

Forms

Collecting Information in a Usable Way

Washington University in St. Louis
Webster University

R. Scott Granneman

© 2013 R. Scott Granneman
Last updated 20131202
You are free to use this work, with certain restrictions.
For full licensing information, please see the last slide/page.

1

Intro

2

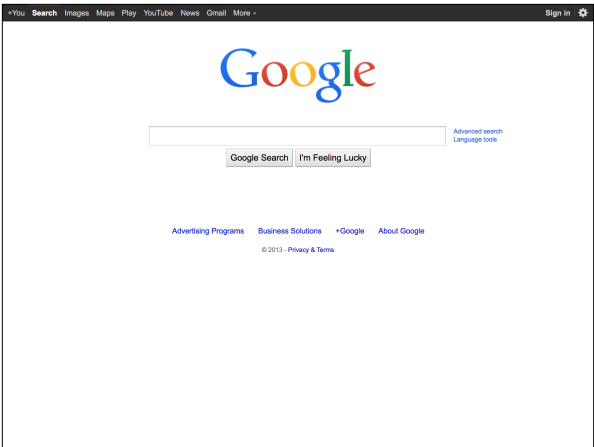
You use forms all the time

- » Search
- » Login
- » Account creation
- » Submit information
- » Shopping
- » Signing up for mailing list

