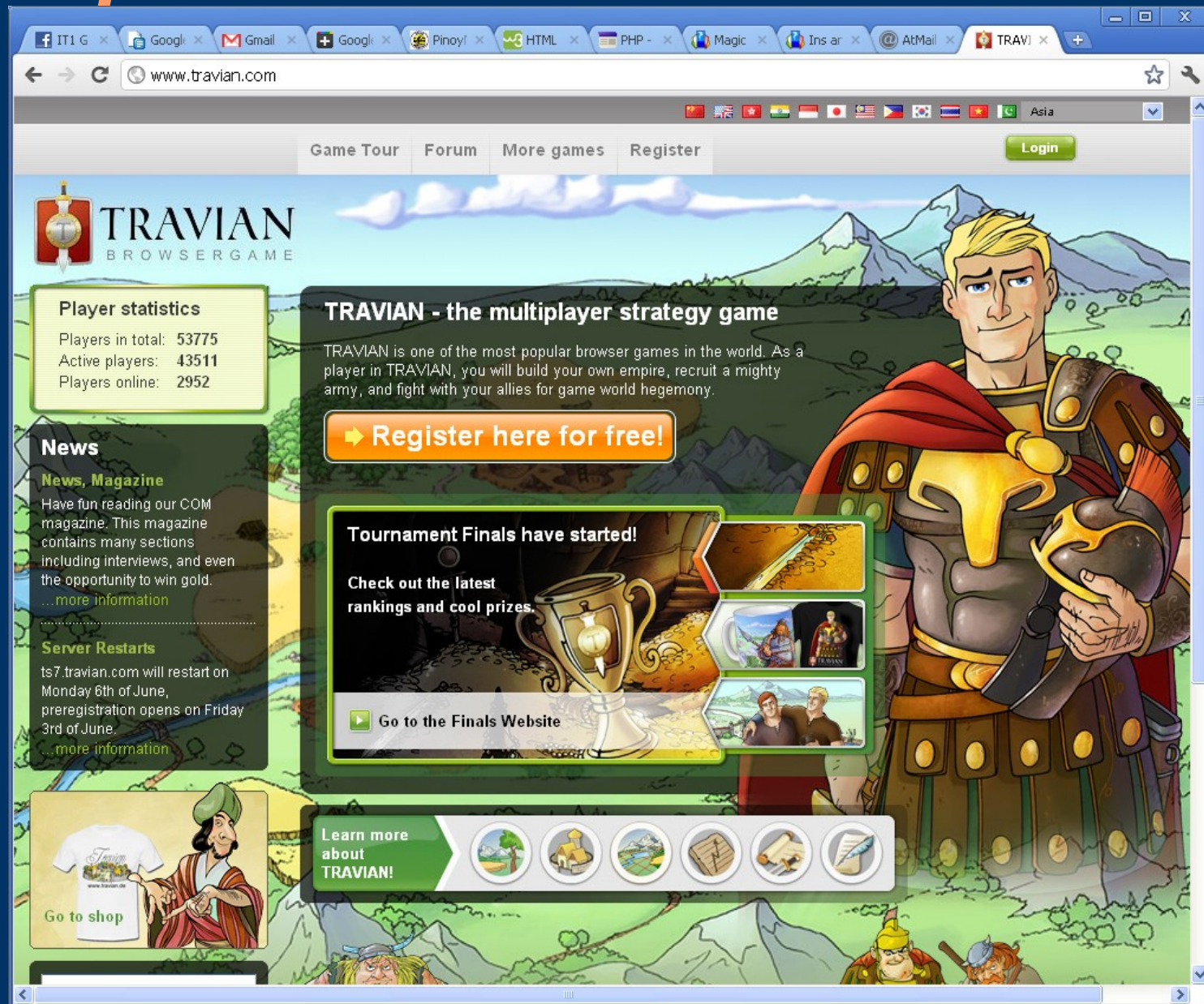
Digital Cameras Bestsellers

- Canon EOS Rebel T3i
18 MP CMOS...
- Canon PowerShot ELPH 300 HS 12 MP...
- Canon PowerShot A490 10.0 MP Digital...
- Sony Cyber-Shot DSC-W530 14.1 MP...

