

Interaction Design &
Forms and Dialogs

Welcome

The Five Essential Factors:

Consistency

Strive for consistency in appearance and behavior, because it facilitates usability, credibility, and trust.

Visibility

Most interfaces are inherently visual, so make certain that people know when and where they can interact with it.

Learnability

Meaningful, unambiguous labels, content, and interactions make it possible to quickly understand and repeat an experience.

Predictability

Set expectations about what will happen during and after an interaction to minimize confusion and dissatisfaction.

Feedback

Acknowledge interactions and provide information about status, location, progress, and closure.

Interaction design is not about the behavior of the interface, it is about the behavior of *people*.

Interaction Design Involves...



Forms

The structure and layout of forms should be based on how people are going to complete them.

When deciding where to place the labels for form fields, consider if all (or nearly all) fields are required, if people will be completing all (or nearly all) fields sequentially, or if they will be scanning and looking only for relevant fields to complete.

Facilitate keyboard navigation and accessibility by logically structuring forms with a matching tab order.

Identify the primary and secondary actions on a form and give visual prominence to the primary action.

Place buttons on forms where they will be in the line of attention. Do not place primary action buttons distant from the visitor's attention or where their contextual meaning may be weakened.

Always use meaningful labels, and use direct, active language whenever possible.

Web Forms

Layout & Alignment

It is important to understand how a web form will be used and the data being collected to determine the most effective layout.

Left Aligned Label	<input type="text" value="Text Field"/>
Longer Left Aligned Label	<input type="text" value="Select One"/>
Brief Label	<input type="text" value="Text Field"/>
	<input type="button" value="Primary"/> <input type="button" value="Secondary"/>

Right Aligned Label	<input type="text" value="Text Field"/>	
Longer Right Aligned Label	<input type="text" value="Text Field"/>	(optional)
Brief Label	<input type="text" value="Select One"/>	
<input type="button" value=" < Previous"/>		<input type="button" value=" Next >"/>

Left Aligned Label Above Field	<input type="text" value="Text Field"/>
Longer Left Aligned Label Above Field	<input type="text" value="Select One"/>
Brief Label Above Field	<input type="text" value="Text Field"/>
	<input type="button" value="Primary"/> <input type="button" value="Secondary"/>

Forms

Select form fields that will guide the visitor to enter the correct type, amount, and format of information.

The size of the form field should communicate the amount of information to be gathered.

When allowing people to make multiple selections, use the easier method.

When placing labels inside form fields, follow these guidelines:

1. Use a meaningful label.
2. Completely remove the label when the field is in focus. Do not require visitors to delete the label before entering their information.
3. If the field loses focus while blank or before information has been entered, restore the label so that the form field may be identified and the correct data may be entered.

Form Fields

Form Field Size



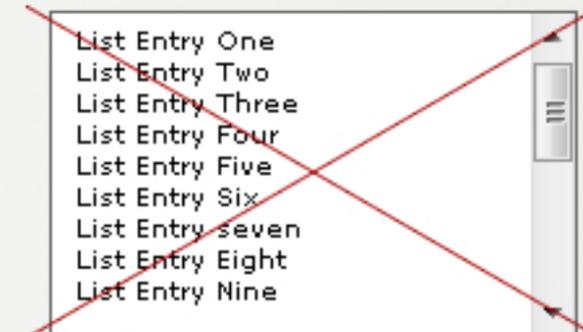
A form illustrating field sizes. The 'Name' field is a wide text box containing 'San Francisco'. The 'Postal Code' field is a narrow text box containing '94107'. The 'City' field is a wide text box containing 'San Francisco'. The 'Comment' field is a wide text box containing '(500 char)', which is crossed out with a red X. To the right is a large text area with a scrollbar containing the text 'A large amount of text may be entered here.'.