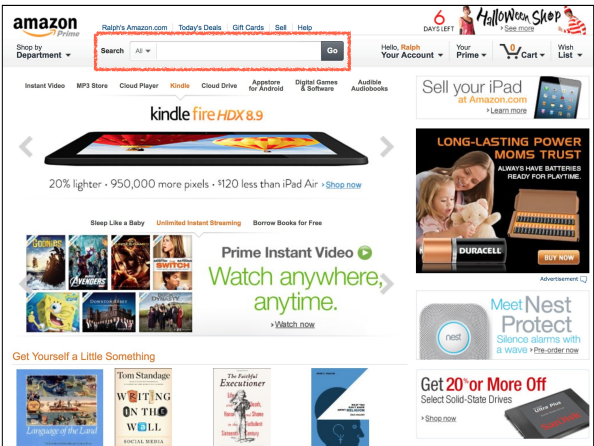
3

Forms in Daily Use

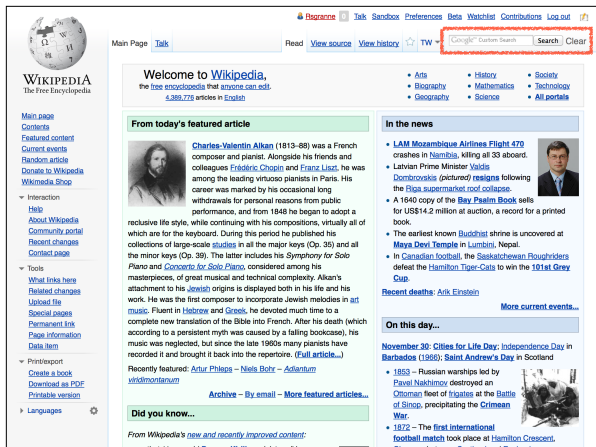
4



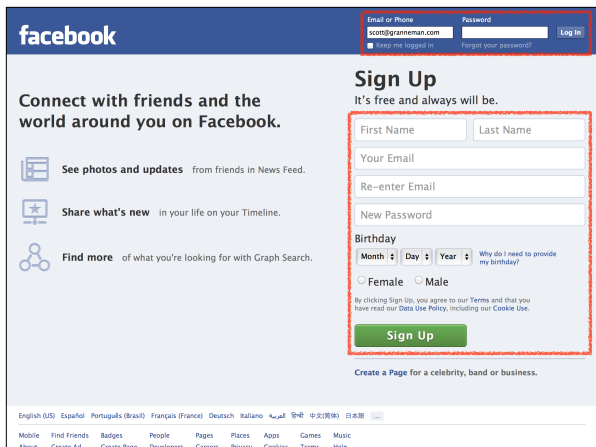
5



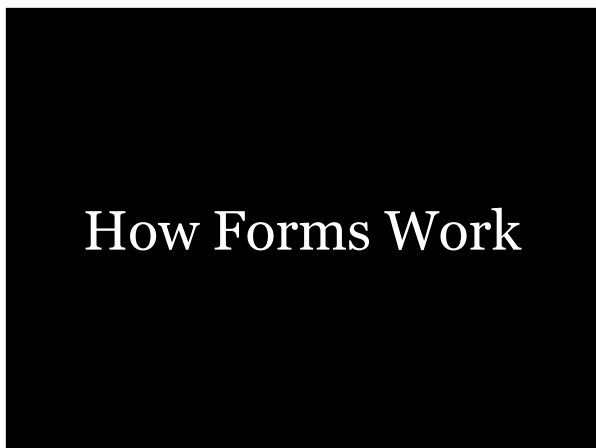
6



7



8



9

10

When you submit a form,
data is sent from your browser
to the server
in `name=value` pairs

`https://www.google.com/
search?q=scott+granneman`

`q` is the `name`
`scott+granneman` is the `value`

11

1. User fills in form & presses Submit
2. Name/Value pairs sent to server
3. Server processes submitted info
4. Server creates a results page for user to see (optional)

Thank you for voting for Curly! If you won, we'll notify you.

12

Form Containers

13

`<form>`

14

Contains form controls

15

```
<form action="http://  
www.server.com/subscribe.php"  
method="get" id="subscription">
```

action: program that receives form data
& processes it

method: how form is sent
(2 methods: `get` & `post`)

id: uniquely identifies form
for scripting & CSS

16

```
method="get"
```

Values from form
are added to the end of the URL
specified in the `action` attribute

Good for:

- » Short forms (like search)
- » Retrieving data from a database
& not adding or deleting

If `method` is not specified, `get` is used

17

```
method="post"
```

Values from form
are sent in HTTP headers

Good for:

- » Allowing users to upload files
- » Long forms
- » Sensitive data, like login forms
- » Adding data to, or deleting data from,
a database

18

For testing & learning,
you can use a `mailto` for the `action`

```
<form method="post"
action="mailto:you@domain.com?
subject=Form_Test"
enctype="text/plain">
```

Completely insecure, so use with care!

19

<fieldset>

20

Group related form controls together

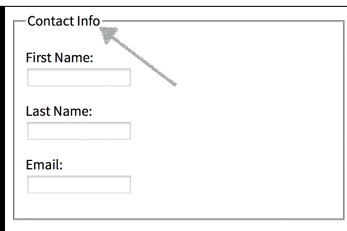
Border can be adjusted with CSS

21

```
<fieldset>
  <p>
    <label>
      First Name:
      <br><input type="text" name="first-name">
    </label>
  </p>
  <p>
    <label>
      Last Name:
      <br><input type="text" name="last-name">
    </label>
  </p>
  <p>
    <label>
      Email:
      <br><input type="text" name="email">
    </label>
  </p>
</fieldset>
```

<legend>

22



23

Caption at top of `fieldset`
that identifies
the purpose of those form controls

```
<fieldset>
  <legend>Contact Info</legend>
  <p>
    <label>
      First Name:
      <br><input type="text" name="first-name" />
    </label>
  </p>
  <p>
    <label>
      Last Name:
      <br><input type="text" name="last-name" />
    </label>
  </p>
  <p>
    <label>
      Email:
      <br><input type="text" name="email" />
    </label>
  </p>
</fieldset>
```



24

25

`<label>`

26

Caption for form control

Can be placed in 2 ways

1. Use the `for` attribute
2. Place form control inside `<label>`

27

Use the `for` attribute,
whose value
must match the form control's `id`

```
<label for="first-name">  
  First Name:</label>  
<input type="text"  
name="first-name" id="first-name">
```

28

The easier method
is to
place the form control inside `<label>`

29

```
<p>
  <label>
    First Name:
    <br><input type="text" name="first-
name">
  </label>
</p>
<p>
  <label>
    Last Name:
    <br><input type="text" name="last-name">
  </label>
</p>
<p>
  <label>
    Email:
    <br><input type="text" name="email">
  </label>
</p>
```

30

Big advantage of `<label>`:
clickable area includes the label
as well as the form control

Without a `<label>`,
users must click exactly on the checkbox

```
<p>
  Favorite zombie movie:
</p>
<p>
  <input type="checkbox" name="zombies"
    value="Night_of_the_Living_Dead"> Night of
    the Living Dead
</p>
<p>
  <input type="checkbox" name="zombies"
    value="Dawn_of_the_Dead"> Dawn of the Dead
</p>
<p>
  <input type="checkbox" name="zombies"
    value="Day_of_the_Dead"> Day of the Dead
</p>
```

