



Announcements

- Project due date
 - Project 2A due Wednesday at 10pm
 - 1-1-1 rule by Thursday night at 10pm
- Extra credit due dates
 - Labs 8/9: Friday night at 10pm
 - Living Computer Museum
 - New quiz for anyone who got lost on the way to the museum—15 extra credit points
 - Only for students who registered for the tour



Announcements

- This week's discussion is open
 - Post your URL for Project 1B
 - Explore the class's Misinformation Sites
 - Post helpful comments for ten projects

Web Design Concepts



Forms

Gathering Input from the User

D.A. Clements



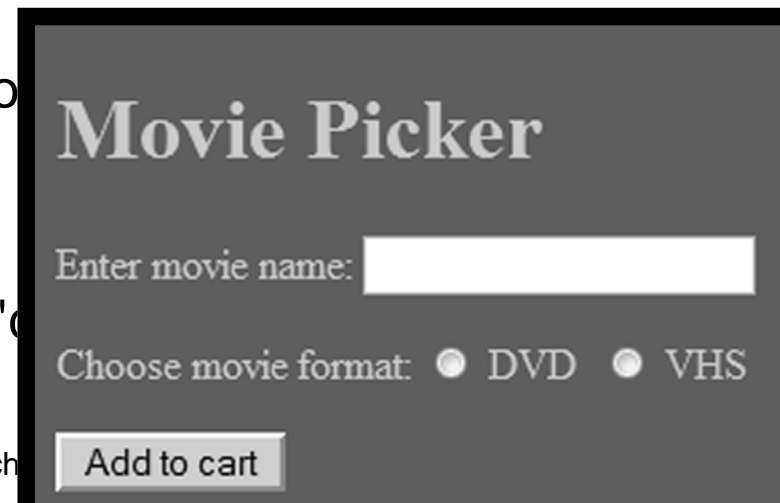
Objectives

- Set up a form with HTML
 - Add form inputs:
 - Text fields
 - Radio buttons
 - Check boxes
 - Select menus
 - Submit buttons
- Add JavaScript
 - Event Handlers



A short form: Movie Picker

```
<h1>Movie Picker</h1>
<form id="picker" method="post" action="">
<p>
  <label for="movie">Enter movie name:</label>
  <input type="text" name="movie" id="movie" />
</p>
<p>
  Choose movie format:
  <input type="radio" name="format" id="dvd" value="dvd" />
  <label for="dvd">DVD</label>
  &nbsp;<input type="radio" name="format" id="vhs" value="vhs" />
  <label for="vhs">VHS</label>
</p>
<input type="button" name="cart" id="cart" value="Add to cart" />
</form>
```





Test the Movie Picker form

- The form pops up but won't really do anything because
 - It's the pure HTML
 - No client-side or server-side scripts to put data into a database or manipulate it in any way

A screenshot of a web form titled "Movie Picker". The form has a dark grey background and contains the following elements: a text input field for "Enter movie name:", two radio buttons for "Choose movie format:" with "DVD" and "VHS" options, and a button labeled "Add to cart".



A short form: Markup

```
<h1>Movie Picker</h1>
<form id="picker" method="post" action="">
  <p>
    <label for="movie">Enter movie name:</label>
    <input type="text" name="movie" id="movie" />
  </p>
  <p>
    Choose movie format:
    <input type="radio" name="format" id="dvd" value="dvd" />
    <label for="dvd">DVD</label>
    &nbsp;<input type="radio" name="format" id="vhs" value="vhs" />
    <label for="vhs">VHS</label>
  </p>
  <input type="button" name="cart" id="cart" value="Add to cart />
</form>
```



Form tags

```
<h1>Movie Picker</h1>
<form id="picker" method="post" action="#">
  <p>
    <label for="movie">Enter movie name:</label>
    <input type="text" name="movie" id="movie" />
  </p>
  <p>
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    <input type="radio" name="format" id="dvd" value="dvd" />
    <label for="dvd">DVD</label>
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    <label for="vhs">VHS</label>
  </p>
  <input type="button" name="cart" id="cart" value="Add to cart" />
</form>
```

A screenshot of a web form titled "Movie Picker". The form has a dark grey background with white text. It contains a text input field for "Enter movie name:", two radio buttons for "Choose movie format:" (DVD and VHS), and a button labeled "Add to cart".