Multiple Selections

Select All That Apply:

- Selection 1
- Selection 2
- Selection 3
- Selection 4
- Selection 5
- Selection 6

Select All That Apply (hold CTRL / CMD while clicking)



A list of nine entries: 'List Entry One' through 'List Entry Nine'. The list is crossed out with a red X.

Labels Inside Form Fields

Personal Information



A form with four fields: 'Dave', 'Last Name', 'City', and 'State'. The labels 'Last Name', 'City', and 'State' are placed inside the input boxes.

Personal Information



A form with four fields: a blank box, a blank box, a blank box, and 'State'. The labels are not visible inside the input boxes. The entire form is crossed out with a red X.

Forms

Reduce the visitor's workload and effort to complete forms.

Pre-populate forms with information previously provided or already known.

Use defaults that are logical and likely to be correct, but make them easy to change or edit.

Leverage other sources of data when possible. For example, geolocation can provide city and state information, and mobile phones can pre-populate their phone numbers.

Allow people to enter data in formats that are meaningful to them. Clean and re-format data before validating and storing it.

Reduce Effort

Pre-Populate Form Fields

Shipping Address:

First Name	<input type="text" value="Dave"/>
Last Name	<input type="text" value="Hogue"/>
Address 1	<input type="text" value="42 Pixel Blvd"/>
Address 2	<input type="text" value="Suite 13"/>
City	<input type="text" value="San Francisco"/>
State	<input type="text" value="California"/>
Postal Code	<input type="text" value="94107"/>

Billing Address:

Same as Shipping Address

First Name	<input type="text" value="Dave"/>
Last Name	<input type="text" value="Hogue"/>
Address 1	<input type="text" value="42 Pixel Blvd"/>
Address 2	<input type="text" value="Suite 13"/>
City	<input type="text" value="San Francisco"/>
State	<input type="text" value="California"/>
Postal Code	<input type="text" value="94107"/>

Data Structure

Telephone - -

Telephone

Telephone

Telephone

Telephone

Accept valid data in any format.
Remove unnecessary or extraneous characters before storing the data.

Forms

Place error messages where they will be noticed and meaningful.

When error checking happens on a per field basis, an error message may be displayed immediately and near the field with the error, because the visitor's attention is probably still near.

When error checking includes multiple form fields:

1. It may be necessary to place a generic error alert in a noticeable location near the top of the page or step.
2. Try to avoid placing error messages outside of the visible browser canvas.
3. Check all fields for errors before returning any error messages. If there are multiple errors on a page or step, show all of the errors at the same time.

Highlight the form field(s) in error and place the error message near it.

Error Message Placement

Visible, Contextual, and Meaningful

Present error messages so that visitors understand where the error occurred and what needs to be corrected.

Some required information is missing. Please complete the indicated fields below.

Personal Information		All fields are required.
First Name	<input type="text" value="Dave"/>	
Last Name	<input type="text" value="Hogue"/>	
Occupation	<input type="text" value="Interaction Designer"/>	
City	<input type="text" value="San Francisco"/>	
State	<input type="text" value="California"/>	
Postal Code	<input type="text" value="94107"/>	
Account Settings		are required.
Display Name	<input type="text"/>	Display name is a required field. Please choose a nickname that other members will see on your posts.
Email Preferences	<input checked="" type="checkbox"/> When my posts receive <input type="checkbox"/> When my posts are marked as a favorite <input type="checkbox"/> When people I follow publish a new post <input checked="" type="checkbox"/> When people follow me	
Show My Location	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Default Post Setting	<input type="text" value="Public"/>	

Forms

Checking for errors should be efficient and responsive.

Validating form fields and checking for errors can be done several ways.

Per Field

When the visitor moves focus to another form field with tab, mouse, or touch the previously completed form field is checked for errors.

Per Page or Step

When the visitor advances to the next page or step in the form, all of the form fields on the just-completed page or step are checked for errors.

Per Form

The completed form fields are checked for errors only when the entire form has been completed, regardless of the number of pages or steps.