Favorite zombie movie:

☒ Night of the Living Dead

☐ Dawn of the Dead

☐ Day of the Dead

31

With a `<label>`,
users can click on the checkbox *or* the text

```
<p>
  Favorite zombie movie:
</p>
<p>
  <label><input type="checkbox" name="zombies"
    value="Night_of_the_Living_Dead"> Night of the
    Living Dead</label>
</p>
<p>
  <label><input type="checkbox" name="zombies"
    value="Dawn_of_the_Dead"> Dawn of the Dead
  </label>
</p>
<p>
  <label><input type="checkbox" name="zombies"
    value="Day_of_the_Dead"> Day of the Dead</label>
</p>
```

Favorite zombie movie:

☒ Night of the Living Dead

☐ Dawn of the Dead

☐ Day of the Dead

32

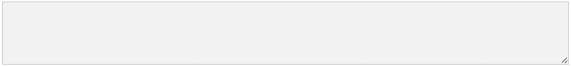
Basic Form Controls

33

Text

34

Tell Me About Yourself

A screenshot of a web form. At the top, there is a label "Tell Me About Yourself". Below the label is a rectangular text area with a light gray background and a thin border. The text area is empty.

35

Text area

Multiple lines of text

- » Messages
- » Comments

36

```
<textarea name="about" cols="40"
  rows="4"></textarea>
```

name: identifies the form control

cols: width of text area in characters
(Deprecated—use CSS instead)

rows: vertical rows of text area
(Deprecated—use CSS instead)

37



Some browsers
(like Safari)
allow users to resize text areas manually

38

```
<textarea name="about" cols="40"
rows="4">Tell me about yourself...
</textarea>
```

If you put text
between `<textarea>` & `</textarea>`,
it appears in the form element
& is submitted unless user deletes it

Users will forget

39

Better to use a form label

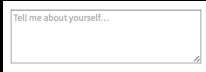
```
<label for="explanation">Tell me about
yourself...</label>
<textarea name="about"
id="explanation">
</textarea>
```

OR

```
<label>Tell me about yourself...
<br><textarea name="about">
</textarea></label>
```

Or use the HTML5-only
`placeholder` attribute

```
<textarea placeholder="Tell me  
about yourself..."></textarea>
```

A screenshot of a web browser showing a text area with a light grey border. Inside the text area, the text "Tell me about yourself..." is displayed in a light grey font, serving as a placeholder.

Grey text disappears automatically
when a user clicks in the text area & types,
& reappears
if the user clicks out of the text area
without filling anything in first

40

`placeholder`
works with all text form controls

41

Joint Donor

Please provide partner/spouse name if making a joint donation.

First Name: Last Name:

42

Text input

For single lines of text
» Names
» Cities
» Email addresses

```
<input type="text" name="username"
      size="15" maxlength="30">
```

type: kind of input,
in this case a single-line text field

name: identifies the form control

size: visible size of field
(Deprecated—use CSS instead)

maxlength: maximum
number of characters users can enter
(if left off, no limits)

43

```
<p>
  <label>
    First Name:
    <br><input type="text" name="first-name">
  </label>
</p>
<p>
  <label>
    Last Name:
    <br><input type="text" name="last-name">
  </label>
</p>
<p>
  <label>
    Email:
    <br><input type="text" name="email">
  </label>
</p>
```

44

Don't use text input
when you should use text area

45

46

Tell Us About Yourself

Name

E-mail Address

Preferred contact number: ☒ Home ☒ Mobile ☒ Office

Best time call: ☐ AM ☐ PM

Please provide your suggestions to enhance Online Banking.
 Please do not include personal account information here. Use our Secure message section of Online Banking to send account-related questions.

47

.....