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Example: MMOG



Example: Online Banking

The screenshot shows a web browser window with multiple tabs open, including Facebook, Google Docs, Amazon.com, iGoogle, and Landbank iAccess. The address bar shows the URL <https://www.lbpiaaccess.com/Default.asp>. The website header features the Landbank iAccess logo with the tagline "RETAIL INTERNET BANKING THE CONVENIENCE OF ONLINE BANKING". Below the header, there are navigation links: [About Us](#), [FAQs](#), [Security Policy](#), [iAccess Features](#), and [Find Us](#).

Are you interested to enroll online?
This facility is available to existing LANDBANK ATM account holders.
[Enroll now!](#)

Do you need assistance?
Please call the LANDBANK Helpdesk at 405-7800 (1-800-10-405-7000 for domestic toll-free calls) or you may send us your e-mail message at lbpiaaccess@mail.landbank.com

Use your LANDBANK cards to pay for purchases of up to a maximum of P100,000 per day in department stores, groceries, and boutiques through the Point-of-Sale (POS) terminals. POS enables cashless shopping by auto debiting your account. LANDBANK is interconnected with Expressnet, Megalink and BancNet POS systems nationwide.

Just present your LANDBANK Cards in over 20,000 merchants in the Philippines and enjoy greater shopping convenience.

Enjoy convenient cashless shopping with your ATM, e-Card or Cash Card!

[Click here to view the BSP Circular FAQs](#)

iAccess Update!!!
Effective **January 24, 2011**, iAccess services such as balance inquiry, fund transfer, checkbook requisition and bills payment shall be available starting **12:00 MN until 10:00 PM.**

Input your iAccess ID and Password
iAccess ID :
Password : 
[Log in](#) [Reset](#)

Important
*Password is case sensitive.
*For your security, you have a limited number of attempts to supply the correct information.
*Do not forget to logout iAccess once you completed your transaction.

[Forgot your Password?](#)

Upon logon, I hereby agree to its [Terms and Conditions](#).
Click [here](#) to download enrollment form.


[Click to verify](#)

Web Applications

- Required Reading:
 - Graham, Paul. **The Other Road Ahead**,
<http://www.paulgraham.com/road.html>
 - Spolsky, Joel. **How Microsoft Lost the API War**,
<http://www.joelonsoftware.com/articles/APIWar.html>

Building User Interfaces in Web Applications

- The Usual Suspects
 - HTML elements: hyperlinks, divs, form elements, etc.
 - CSS: for advanced element stylings
 - Javascript: for UI controls logic, event handling
- “*Rich Client*” Approach*
 - Use Java
 - Use Flash

Building User Interfaces in Application

- Buzzword: DHTML
 - Dynamic HTML
 - Combination of HTML, CSS and Javascript
 - *Microsoft* spawned buzzword.



Web Form Elements (tags)

- According to the Basic Forms Module in XHTML
 - `<form>`
 - `<input>` - for creating textfields, password fields, radio buttons, buttons, checkboxes
 - `<label>`
 - `<select>` - for single select, multiple select drop down boxes or lists
 - `<option>` - used in conjunction with select.
 - `<textarea>` - for text areas

Web Forms Elements

- Forms Module
 - All elements in Basic Forms Module PLUS
 - `<button>`
 - `<fieldset>` - grouping element
 - `<legend>` - annotation element
 - `<optgroup>` - grouping element for options

XHTML Modularization, read:

<http://www.webstandards.org/learn/articles/askw3c/dec2003/>

HTML 4.01/XHTML 1.0 Form Elements (Controls)

- Form
- Buttons
 - Submit : when *activated* will submit a form.
 - Reset: *reset* all controls to initial values
 - Push buttons: no default behaviour, requires script programming
- Checkboxes
- Radio Buttons
- Text Fields/Password Fields
- Menus/Drop Down Lists/Selection Lists, Options, Option Groups
- Text Area
- File Select
- Hidden Controls
- Labels
- Fieldset
- Legend

Creating Forms

```
<form name="MyForm"
      action="formprocessing.cgi"
      method="get|post"
      enctype="application/x-www-form-
              urlencoded">
  <!-- Form controls here -->

</form>
```

Name of the form

Page/CGI the form values will be submitted to.

