

Timing: 1 to 2 hours

Level: Ages 15 and up

# Implementing reusable web design

## Activity Overview

Reusable design is the practice of developing elements—such as patterns, templates, components, frameworks, assets, and content—that can be used in a variety of contexts while maintaining their usefulness each time they are reused. In this activity, students will learn how to implement a reusable design by using universal navigation and templates.

**Note:** Portions of this activity align to the Adobe Certified Associate objectives. Within the instruction steps and technical guides, the specific learning objectives for the exam(s) are referenced with the following format: <sup>1.1</sup>

## Activity Objectives

### Design skills

- Creating templates and reusable designs
- Designing with CSS
- Organizing pages with CSS
- Providing universal navigation

### Technical skills

#### Fireworks

- Understanding the Fireworks workspace
- Creating buttons
- Creating navigation bars
- Creating pop-up menus

#### Dreamweaver

- Creating templates

- Creating rollover images
- Creating interactive buttons with CSS

## Project Assets

- *Presentation:* Reusable design <sup>5.8</sup>
- *Fireworks guide:* Overview of Adobe Fireworks
- *Fireworks and Dreamweaver guide:* How to create interactive navigation <sup>4.9</sup>
- *Dreamweaver guide:* How to use templates <sup>5.5</sup>

## Background preparation resources

[Technical and content information](#)

[ISTE NETS\\*S Standards for Students](#)

[Adobe Certified Associate objectives](#)

## Activity Steps

1. Reusable design is the practice of developing elements—such as patterns, templates, components, frameworks, assets, and content—that can be used in a variety of contexts while maintaining their usefulness each time they are reused. However, reusable does not mean the design will always be perfect - nearly everything that is designed will likely need to be adapted each time it is reused, so all elements should be adaptable, depending on the context in which they are used.
2. Using the *Reusable design* presentation<sup>5.8</sup>, introduce and discuss the benefits of reusable design. Topics to cover include:
  - How web standards such as CSS help make designs reusable and enable quick global changes
  - How reusable designs can make for less work on future projects
  - How such things as code snippets, templates, CSS Starter Layouts, and other elements can be reused
  - How reusable design is especially helpful when designing for multiple devices
  - How reusable design can help keep a website current even in older browsers
3. Discuss the importance of templates, assets, and libraries as tools for promoting consistency in website design. Other techniques with which students should be familiar are managing reusable assets in the Assets panel, using library objects, applying styles to text, using standard fonts, and using web-safe colors.<sup>2.1</sup>

**Note:** You may want to discuss *includes* at this point. Explain that includes are sections of HTML that include content of one or more files from another web page. They are especially helpful for items such as logos, navigation, and copyright information that are repeated on most, or all, of your web pages. You can program includes to be client-side (cached on the client and viewable locally without a web server) or server-side (files on the web server).
4. Explain how using style sheets and templates for content pages helps keep the site consistent while the team produces the site.<sup>2.1</sup>
5. Introduce students to the interface, terminology, and basic panels and tools in Adobe Fireworks. Using the "I do, we do, you do" method demonstrate how to:
  - Work with the Adobe Fireworks workspace: tools, Document windows, menus, and panels.
  - Customize the workspace.
  - Change the magnification of a document.
  - Navigate through a document by using tools and panels

*Fireworks guide:* Overview of Adobe Fireworks

6. Distribute the technical guides and explain that Adobe Fireworks enables you to design the look and functionality of interactive graphics (such as buttons, links, and rollovers) and save them as HTML so you can import them into a Dreamweaver document. Explain that virtual buttons can have four states: Up, Over, Down, and Over While Down. The first three states are the most common. Demonstrate the following:
  - How to create a three-state button in Fireworks and how to set the active area for a button.
  - How to create a navigation bar in Fireworks.
  - How to create rollover images in Dreamweaver.
  - How to develop interactive buttons with CSS in Dreamweaver.

*Fireworks and Dreamweaver guide:* How to create interactive navigation<sup>4.9</sup>

7. Introduce templates and explain that by using a template, all team members can work on the pages while maintaining uniformity of site design. Distribute the technical guide and demonstrate the following:
  - How to create templates in Dreamweaver.
  - How incorporate the style sheets they created.
  - Remind and encourage them to use div tags, paragraph styles for headings, and indentation to create and maintain a page structure and a meaningful content hierarchy.
  - Use the Assets panel to insert the images and graphics, from Photoshop and Illustrator, into a template.
  - Save their files as templates.

*Dreamweaver guide: How to use templates*<sup>5.5</sup>
8. Ask students to create a template for a simple web project, like creating a website about themselves or for a school club, or for a web project they are currently working on. Remind them to incorporate style sheets, use a content hierarchy, and use the Assets panel.
9. Explain that when they work on web projects whenever possible use reusable design because it:
  - Enables designers to use a variety of elements multiple times in multiple ways in a variety of contexts
  - Maintains its value and usefulness across projects
  - Saves time and money

### Background preparation resources:

- To view video tutorials aligned with the skills required to complete this project, visit Adobe TV: <http://tv.adobe.com>
- For more teaching and learning resources on the topics in this project, search for resources from the community on the Adobe Education Exchange: <http://edex.adobe.com/>
- For an overview of the interface and for more information on the technical aspects of *Adobe Fireworks*, see *Fireworks Help*.
- For an overview of the interface and for more information on the technical aspects of *Adobe Dreamweaver*, see *Dreamweaver Help*.

### Reusable design

- Basic and advanced techniques of Cascading Style Sheets: the CSS Technology Center at [www.adobe.com/devnet/dreamweaver/css.html](http://www.adobe.com/devnet/dreamweaver/css.html)
- CSS Zen Garden. A demonstration of what can be accomplished through CSS-based design: [www.csszengarden.com/](http://www.csszengarden.com/)

## ISTE NETS\*S Standards for Students

This project is aligned to the ISTE NETS\*S Technology Standards. Depending on the subject and content area the student selects you may research your own state content standards to see how this project aligns to your state requirements.

### ISTE NETS\*S: Curriculum and Content Area Standards – NETS for Students

6. Technology Operations and Concepts  
Students demonstrate a sound understanding of technology concepts, systems and operations. Students:
  - a. understand and use technology systems.
  - b. select and use applications effectively and productively.
  - d. transfer current knowledge to learning of new technologies.

## Adobe Certified Associate Exam Objectives

### Adobe Certified Associate, Web Authoring objectives

- 2.1 Demonstrate general and Dreamweaver-specific knowledge of best practices for designing a website, such as maintaining consistency, separating content from design, using standard fonts, and utilizing visual hierarchy.
- 4.9 Insert navigation bars, rollover images, and buttons created in a drawing program on a web page.
- 5.5 Create web page templates.
- 5.8 Use CSS to implement a reusable design.

### For more information

Find more teaching materials for using Adobe software in your classroom on the Adobe Education Exchange: <http://edex.adobe.com/>.



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