Movie Picker

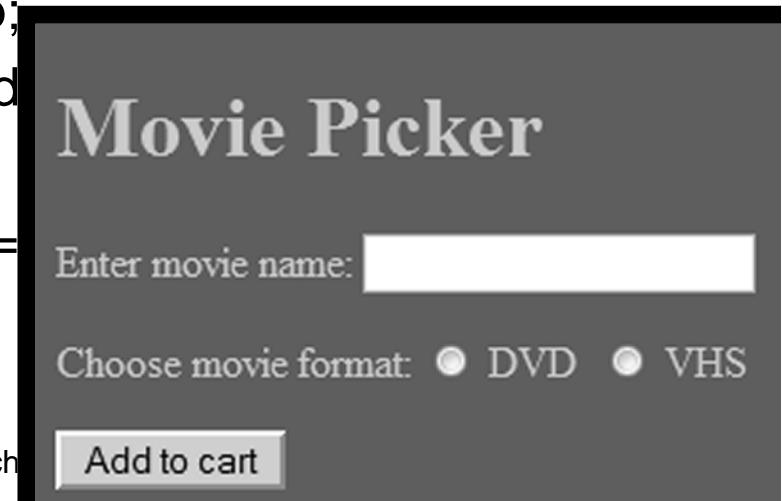
Enter movie name:

Choose movie format: DVD VHS



Input tags

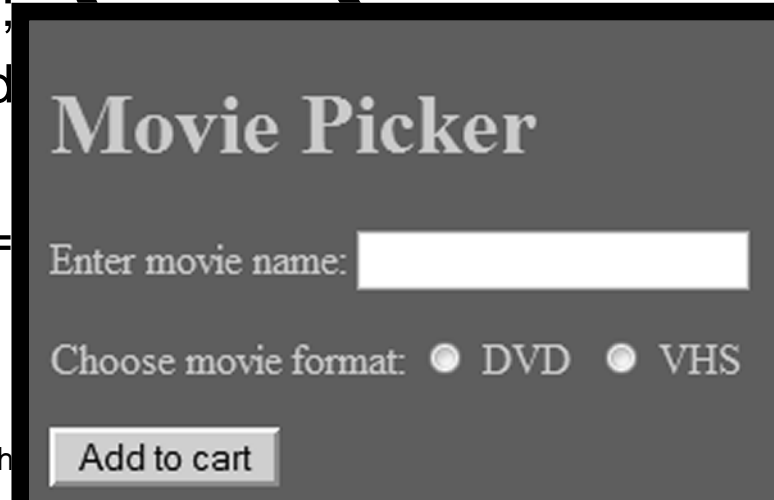
```
<h1>Movie Picker</h1>
<form id="picker" method="post" action="">
  <p>
    <label for="movie">Enter movie name:</label>
    <input type="text" name="movie" id="movie" />
  </p>
  <p>
    Choose movie format:
    <input type="radio" name="format" id="dvd" value="dvd" />
    <label for="dvd">DVD</label>&nbsp;  
    <input type="radio" name="format" id="vhs" value="vhs" />
    <label for="vhs">VHS</label>
    <input type="button" name="cart" id="cart" value="Add to cart" />
  </p>
</form>
```





Inputs and Labels

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    <input type="radio" name="format" id="vhs" value="vhs" />
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The screenshot shows a web form titled "Movie Picker" on a dark background. It features a text input field for "Enter movie name:", two radio buttons for "Choose movie format:" with labels "DVD" and "VHS", and a button labeled "Add to cart".



Inputs and Labels

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<h1>Movie Picker</h1>
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<form id="picker" method="post" action="">
```