Password

Text input, but with content masked by •

This is not secure by default!
 Data is not sent encrypted to the server
 unless you use SSL/TLS (HTTPS)

48

```
<input type="password"
name="password" size="25"
maxlength="128">
```

type: kind of input,
 in this case a single-line text field

name: identifies the form control

size: visible size of field
 (Deprecated—use CSS instead)

maxlength: maximum
 number of characters users can enter
 (if left off, no limits)

49

Choices

50

Radio buttons

Select one option only

Be careful—there's no way
for users to unselect a radio button

51

```
<input type="radio" name="stooge"
      value="Moe">
<input type="radio" name="stooge"
      value="Curly">
```

type: kind of input,
in this case a single-line text field

name: identifies the form control
(all related radio buttons
must have same name)

value: input submitted to the server

<p>
Favorite Stooge:
</p>
<p>
<input type="radio" name="stooge"
value="Larry"> Larry
</p>
<p>
<input type="radio" name="stooge"
value="Moe"> Moe
</p>
<p>
<input type="radio" name="stooge"
value="Curly"> Curly
</p>

Favorite Stooge:

☐ Larry

☐ Moe

☐ Curly

52

Don't let radio button labels wrap

53

Nikon ... At the heart of the image...

Join the Nikon Community Now!

Email Address:

Please carefully check your email address entry.
To ensure your email filter does not block messages from us, add our "From" address (nikon@nikon.net) to your Address Book.

ZIP Code:

☐ Yes ☒ No Send me education based messages that will help me get the most out of my photography and sport optic equipment including helpful tips and lessons, inspirational articles and other related educational messages.

☐ Yes ☒ No Send me the Nikon corporate newsletter that will keep me up to date on all the latest company news including newly released products, rebates and other relevant company information.

☐ Yes ☒ No Send me special offers from Nikon marketing partners. Please note that these messages will come from Nikon, and at no point will Nikon will share or sell your contact information with these third parties.

☐ Yes ☒ No If you would prefer to **not** receive additional email messages from Nikon, please select **No**.

54

Forms.key - December 4, 2013

Don't cram radio buttons together

55

The screenshot shows the eClinicalWeb interface. On the left is a sidebar menu with categories: Questions/Concerns, Messages, Account Information, Intake Forms, Review, Appointments, and Requests. The main content area is titled 'Patient History Questions' and contains several sections: Dermatology (bruising, rash, lumps, keloid formation), Constitutional (weight change, loss of appetite, fever, fatigue), and Ophthalmology (glaucoma, glasses/contacts, disease or injury). Each question has radio buttons for 'Yes' and 'No'.

56

Favorite Zombie Movies

<input type="checkbox"/> Night of the Living Dead	<input type="checkbox"/> Zombieland
<input type="checkbox"/> Dawn of the Dead	<input type="checkbox"/> The Horde
<input type="checkbox"/> Day of the Dead	<input type="checkbox"/> Pontypool
<input type="checkbox"/> Zombi 2	<input type="checkbox"/> 28 Days Later
<input type="checkbox"/> Shaun of the Dead	<input type="checkbox"/> 28 Weeks Later

57

Checkboxes

Select—& unselect—one or more options

58

```
<input type="checkbox" name="zombies"
value="Night_of_the_Living_Dead">
<input type="checkbox" name="zombies"
value="Dawn_of_the_Dead">
```

type: kind of input,
in this case a single-line text field

name: identifies the form control
(all related checkboxes must have same name)

value: input submitted to the server

59

```
<p>
  Favorite zombie movies:
</p>
<p>
  <label><input type="checkbox" name="zombies"
value="Night_of_the_Living_Dead"> Night of the
Living Dead</label>
</p>
<p>
  <label><input type="checkbox" name="zombies"
value="Dawn_of_the_Dead"> Dawn of the Dead
</label>
</p>
<p>
  <label><input type="checkbox" name="zombies"
value="Day_of_the_Dead"> Day of the Dead</label>
</p>
```

Favorite zombie movies:

- ☐ Night of the Living Dead
- ☐ Dawn of the Dead
- ☐ Day of the Dead

60

Feedback

We would love to know what brought you to our site today. Please take a moment to let us know how you learned about this event. Your feedback is very helpful.

What prompted your donation today ✓ Choose...

- Received Mailing
- HFHSL Website
- Habitat Happenings E-Newsletter
- Advertisement
- Online Promotion or Social Media
- Other...

