



# JavaScript and jQuery for Designers

## Lesson 3: Making Forms Work Well

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# Welcome!



- Four sessions
  - 1: JavaScript & jQuery Basics
  - 2: Setting Up Plugins
  - **3: Making Forms Work Well**
  - 4: Getting Fancy
- Course Portal has all the links you need
  - [www.online-web-courses.com](http://www.online-web-courses.com)

# Questions

- Ask questions via chat during the live course
- Join the discussion group
  - Link at the course portal
- Email us
  - [course-support@webvanta.com](mailto:course-support@webvanta.com)
  - *Please use the discussion group* for non-private questions



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# Goals for This Lesson

- Learn how to enhance forms using jQuery
- See examples of more complex plugin setup
- Explore more troubleshooting techniques

# Homework Solution

- FAQ
  - Accordion
- Photo Gallery
  - Colorbox or photo gallery (Gallerific, Galleria)
  - See Galleria example in code files
- Product Page
  - Tabs

# Troubleshooting

- Any errors in the JavaScript console?
- Are the required files being loaded?
  - Look at element list in developer console
  - Check for JavaScript, CSS, images
- Is your HTML structured how the plugin expects?
  - Compare your code to demo code
- Is the plugin being invoked on the correct element?
  - Use console to see if your selector returns what you expect

# Using the JavaScript Console

- Look for error messages
  - Linked to line of code that caused the problem
- Enter JavaScript and jQuery code to test it out
  - Explore the DOM and JS objects interactively
- Write messages to the console from your code
  - `console.log("Hello console");`
- Set breakpoints

# Creating Great Forms

- Forms are where you get the user to give you information
  - You should make this as easy as possible
- HTML5 will give you all the capabilities you need
  - In perhaps 5 more years
- JavaScript is an essential part of the toolkit for building great forms now



# Ways to Enhance Forms

- Progressive disclosure
  - Show/hide areas depending on other choices
- Custom data-entry widgets
  - Date picker (calendar) for date fields
- Autocomplete for text fields
  - Suggests values once user starts typing
- Validation
  - Helps user enter the right information

# Progressive Disclosure

- Simplify forms as much as possible
- If certain fields are only needed when other selections have been made, only show them then
- Simple to build with jQuery (no plugin needed)
  - Detect any change in triggering element
  - Depending on the state of triggering element
    - Show or hide other elements



The image shows a form with the following elements:

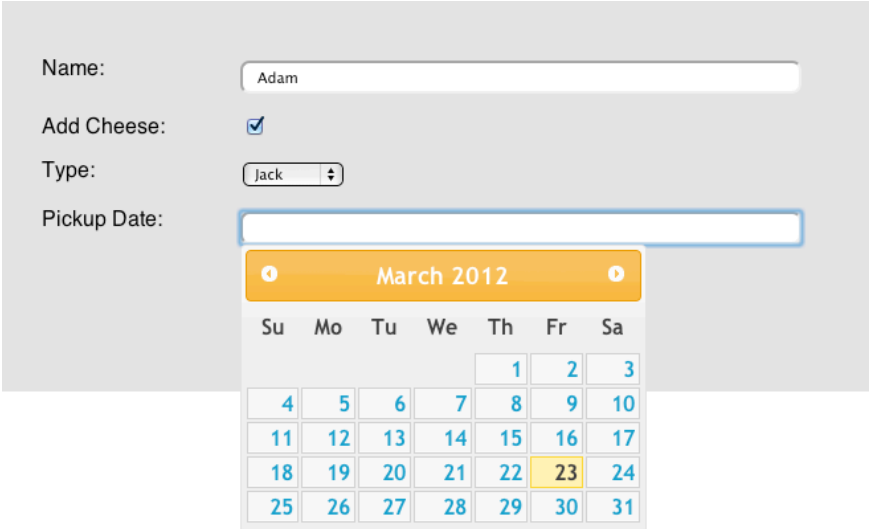
- Name:
- Add Cheese: ☐
- Type:
- Pickup Date:
- Place Order button

