

# HTML Forms

INFO 253A: Frontend Web Architecture

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# What is a form (on-line)?

SurveyMonkey Form

# Forms are everywhere

- Combining forms with JavaScript makes a site interactive
- [Google Search](#)

# Forms are HTML

- Declarative
- Standardized
- Semantic
- Styled

The image displays a vertical stack of seven select boxes, illustrating various styling and states:

- 1. Unstyled: A plain white select box with the text "Here is the unstyled select box" and a small downward arrow.
- 2. Standardized: A white select box with the text "Here is the first option" and a small downward arrow.
- 3. Dark styled: A black select box with the text "Here is the first option" and a small downward arrow.
- 4. Green styled: A green select box with the text "Here is the first option" and a small downward arrow.
- 5. Blue styled: A blue select box with the text "Here is the first option" and a small downward arrow.
- 6. Yellow styled: A yellow select box with the text "Here is the first option" and a small downward arrow.
- 7. Highlighted styled: A green select box with the text "Select an Option" and a small downward arrow, featuring a glowing effect.
- 8. Unstyled (bottom): A plain white select box with the text "Select an Option" and a small downward arrow.

# Input Tag

- Signals we'd like to get data from the user
- What type of data?
- type attribute

# Text Input Type

```
1 <form>
2   <input type="text" />
3 </form>
```

# Submit Type

```
1 <input type="submit" />
```

# CheckBox Type

```
1 <input type="checkbox" checked="checked" />
```



# What do these form elements mean?

- Just add text next to the box
- Add an attribute to the tag
- Add text in a `<span>` or `<p>`
- Add text in a `<label>` element that "references" the input

# CheckBox Type

```
1 <input type="checkbox" value="enrolled" id="check-enrolled" checked>  
2 <label for="check-enrolled">Enrolled?</label>
```

# Radio Type

```
1 <input type="radio" name="mascot" value="bear" id="radio-bear">
2 <label for="radio-bear">Bear </label>
3
4 <input type="radio" name="mascot" value="cardinal" id="radio-cardinal" />
5 <label for="radio-cardinal" >Cardinal </label>
```

# Select Type

```
1 <label for="state">State:</label>
2 <select name="state" id="state">
3     <option value="CA">CA</option>
4     <option value="OR">OR</option>
5     <option value="NY">NY</option>
6 </select>
```

# Hidden Type

```
1 <input type="hidden" name="page" value="2">
```

# HTML5 types

- color, tel, email, datetime, url
- Provides validation as well as default styling
- [HTML5 Reference](#)

```
1 <label for="color">Color: </label>
2 <input type="color" name="color" id="color" /> <br />
3
4 <label for="email">Email: </label>
5 <input type="email" name="email" /><br />
```

# Let's look at a complete form

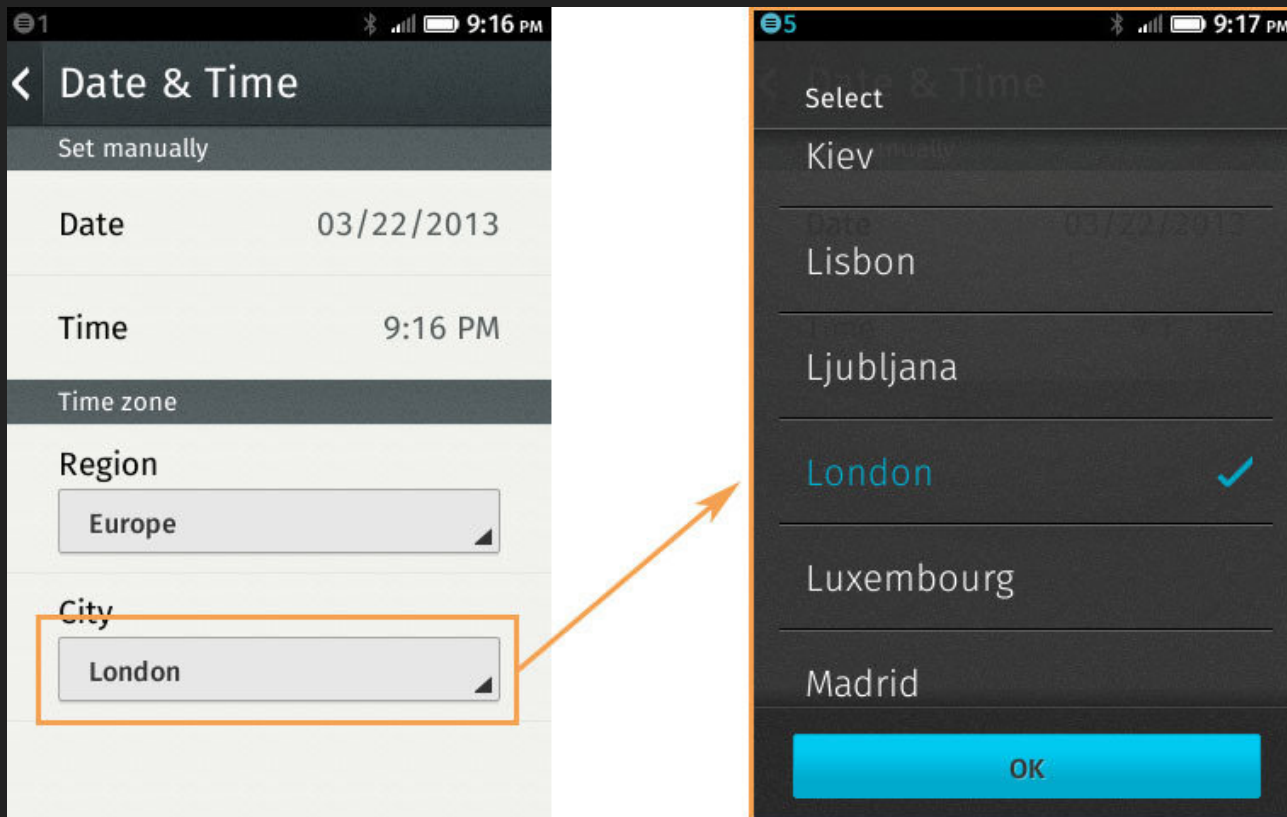
```
1 <form method="GET" action="http://www.google.com/search">
2     <input type="text" name="q" value="">
3     <input type="submit" value="Google Search">
4 </form>
```

# Form Design

- Goal: make it easy to provide information
- Use the appropriate input elements
- Use CSS to style elements to better set context



# User Interface Differences



# Example Search Widget

- Github!

# Overview

```
<form action="/login">
<input type="text" name="username"/>
<input type="password" name="
password"/>
<input type="submit"/>
</form>
```

```
POST /login HTTP/1.1
Host: www.mysite.com
User-Agent: Mozilla/4.0
Content-Length: 27
Content-Type: application/x-www-form-
urlencoded

username=ilovecats&password=secret
```

```
HTTP/1.1 200
Content-Type: text/html
Content-Length: 73
```

```
<html>
  <body>
    <p> Welcome back ilovecats! </p>
  </body>
</html>
```

Web Server

with

Server Side Language

# Improvements (browser side)

- Interactivity!
- Give users instant feedback
- Use content in forms immediately on the browser

# JavaScript!

- Write imperative style code specific to your site
- No interaction with a server required
- Run by the browser

Questions?