Select list
(AKA *drop-downs*)

Select one option from a list

61

```
<select name="stooge">
  <option value="larry">Larry</option>
</select>
```

name: identifies the form control

option: specific choice for users

value: input submitted to the server

62

```
<p>
  Favorite Stooge:
</p>
<select name="stooge">
  <option value="larry">Larry</option>
  <option value="moe">Moe</option>
  <option value="curly">Curly</option>
</select>
```

Favorite Stooge:

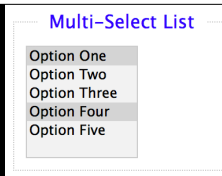
☒ Larry
☐ Moe
☐ Curly

63

Select lists are similar to radio buttons
in that users can only make 1 choice

If users need to see all options
at the same time,
radio buttons are better

If you have a very long list of options
(such as a list of states or countries),
select lists are better



64

Multi-Select List

Select multiple options from a list

Don't use this form control,
as it's very confusing for users

```
<select name="stooges" size="4"
multiple="multiple">
  <option value="larry">Larry</option>
  <option value="moe">Moe</option>
  ...
</select>
```

65

name: identifies the form control

size: number of options to show at once
(turns select list into multi-select list)

multiple: allow users to select multiple options
(Command on OS X & Ctrl on Windows & Linux)

option: specific choice for users

value: input submitted to the server

Favorite Stooges:
(Hold down Ctrl or Command to select multiple stooges)



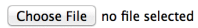
66

```
<p>
  Favorite Stooges:
  <br><small>(Hold down Ctrl or Command
    to select multiple stooges)</small>
</p>
<select name="stooges" size="4"
multiple="multiple">
  <option value="larry">Larry</option>
  <option value="moe">Moe</option>
  <option value="curly">Curly</option>
  <option value="shemp">Shemp</option>
  <option value="joe">Joe</option>
  <option value="curly_joe">Curly Joe</option>
</select>
```

67

Uploads

68



File select

Choose file on your computer
to upload to a server

Common with
Content Management Systems

Difficult to style with CSS,
so don't even try

69

```
<input type="file" name="upload">
```

`type`: kind of input,
in this case a file select field

`name`: identifies the form control

70

You must use
`method="post"`
to upload files

71

Submissions

72

A small, light gray rectangular button with rounded corners and a thin black border. The word "Submit" is written in a black, sans-serif font in the center of the button.

Submit button

Submit form to a server

Contact Info

First Name:

Last Name:

Email:

Subscribe Now!

```
<input type="submit"
value="Subscribe Now!">
```

type: kind of input,
in this case a submit button

value: text that appears on button

73

The Submit button goes on the right

In fact, it's really the only button you need

Multi-page forms aren't very usable
& users don't really like them

74

AMERICAN FAMILY INSURANCE

Get a Quote | Find an Agent | About Us | Careers | Contact Us | Español

Products | Learn & Plan | Claims | Payments | My Account

Need Help? 1.800.MYAMFAM (592.6326)

Overview | Saved Quotes | **Online Billing** | Policies | Profile | Help | Log Out

Billing Account Summary

Payments

Make a Payment

View/Edit Payments

Automatic Payments

Financial Information

Set Up New Payment Method

View/Edit Payment Methods

Manage Billing Accounts

Due Date Reminder

Register Billing Account

Unregister Billing Account

Help

FAQs

Contact Billing

Enter Payment Information - Verification

Enter Payment | **Verify** | Confirm

Please verify that the information below is correct. If you need to make changes, click "Edit." To proceed, click "Submit."

Billing Account: 007-592-614-45

Payment Amount: \$551.00

Payment Method Name: MasterCard

Payment Date: 04/05/2010

Submit | Edit | Cancel

75

76

Inquiring Document: Ticket N48158283
 You have a total of 1 ticket(s) on your account.

The amount of the ticket entered is: **\$20.00**
 The total amount of your ticket(s) is: **\$20.00**

Please select from the following:

☒ I would like to pay for this ticket only.

<u>Ticket Number</u>	<u>Issue Date</u>	<u>Violation</u>	<u>Location</u>	<u>Amount</u>
N48158283	07/28/2010	STREET CLEANING	6400 ODELL	\$20.00
Total Payment:				\$20.00

77

First name
 Last name
 Street address
 City
 State
 Zip
 Phone
 E-mail
 Age (optional)
 Occupation (optional)
 Gender
 Marital Status
 Education
 Household Income
 How do you usually read *The Village Voice*?
 Would you like to receive a **Voice Card**? ☒ Yes

By submitting this entry, you agree to share your information with the sponsor of this giveaway.

No purchase necessary. You must include your name, address, and a valid e-mail address for your entry to be accepted. Winners will be picked at random and notified via email.