HTTP Method

Creating Forms

- The <form> tag groups related form controls.
- It gives information on where the form values will be forwarded/submitted to (action attribute) and how to pass on the data (the method attribute).
 - ...among other things.

Creating Forms With File Select (E.g. Uploading A File)

```
<form method="post"  
  action="processfile.php"  
  enctype="multipart/form-data"  
  accept="image/gif">  
  
  <input type="file" name="upload"/>  
  <!-- Other elements-->  
</form>
```

Enctype required


Limits what can types of
files can be submitted,
May be a comma delimited
List of possible MIME types.

Use the above form attributes when you have
A file select control in the form

Form Events

```
<form ...  
    onsubmit="script"  
    onreset="script"  
>
```

```
</form>
```



Form specific events, in addition to the intrinsic events
Define client side scripts to be executed upon realization
Of the events, namely when the form is submitted AND
When the form is reset.

Form Methods

- GET : When **get** method is used, form data is sent **WITH** the URL in HTTP Request.
 - E.g. BROWSER appends data to the action URL
processform.php?name1=value1&name2=value2&....
 - It **CAN BE BOOKMARKED** by browsers so you don't need to input data in the form again.
 - **DO NOT USE GET** when forms submit passwords **OR** you have too many fields and values to submit.

E.g.

```
GET processform.php?n1=v1&n2=v2 HTTP/1.1
```

```
Host: http://myserver.com
```

```
...
```

Form Methods

- POST: Form data is sent in the BODY of the HTTP Request
 - Preferable way of sending form data.

E.g.

```
POST processform.php HTTP/1.1
```

```
... Other headers here ...
```

```
n1=v1&n2=v2&n3=v3&n4=v4...
```

HTTP Request
Body



What gets Submitted

- When a form is primed for submission, the browser gets the names of all the controls and their values and arrange them into name=value pairs delimited by “&”. Some controls may cause more than one pair to have the same name (e.g. for checkboxes, textfields with the same name).
 - E.g. choice=1&choice=2&name=John

The <input> tag.

- Can be used to create buttons (push, submit and reset), checkboxes, radio buttons, text fields, password fields, file select control, image control.
- Example (Proper) Minimal Declaration

```
<input type="text"  
      name="field1" />
```

ALWAYS put a **name**
to your form controls.



Creating Text Fields/Password Fields

```
<input type="text"  
      name="text1"
```

```
      value="Value Here"
```

```
      size="30"
```

```
      maxlength="20" />
```

← Initial value

← Visible chars

← Maximum chars
That can be typed

Label

The diagram shows a white rectangular box containing two input fields. The top field is labeled 'Text Field : ' and contains the text 'Value Here'. The bottom field is labeled 'Password : ' and contains ten asterisks. Arrows point from the text 'Text Field : ' to the label 'Label' on the left, and from the text 'Password : ' to the annotation 'If type="password"' on the right. An arrow points from the text 'Value Here' to the annotation 'Initial value' above the code. Another arrow points from the text 'maxlength="20"' to the annotation 'Maximum chars That can be typed' on the right. A third arrow points from the text 'size="30"' to the annotation 'Visible chars' on the right.