```
<p>
```

```
  <label for="movie">Enter movie name:</label>
```

```
  <input type="text" name="movie" id="movie" />
```

```
</p>
```

```
<p>
```

```
  Choose movie format:
```

```
  <input type="radio" name="format" id="dvd" value="dvd" />
```

```
  <label for="dvd">DVD</label>&nbsp;  
```

```
  <input type="radio" name="format" id="vhs" />
```

```
  <label for="vhs">VHS</label>
```

```
  <input type="button" name="cart" id="cart" value="Add to cart" />
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```
</p>
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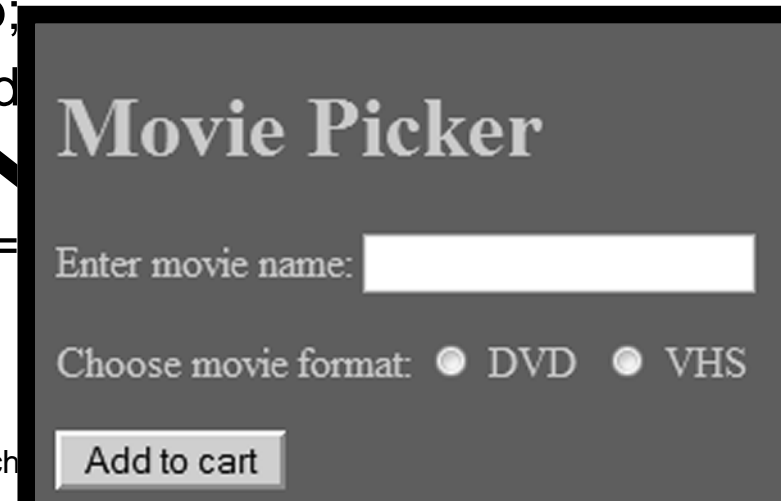
```
</form>
```

The screenshot shows a web form titled "Movie Picker" on a dark background. It features a text input field for "Enter movie name:", two radio buttons for "Choose movie format:" (DVD and VHS), and a button labeled "Add to cart".



Inputs and Labels

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  <p>
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    <input type="radio" name="format" id="dvd" value="dvd" />
    <label for="dvd">DVD</label> &nbsp;&nbsp;&nbsp;
    <input type="radio" name="format" id="vhs" value="vhs" />
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Inputs and Labels

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Choose movie format:

```
<input type="radio" name="format" id="dvd" value="dvd" />
```

```
<label for="dvd">DVD</label> &nbsp;
```

```
<input type="radio" name="format" id="vhs" value="vhs" />
```

```
<label for="vhs">VHS</label>
```

```
<input type="button" name="cart" id="cart" value="Add to cart" />
```

```
</p>
```

```
</form>
```



Inputs and Labels

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<h1>Movie Picker</h1>
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```

```
<p>
```

```
<label for="movie">Enter movie name:</label>
```

```
<input type="text" id="movie" value="" />
```

```
</p>
```

```
<p>
```

```
Choose movie format:
```

```
<input type="radio" name="format" id="dvd" value="dvd" />
```

```
<label for="dvd">DVD</label>&nbsp;  
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<input type="radio" name="format" id="vhs" value="vhs" />
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</p>
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```
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Inputs and Labels

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    <label for="vhs">VHS</label>
    <input type="button" name="cart" id="cart" value="Add to cart" />
  </p>
</form>
```



Choose movie format:

```
<input type="radio" name="format" id="dvd" value="dvd" />
```

```
<label for="dvd">DVD</label> &nbsp;
```

```
<input type="radio" name="format" id="vhs" value="vhs" />
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```
<label for="vhs">VHS</label>
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```
<input type="button" name="cart" id="cart" value="Add to cart" />
```




Sets of Radio Buttons

```
<h1>Movie Picker</h1>
<form id="picker" method="post">
```

```
<p>
```

```
<label for="movie">Enter movie name:</label>
```

```
<input type="text" id="movie" value="" />
```

```
</p>
```

```
<p>
```

```
Choose movie format:
```

```
<input type="radio" name="format" id="dvd" value="dvd" />
```

```
<label for="dvd">DVD</label>&nbsp;  
```

```
<input type="radio" name="format" id="vhs" value="vhs" />
```

```
<label for="vhs">VHS</label>
```

```
<input type="button" name="cart" id="cart" value="Add to cart" />
```

```
</p>
```

```
</form>
```

Movie Picker

Enter movie name:

Choose movie format: DVD VHS



Button inputs

```
<h1>Movie Picker</h1>
<form id="picker" method="post">
```

```
<p>
```

```
<label for="movie">Enter movie name:</label>
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<input type="text" id="movie" />
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```
</p>
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</p>
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Button inputs

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    <input type="button" name="cart" id="cart" value="Add to cart" />
  </p>
</form>
```





Select boxes

```
<p>  
  <label for="gradprogram">Select your graduate program</label>  
  <select name="gradprogram" size="1" id="gradprogram">  
    <option value="mlis" selected="selected">MLIS</option>  
    <option value="msim">MSIM</option>  
    <option value="other">Other</option>  
  </select>  
</p>
```

Select your graduate program: MLIS ▼



Submit buttons

- Sends the user data to a JavaScript or Server-Side script:

```
<p>  
    <input type="submit"  
    name="submitform" id="submitform"  
    value="Submit Form" />  
</p>
```

- Nothing happens with HTML alone.