78

Actually, try to get all your buttons
 in the correct order

Overview
Saved Quotes
Online Billing
Policies
Profile
Help
Log Out

Billing Account Summary
Payments
Make a Payment
View/Edit Payments
Automatic Payments
Financial Information
Set Up New Payment Method
View/Edit Payment Methods
Manage Billing Accounts
Due Date Reminder
Register Billing Account
Unregister Billing Account
Help
FAQs
Contact Billing

Enter Payment Information

Enter Payment
Verify
Confirm

To make a payment, please complete the information below and click "Next."

* Indicates required information

Billing Account: 007-592-614-45
View Bill

Statement Date: 03/25/2010
Due Date: 04/21/2010

Payment Amount:

☐ Minimum Due \$45.99
☒ Account Balance \$551.00
☐ Other \$

Payment Method Name: MasterCard
View/Edit Payment Methods
Set Up New Payment Method

Payment Date: 04/05/2010

Next
Previous

Next then Previous?!

79

Reset
Submit

Reset button

Restore form to its original values

Do *not* use this except for testing!

Do *not* use this on live forms!

80

Contact Info
First Name:
Last Name:
Email:

Lose All Your Work!
Submit

```
<input type="reset" value="Lose All Your Work!">
```

type: kind of input, in this case a submit button

value: text that appears on button

81

82

If you do use a Reset button,
do *not* make it look like a Submit button

83

The screenshot shows a web form for UPS shipping. It contains several sections with input fields and buttons. Hidden fields are indicated by small blue squares with a plus sign. The form includes sections for payment information, account association, and pickup scheduling. At the bottom, there are 'Start Over' and 'Next >' buttons.

How would you like to pay?
Please enter your payment information below. The information you enter will be transmitted using a secure connection. Required fields are indicated with +.

Bill Shipping Charges to: +

Associate a Shipper's UPS Account ☐
Use Another UPS Shipper Account

UPS Account Number
V428E4 +

Account Name:
WebSanity +
Your descriptive name for this account

Country:
United States or Puerto Rico

ZIP Code
63117 +

Save Options for Account number:
Save As New Entry and Set As Default

Don't have a UPS Account?
[Open a UPS Account](#) (You will leave the shipping screens)

Would you like to schedule a pickup?
☐ Schedule a [UPS On-Call Pickup](#) - An additional fee may apply

☒ Review Shipping details, including price, before completing this shipment

84

Hidden fields

Users don't see them,
but developers use them
to add hidden values to forms

85

```
<input type="hidden" name="source"  
       value="google-ads">
```

`type`: kind of input,
in this case a hidden control

`name`: identifies the form control

`value`: input submitted to the server

86

Accessibility

87

For maximum accessibility:

- » Use fieldsets
- » Don't rearrange the order of fields
using CSS;
instead, let the order on screen
follow the order in HTML

88

Tips

89

Label Placement

90

Placing labels is important for usability

First name

Last name

Street address

City

State

Zip

Phone

E-mail

Age (optional)

Occupation (optional)

Gender ☐ Male ☐ Female

Marital Status ☐ Married ☐ Single

Education ☐ Pick one

Household Income ☐ Pick one

How do you usually read *The Village Voice*? ☐ Online ☐ Print

Would you like to receive a *Voice Card*? ☒ Yes ☐ No

By submitting this entry, you agree to share your information with the sponsor of this giveaway.

No purchase necessary. You must include your name, address, and a valid e-mail address for your entry to be accepted. Winners will be picked at random and notified via email.

91

If you're going to have labels on the left, you need to gutter-align them

mozypro

Admin Console

Configuration View all

Account Details

Name: WebSecurity (change)

Username: admin@websecurity.com (change)

Password: Current Password: New Password: Confirm Password: Submit cancel

Receive Many Email Notifications? Yes (change)

Receive Many Account Statements? No (change)

92

Cramming everything on one line makes it difficult to read

General rules of thumb

Above or to the left

- » Text inputs
- » Text areas
- » Select boxes
- » File uploads

To the right

- » Individual checkboxes
- » Individual radio buttons

93

94

Field labels on top
» Mobile

Field labels on left
» Desktop

95

Required

96

Clearly indicate what is required

Which
of these 4 fields
are required?
All of them?