← If type="password"

Creating Radio Buttons/Checkboxes

```
<input  
  type="radio" name="gender"  
  value="M"  
  checked="true"/> Male  
<input  
  type="radio" name="gender"  
  value="F" /> Female
```



Gender : ☒ Male ☐ Female

Radio group = 1 choice only
Checkbox group = multiple choices

Radio and checkbox groups must have
the same **name**.

value attribute important for each radio
Or checkbox

checked attribute imply pre-selection.

```
<input type="checkbox" name="choices"  
  value="1" checked="true"/> Firing Squad  
<input type="checkbox" name="choices"  
  value="2" checked="true" /> Electric  
  Chair  
<input type="checkbox" name="choices"  
  value="3" /> CMSC 100 First  
  Long Exam
```



Execution Method : ☒ Firing Squad ☒ Electric Chair ☐ CMSC 100 First Long Exam

Creating File Select

```
<input type="file"  
      name="f_upl"/>
```

Comes with its own browse button that will open a file selection (File Open) dialog.

A screenshot of a web form element. It consists of a text label "File to Upload/Submit:" followed by a text input field and a "Browse..." button. The entire form is enclosed in a light gray border. An arrow points from the text "Comes with its own browse button" to the "Browse..." button.

Requires **enctype="multipart/form-data"** on the enclosing `<form>` tag.

Hidden Fields

```
<input type="hidden"  
      name="secret_field"  
      value="883920030" />
```

No visual representation/rendering. Allows information to be passed or stored between client and server using forms that may be otherwise be lost due to the **stateless nature** of HTTP.

Buttons

- Can be created using `<input>` or `<button>` tags. (Let's use `<input>` as our standard.)

```
<input type="submit"
       name="action" />
```

```
<input type="submit"
       name="action"
       value="Submit" />
```

```
<input type="reset" />
```

```
<input type="reset"
       value="Clear Fields" />
```

```
<input type="button"
       name="b1" />
```

```
<input type="button" name="b2"
       value="Push"
       onclick="script" />
```



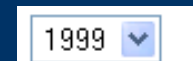
Buttons

- `<input type="image" src="...">`
 - Graphical submit button, src attributes indicate URL of image to use.
 - X-value and y-value coordinates in the image where the “click” occurred is passed to the server.
- `<button>` tag offers more graphical flexibility.
- `<input type="button">` does not have any default action. It must be defined using client-side scripting.

Menus/Lists/Dropdown Boxes

- Menus/Dropdown (Single Selection)

```
<select name="year">  
  <option>1999</option>  
  <option>2000</option>  
  <option>2001</option>  
  <option>2002</option>  
</select>
```



A single selection dropdown menu with a white background and a blue border. The text '1999' is displayed in the center, and a small blue downward-pointing arrow is on the right side.

- Single Selection, More Than One Visible Option

```
<select name="year" size="3">  
  <option>1999</option>  
  <option>2000</option>  
  <option>2001</option>  
  <option>2002</option>  
</select>
```



A list box with a white background and a blue border. It contains three options: '1999', '2000', and '2001'. The '1999' option is highlighted with a blue background. On the right side, there are three small blue icons: an upward arrow, a list icon, and a downward arrow.

Menus/Lists

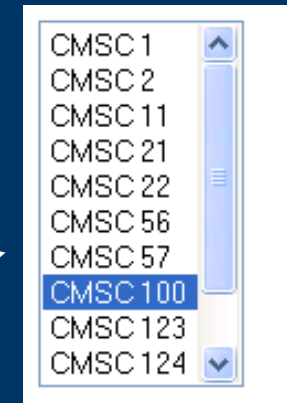
Multiple Selection through
Shift+Click or Ctrl+Click

- Multiple Selection Lis

```
<select name="subjects" size="10"  
  multiple="true">  
  <option value="1">CMSC 1</option>  
  <option value="2">CMSC 2</option>  
  <option value="3">CMSC 11</option>  
  <option value="4">CMSC 21</option>  
  <option value="5" >CMSC 22</option>  
  <option value="6">CMSC 56</option>  
  <option value="7">CMSC 57</option>  
  <option value="8" selected="true">CMSC  
    100</option>  
  <option value="9">CMSC 123</option>  
  <option value="10">CMSC 124</option>  
  <option value="11">CMSC 125</option>  
  <option value="12">CMSC 127</option>  
</select>
```