Submit buttons and form tags

```
<h1>Movie Picker</h1>
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Movie Picker

Enter movie name:

Choose movie format: DVD VHS



Events Cause Processing

After drawing a page, browsers sit idle waiting for something to happen ... when user gives input, it cause *events*

- Event types
 - onclick
 - onchange
 - onmouseover
 - onsubmit



Test the Smileys form

- Smileys...
 - This one actually does something!
 - JavaScripts respond to user events



Emoticons = Emotional Icons

: -)	Smile or Happy	: - p	“Raspberry” or
: - (Frown or Sad		‘tongue in
; -)	Winking		cheek’
: - D	Laughter	: - S	Confused
: - C	Very, very sad	: - /	Doubtful or
D - :	Annoyed, shocked or scared		confused
		: -	Blank
		O : O _ O	Surprised or shocked

Sideways



Asian Emoticons

(^_^)	Laughing	(???) /	Joyful
(>_<)>	Troubled	???) ;)	Surprised
(^_^;)	Troubled	#^.^#)	Shy
(ToT)	Crying	*'?'*)	Infatuation
m(_ _)m	Apologising	??;))	Worried
(^^;)	Shy	*^?^*)	Joyful
(???)	Grinning	(^?^)	Laughing

Sideways



Asian Emoticons

(^_^)	Laughing	(???) /	Joyful
(>_<)>	Troubled	(???) ;)	Surprised
(^_^;)	Troubled	.^#)	Shy
(ToT)	Crying	?`*)	Infatuation
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(^^;)	Shy	(*^?^*)	Joyful
(???)	Grinning	(^?^)	Laughing

Sideways



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(^_^)	Laughing	(???) /	Joyful
(>_<)>	Troubled	(???) ;)	Surprised
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(ToT)	Crying	(*^?^*)	Infatuation
m(_ _)m	Apologising	(^?^)	Worried
(^^;)	Shy	(^?^)	Joyful
(???)	Grinning	(^?^)	Laughing

Sideways



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(^_^)	Laughing	(???) /	Joyful
(>_<)>	Troubled	(???) ;)	Surprised
(^_^;)	Troubled	(#^.^#)	Shy
(ToT)	Crying	(*`?`*)	Infatuation
m(_ _)m	Apologising	(??;))	Worried
(^^;)	Shy	(*^?^*)	Joyful
(???)	Grinning	(^?^)	Laughing

Right-side up!



Try the Viking Names form

- Another form powered by JavaScript



Summary

- Set up a form with HTML
 - Add form inputs:
 - Text fields
 - Radio buttons
 - Check boxes
 - Select menus
 - Submit buttons
- Add JavaScript
 - Event Handlers



JavaScript Storyteller Project 2B

Putting a big project together

D.A. Clements



Objectives

- Understand how a larger project is built from the basic programming concepts
- Understand how to declare multiple functions
- Understand how to call functions from
 - Event handlers
 - Other functions



Small programming modules that can be called as needed

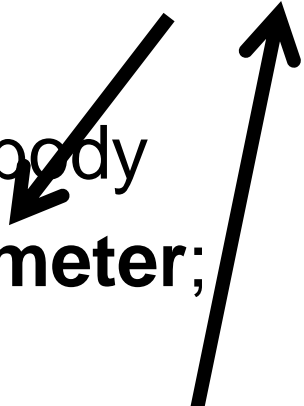
FUNCTIONS



Passing Values to Functions

- Definition syntax

```
function name(parameter)  
{  
    //statement body  
    x = x * parameter;  
}
```

Two arrows originate from the word 'parameter' in the function definition. One arrow points diagonally down and to the left towards the word 'parameter' in the function call 'name(argument)'. The other arrow points diagonally up and to the right towards the word 'argument' in the same function call.

- Call syntax

```
onclick="name(argument)"
```