Data Validation

Per Field

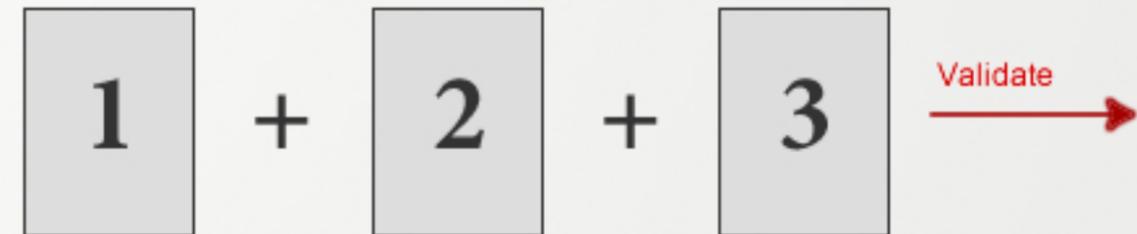
First Name	<input type="text" value="Dave"/>
Last Name	<input type="text" value="Hogue"/>
Occupation	<input type="text" value="Select One"/>
City	<input type="text"/>
State	<input type="text" value="Select State"/>
Postal Code	<input type="text"/>

Occupation is a required field.

Per Page or Step



Per Form



Forms

Error messages should be helpful.

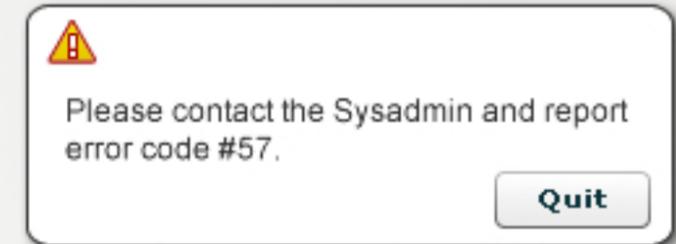
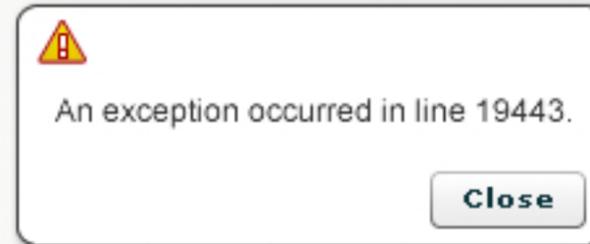
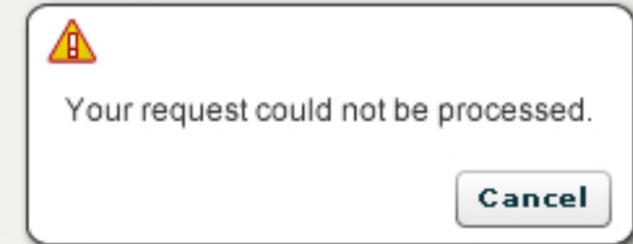
Error messages should meet the following criteria:

1. Explain what went wrong.
2. Explain why it went wrong.
3. Offer information and suggestions on how to resolve the error.
4. Never blame the person.

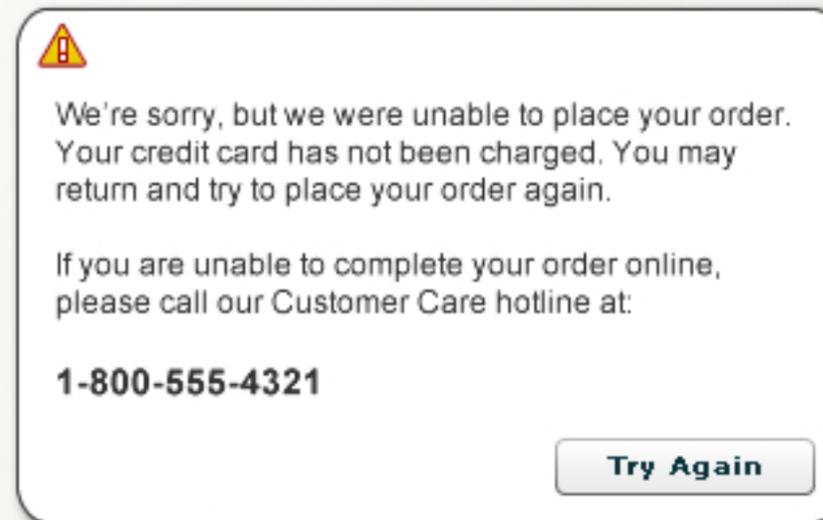
Error prevention is the best form of error handling.