↑
value

↖
Label

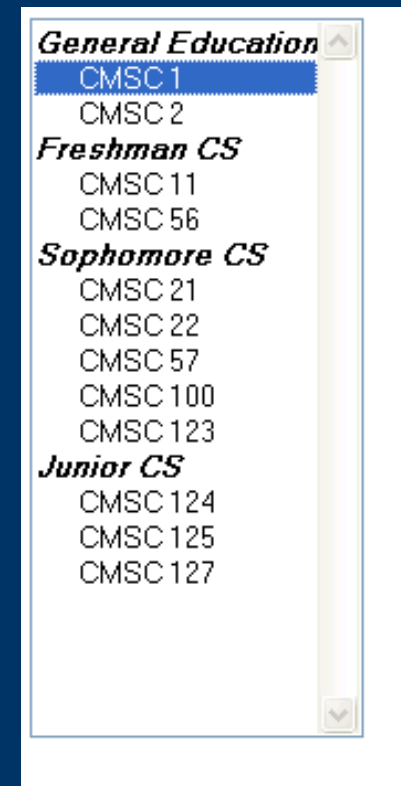


Preselection

If **value** attribute exists for a selected option, it will be the Submitted data otherwise the label of the option will be submitted

Menus/Lists With Option Groupings

```
<select name="subjects" size="20" multiple="true">
  <optgroup label="General Education">
    <option value="1">CMSC 1</option>
    <option value="2">CMSC 2</option>
  </optgroup>
  <optgroup label="Freshman CS">
    <option value="3">CMSC 11</option>
    <option value="6">CMSC 56</option>
  </optgroup>
  <optgroup label="Sophomore CS">
    <option value="4">CMSC 21</option>
    <option value="5">CMSC 22</option>
    <option value="7">CMSC 57</option>
    <option value="8" selected="selected">CMSC
      100</option>
    <option value="9">CMSC 123</option>
  </optgroup>
  <optgroup label="Junior CS">
    <option value="10">CMSC 124</option>
    <option value="11">CMSC 125</option>
    <option value="12">CMSC 127</option>
  </optgroup>
</select>
```




Text Area

```
<textarea  
  name="message"  
  rows="8"  
  cols="35">
```

Your Message Here

```
</textarea>
```



Your Message Here

Misc Form Elements

- `<label>` Creates labels for controls
 - E.g. `<label for="lname">Name : </label>`
- `<fieldset>` Grouping for controls and labels within form.
- `<legend>` allows assigning captions to fieldsets and controls.

Attributes For Control Events and Other Attributes

- onclick, ondblclick, onmousedown, onmouseup, onmouseover, onmousemove, onmouseout, onkeypress, onkeydown, onkeyup
 - Mouse and key events.
 - Each of these attributes are applicable to controls and must contain a script (i.e. Javascript inline script or function call).
 - I.e. `<input type="text" onmouseover="doThis()".../>`
- onfocus, onblur
 - Control events activated when focusing in and out of a control.
- onselect
 - Occurs when text is selected in `<input>` & `<textarea>`
- onchange
 - Occurs when a control loses focus and has changed value.

Limitations of Web Forms

- Offers limited UI features.
- Limited UI Interactivity.
- No support for advanced UI processes, e.g. Drag and Drop (DnD) and advanced UI controls.
- Use CSS to modify look and feel.



Next Generation Web Forms

- Web Forms 2.0
 - HTML 4.0 Forms Chapter is informally known as Web Forms 1.0
 - Web Forms 2.0 is an enhancement of the “previous” version featuring data typing, new events, ease in scripting, etc.
- XForms
 - Next generation web forms.
 - XML Based
 - Feature rich forms.
- HTML 5 Forms

Reading Assignment!

http://www.w3schools.com/html5/html5_form_input_types.asp

CMSC 100 Official References

- HTML 4.01 Specification
 - <http://www.w3.org/TR/REC-html40/>
 - + Other Related W3C Recommendations esp. XHTML with focus on Web Forms/Form Modules.