Web design & planning

Project Overview

In this project, student teams work on a project to build a website for a client. The client selects the topic of the website and specifies the content to be included. Each student team interprets the client's needs in proposing design solutions for the site's navigation scheme, page layout, look and feel, and content flow. Students write specific design documents to help them communicate clearly with the client.

The focus of this project is working on a team and designing for someone else, emphasizing the following: the design-team process for website development, team-client interaction for incorporating feedback and changes throughout the development of the site, and team-client communication using the design document and evaluating websites in preparation for the design. In Project 3: *Web development and deployment,* student teams will build and launch the client website, completing the full website production process.

Student products: Web production project plan and design solution document; website prototype, storyboard, wireframes, and design comps

Note: Portions of this project 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: [1.1]

Project Objectives

At the completion of the project, students will have developed the following skills:

Project management skills

- Developing a project plan
- Developing a design solution document
- Analyzing to select best examples
- Synthesizing content based on analysis and reflection
- Managing and organizing multiple tasks involved in
- design versus production
- Understanding roles and responsibilities

- Meeting deliverables

Design skills

- Communicating ideas and information through simple wireframes
- Providing multiple design ideas
- Synthesizing information from design review meetings
- Creating wireframes
- Creating design comps
- Creating storyboards
- Creating prototypes
- Applying design principles

- Applying information architecture
- Designing for usability and accessibility
- Designing consistent website pages
- Understanding and applying design aspects such as color theory, layout, contrast, and composition
- Designing for usability and accessibility
- Designing for a specific audience and purpose
- Planning graphics and rich media content based on needs and audience
- Designing for a client while meeting client requirements

Research and communication skills

- Evaluating and analyzing content validity
- Editing website content
- Evaluating and analyzing website navigation
- Understanding and practicing legal use of images
- Understanding tools for creating animation and interactive content
- Critiquing designs
- Communicating purpose and goal
- Communicating and presenting design decisions
- Giving feedback on a project
- Asking questions to focus and clarify
- Listening and interpreting feedback
- Understanding and addressing client design issues
- Finalizing design with a client

Technical Skills

Photoshop

- Creating a wireframe
- Creating design comps

Fireworks

- Creating a prototype
- Exporting a prototype to Dreamweaver

Dreamweaver

- Understanding accessibility

Project Activities

- *Activity:* Analyzing websites
- *Activity:* Introduction to project planning, project management, and teamwork
- *Activity:* Research and writing for design projects
- *Activity:* Working with clients
- *Activity:* Planning design projects
- *Activity:* Information architecture
- *Activity:* Design solution documents
- *Activity:* Copyright and fair use
- *Activity:* Wireframes
- *Activity:* Design comps
- *Activity:* Design project review and redesign
- *Activity:* Creating storyboards for web projects
- *Activity:* Prototypes

Background preparation resources

Technical and content information

Keywords

ISTE NETS*S Standards for Students

Adobe Certified Associate objectives

Project Steps

1. Introduce students to goals of the project:
    - Analyze websites for purpose, audience, usability, and accessibility
    - Define a plan for the web project and work with a client
    - Structure the information architecture and create wireframes
    - Create design comps, storyboard, and a project prototype

2. Introduce the project and provide information about the client organization, such as the following:
    - Name of organization
    - Organization mission and goals
    - Product or service provided by the organization and explanation of how it works
    - Background and history
    - Why the organization is in search of a web-design team

3. Utilize the following series of activities to introduce students to the core skills needed to complete the planning and design phases of the client website project.

4. *Activity:* Analyzing websites   ACA Exam Objectives: 1.1, 1.2, 1.4, 2.1, 2.2, 2.3, 2.4
    (Suggested time: 50-150 minutes)

    - Use this activity to teach or review how to:
    - Identify the kind of information that determines purpose, audience, and audience needs of a website
    - Demonstrate website analysis techniques
    - Introduce how to assess for usability and accessibility
    - Introduce how to design for usability and accessibility

    Explain to students that they will put these concepts into practice in planning and designing the client websites.

    Note: It is recommended to focus on the usability and accessibility steps of this activity for this project.

5. *Activity:* Introduction to project planning,   ACA Exam Objectives: 1.6, 2.6, 1.3, 1.4, 1.4, 2.6, 1.5,
    project management, and teamwork   1.6, 1.3, 1.4, 1.3, 1.4
    (Suggested time: 50–150 minutes)

    Follow these steps to utilize this activity for this project:

    a. Use this activity to introduce and discuss the following when working on a project:
        - Project planning
        - Production phases
        - Project management
        - Working in teams

b. Form student design teams and, where possible, mix members with complementary strengths, such as visual design, technical skill, and project management.