# Hiding and Showing Fields

```
$("#cheese").click(function() {  
    if ($("#cheese").is(':checked')) {  
        $("#cheese-type").show();  
    }  
    else {  
        $("#cheese-type").hide();  
    }  
});
```

# Date Picker

- Pop-up calendars help people enter dates accurately and easily
- Included in jQueryUI
  - <http://jqueryui.com/demos/datepicker/>
- Load jQuery UI JavaScript and CSS
- Invoke on a text field that contains a date
  - `$("#my-date-field").datepicker();`



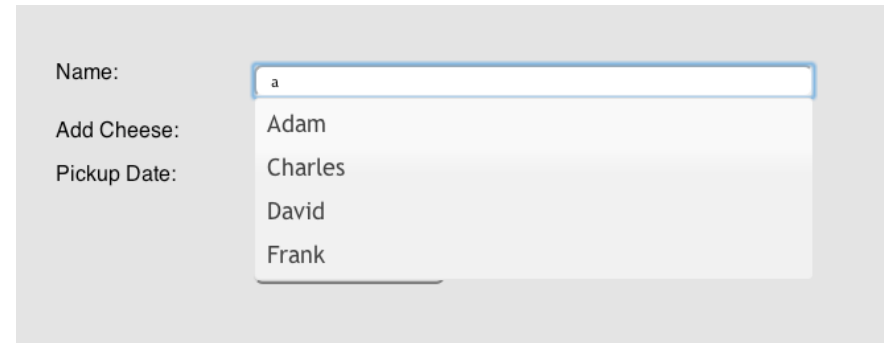
The screenshot shows a form with the following fields:

- Name: Adam
- Add Cheese: ☒
- Type: Jack
- Pickup Date: [Date Picker]

The date picker is open, showing the month of March 2012. The days of the week are listed at the top: Su, Mo, Tu, We, Th, Fr, Sa. The dates are arranged in a grid. The date 23 is highlighted in yellow.

# Autocomplete

- Suggest complete entries for text fields
  - Based on some list of suggested values
  - Typically, this list would come from a database on server side, but it can be static
- Included in jQuery UI library
  - <http://jqueryui.com/demos/autocomplete/>



A screenshot of a web form with three labels: "Name:", "Add Cheese:", and "Pickup Date:". The "Name:" label is followed by a text input field containing the letter "a". A dropdown menu is open below the input field, displaying a list of names: "Adam", "Charles", "David", and "Frank". The "Add Cheese:" and "Pickup Date:" labels are followed by empty text input fields.

# Validating Form Input

- It is hard for users to fill out your forms properly!
- Validation checks form contents against rules
  - Displays helpful messages if there are problems
- Unlike server-side validation, there's no delay while waiting for server
  - Can respond on each keystroke

Name:

This field is required.

Email:

Please enter a valid email address.

Comments:

Is that all you have to say?

# Setting Up Validation

- Use validate plugin
  - <http://bassistance.de/jquery-plugins/jquery-plugin-validation/>
- Two ways to set up rules
  - Using class names on form elements
  - Using JavaScript object when initializing plugin
    - Provides much more capability
- Messages can also be customized

# Specifying Validations

- `<input type="text" name="fullname" id="fullname" class="required" />`

```
$( "#myform" ).validate({  
  rules: {  
    fullname: "required"  
  },  
  messages: {  
    fullname: "Please enter your name"  
  }  
});
```



# Many More Form Plugins

- In-field labels
  - <https://github.com/dcneiner/In-Field-Labels-jQuery-Plugin/>
- "Form" plugin for ajax submit
  - <http://jquery.malsup.com/form/>
- <http://www.queness.com/post/2190/40-extremely-useful-jquery-form-plugins>
- <http://speckyboy.com/2010/06/22/50-jquery-plugins-for-form-functionality-validation-security-and-customisation/>
- <http://www.designyourway.net/blog/resources/55-jquery-form-plugins-to-download-and-use/>

# Homework

- Create a form with the following behaviors:
  - Fields for name, street, city, state, and zip
  - Validate that no fields are blank, that the state field has exactly two characters, and that the zip is a five-digit number
  - Add a checkbox labeled "Provide additional contact info?"
  - If the box is checked, show fields for phone number and email, with appropriate validations