By the way:
labels on
the top *and* bottom
are confusing

BECOME A MEMBER

Join the ACLU of Connecticut

Membership type *

☐ New Membership ☐ Renewal

Membership Level

☐ \$35 ☐ \$50 ☐ \$75 ☐ \$100 ☐ \$200

Other Amount

Note: Contributions to the ACLU of Connecticut are NOT tax deductible for charitable purposes. The ACLU of Connecticut is composed of two organizations, The American Civil Liberties Union of Connecticut and the ACLU Foundation of Connecticut. [Learn more...](#)

Member information

Name *

Prefix First Last Suffix

Company

Address *

Street Address

Connecticut

City State

ZIP Code

97

Inadequacies

98

Even today,
HTML forms lack 2 things:

- » Validation
- » Business logic

99

100

Validation

How do ensure that a user actually entered an email address?

HTML5 includes some validation, but it's not very robust

Still have to rely on server-side programming

101

Business logic

HTML forms don't include good mechanisms to match business logic

102

Habitat for Humanity
Saint Louis

CONTACT | SITE MAP | SEARCH

ReStore | Donate

ABOUT US | VOLUNTEER | SUPPORT US | HOME OWNERSHIP | CONSTRUCTION | NEWS & EVENTS | SUSTAINABILITY

Home > Support Us > How to Donate > Donate Online

DONATE ONLINE

Donation

Amount:

Matching Funds: [Not sure about Matching Funds?](#)

Tribute:

In this gift made in honor of, or in memory of, a friend or loved one?

Designation:

You may make a general donation to support our overall mission, or designate the gift for a more specific purpose.

Recurring Gift:

Choose to make a one-time gift or a monthly, quarterly or annual gift. Recurring gift subscriptions start on the first day of the following month.

Donor Information

First Name:

Last Name:

Card Number:

Expires: month... year...

Security Code:

Address:

City:

State:

ZIP:

Phone:

Email:

Joint Donor

Please provide partner/spouse name if making a joint donation.

Want to learn about more ways to support HFHSL?

- Consider Stock Donations
- Grading Donations of Materials
- Consider donating to Casa for Homes
- Plan Events & Fundraisers that benefit Habitat for Humanity Saint Louis
- Learn more about Matching Gifts

What a great way to connect with the community.

CONTACT | SITE MAP | SEARCH

Habitat for Humanity
Saint Louis

ReStore | Donate

ABOUT US | VOLUNTEER | SUPPORT US | HOME OWNERSHIP | CONSTRUCTION | NEWS & EVENTS | SUSTAINABILITY

Home > Support Us > How To Donate > Donate Online

DONATE ONLINE

Donation

Amount:

Matching Funds: Not sure about matching funds?

Tribute: In this gift made in honor of, or in memory of, a friend or loved one?

Designation: You may make a general donation to support our overall mission, or designate the gift for a more specific purpose.

Recurring Gift: Choose to make a one-time gift or a monthly, quarterly or annual gift. Recurring gift subscriptions start on the first day of the following month.

Matching Gift Program

So that we can expect to receive and properly track your matching gift to us, please provide us with the following information.

Company Name:

Address:

City:

State:

ZIP:

Please fax or email your matching gift form to Sarah Sherwood at 314-371-0404, or sarah@habitatstl.org.

Want to learn about more ways to support HFHSL?

- Consider Stock Donations
- Prizing Donations of Materials
- Consider donating to Cares for Homes
- Plan Events & Fundraisers that benefit Habitat for Humanity Saint Louis
- Learn more about Matching Gifts

What a great way to connect with the community.

103

Thank you!

scott@granneman.com

www.granneman.com

ChainSawOnATireSwing.com

[@scottgranneman](https://twitter.com/scottgranneman)

104

Forms

Collecting Information in a Usable Way

Washington University in St. Louis
Webster University

R. Scott Granneman

© 2013 R. Scott Granneman
Last updated 20131202
You are free to use this work, with certain restrictions.
For full licensing information, please see the last slide/page.

105

Licensing of this work

106

This work is licensed under the Creative Commons Attribution-ShareAlike 4.0 International License.

To view a copy of this license, visit <http://creativecommons.org/licenses/by-sa/4.0/>.

You are free to:

- » *Share* – copy and redistribute the material in any medium or format
- » *Adapt* – remix, transform, and build upon the material for any purpose, even commercially

Under the following terms:

Attribution. You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. Give credit to:

Scott Granneman • www.granneman.com • scott@granneman.com

Share Alike. If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.

No additional restrictions. You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

Questions? Email scott@granneman.com