Error Messages

Bad Error Messages



Good Error Messages



Dialogs

Dialogs are ways to present small amounts of information that are contextually relevant.

Tooltips, sticky tooltips, and “hop-ups” can provide additional detail, information, and instructions without interrupting the visitor’s experience.

Presenting Information

Tooltips

Appear on rollover / mouseover and follow the cursor.



Bell Rock

Located just south of Sedona, Bell Rock is well-known and popular among the red rocks. Geologically, Bell Rock is a butte, composed of horizontally bedded sedimentary rock of the Permian Supai Formation.

Sticky Tooltips

Appear in a pre-defined location on rollover / mouseover when the cursor enters a pre-defined zone.



Bell Rock

Geologically, Bell Rock is a butte, composed of horizontally bedded sedimentary rock of the Permian Supai Formation. Located just south of Sedona, Bell Rock is well-known and popular among the red rocks.

Dialogs

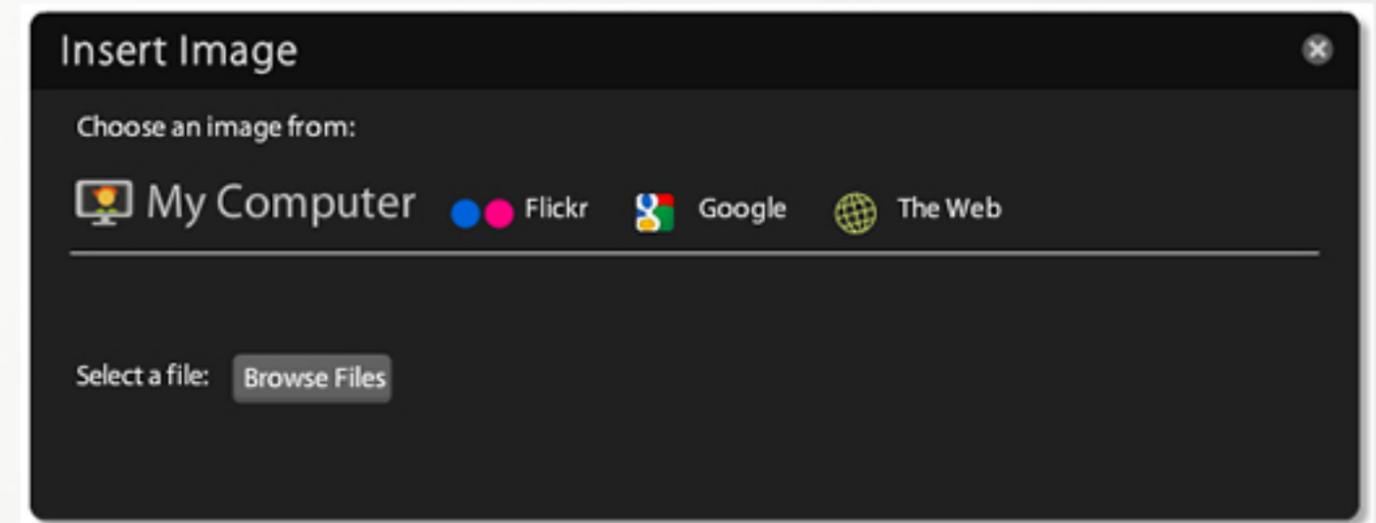
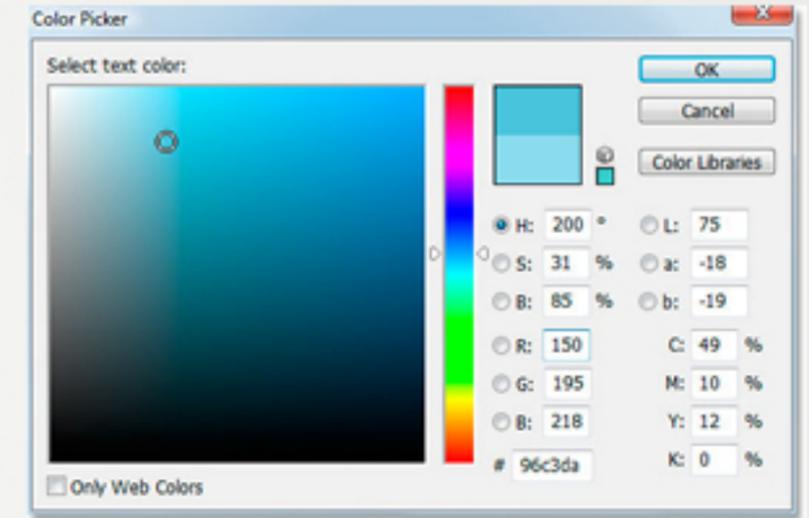
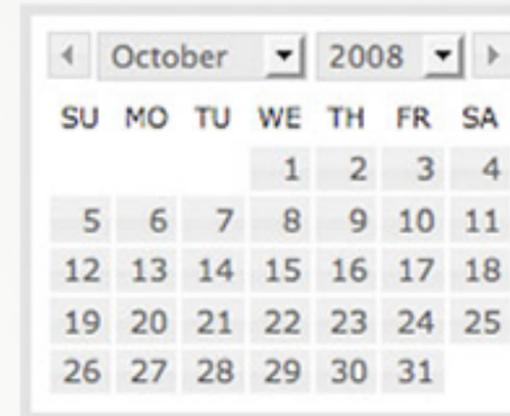
Dialogs may also be used to gather small amounts of information that are contextually relevant.

Calendars (or date pickers), color pickers, tool panels, and even brief forms can be presented to visitors to gather additional information necessary for them to complete their tasks.

When people may need to be able to see information on the main page or while interacting with a dialog, ensure that the dialog does not obstruct that information or that it may be moved to another position.

Gathering Information

Common Dialogs



Dialogs

Do not interrupt, complicate, or confuse the visitor's experience.

Make it easy to dismiss unnecessary dialogs, and make certain that people know what will happen the dialog is closed.

Use clear and unambiguous labels on all action buttons in dialogs so that visitors understand what choice they are making, what action they are taking, and what the outcome will be.

Closing Dialogs

Use clear and unambiguous labels.

Ensure that people understand what will happen when they dismiss a dialog.

Save Changes?

You have made changes to this image. Would you like to save your changes before leaving this page?

Discard

Cancel

Newsletter Subscription

You have asked to be removed from our newsletter mailing list. Would you like to complete this request or continue receiving our weekly newsletter?

Yes

No

Do you really want to quit?

You are leaving the new account application before you have completed it. Exiting now may result in the loss of your account information.

Cancel

Continue

Five Factors & Forms and Dialogs

Consistency

Do not use different form structures and layouts on the same, and do not present the same choices or request the same information with different form field elements.

Visibility

Be careful when placing labels or instructional text inside form fields. If not data are entered, restore the label when the form field is no longer in focus.

Make certain error messages are easily seen.

Learnability

The type of form field element should help the visitor understand what information is required. For example, short text fields should gather brief information, and radio buttons should offer options where it makes sense to choose just one.

Predictability

The tab order when completing forms by keyboard should be logical and meaningful.

Feedback

Provide a sense of place and progress for long, multi-page or multi-step forms.

Make certain that error messages are useful and helpful.