6. *Activity:* Research and writing for design projects   ACA Exam Objectives: 1.2, 2.1
   (Suggested time: 50-100 minutes)

In this activity you will introduce your students to the following:

- Writing, editing, organizing, and managing content
- Communicating information to particular audiences
- Accessing, evaluating, and, synthesizing content from multiple sources
- Understanding the journalistic code of ethics.

Note: For this project we recommend focusing on the assessing and evaluating content portion of the activity, and have the client provide the content. Students will practice writing their own web content in the *Portfolios* project. If you will not complete *Portfolios*, you may want students to follow the steps for writing for the web at this juncture.

7. *Activity:* Working with clients   ACA Exam Objectives: 2.6, 1.4, 2.6, 1.6, 1.4, 1.4
   (Suggested time: 50-150 minutes)

Follow these steps to utilize this activity for this project:

a. This activity introduces the best practices for working with clients to help them create projects that address client's audience, purpose, and goals. Through this activity students will learn about:
   - Interviewing clients
   - Designing for clients
   - Communicating and presenting design ideas to clients
   - Understanding and addressing client design issues
   - Finalizing a design with a client

b. In preparation for the client interview, discuss the kind of information design teams need from their clients about the clients' goals and target audience. Help students identify criteria for determining whether content is relevant to the site goals and appropriate for the target audience.

c. Have students conduct an interview with the client. After the interview, have teams review websites recommended by the client. Encourage teams to collect potential assets and design ideas as they review sites.

Note: It is recommended for this project that the student teams build a website from scratch. However, they can also revise an existing site for a client. If the latter, use the *Design review* worksheet, in place of the *Client interview* worksheet.

8. *Activity:* Planning design projects

    (Suggested time: 50 minutes)

    ACA Exam Objectives: 1.6, 2.6, 1.3, 1.4, 1.4, 2.6, 1.5, 1.6, 1.3, 1.4, 1.3, 1.4

Follow these steps to utilize this activity for this project:

a. Use this activity to teach students how to create a project plan while managing projects.

b. Discuss the website production phases again in the context of creating the client websites. Some things to discuss include:

   • When the completed client site is due

   • Reasonable time frames for each phase

   • Setting due dates

   • Designating task owners for each task on their lists

   • Responsibility of the task owner, especially who is accountable for getting a task completed regardless of who actually works on the task

c. Ask students to create a project plan for organizing their tasks within the project phases.

9. *Activity:* Information architecture

    (Suggested time: 50–150 minutes)

    ACA Exam Objectives: 1.1, 1.2, 1.5, 2.5

Follow these steps to utilize this activity for this project:

a. This activity introduces students to information architecture. Students should understand how to organize web projects so users have easy access to content and information.

b. Ask students to create a flowchart for the client site.

10. *Activity:* Design solution documents

    (Suggested time: 50–100 minutes)

    ACA Exam Objectives: 1.1, 1.2, 1.5, 2.5, 2.6

Follow these steps to utilize this activity for this project:

a. Use this activity to introduce how to create a design solution document to help students identify the goals, objectives, audience, delivery requirements, site content, site structure, and visual design for a web project.

b. Ask teams to organize and outline their content. Have them consider technical features that might be relevant to convey the content provided by the client, such as text and copy, forms, rollover images, pop-up menus, animations, interactive media, video, or preparation of photographs.

c. Introduce and discuss Adobe Edge Animate, Adobe Flash, JavaScript, CSS3, and other rich media tools and their ability to create animation and interactive media. Discuss and analyze with your students what kind of rich media they can realistically create for their client sites.[4.8]

d. Have teams write a design solution document, using their conclusions from the client interview, their content organization, and their knowledge of information architecture and usability.

11. *Activity:* Copyright and fair use   ACA Exam Objectives: 1.3, 1.2, 1.3, 1.4, 1.2, 1.2
    (Suggested time: 50 minutes)

As students consider the content for their client websites, they need to understand copyright and fair use best practices when using content from a third party. Use this activity to introduce your students to copyright issues and fair use guidelines.

12. *Activity:* Wireframes   ACA Exam Objectives: 2.1, 2.2, 2.3, 2.4, 2.5, 3.2, 3.3, 4.1, 4.2, 4.6, 4.7, 5.1
    (Suggested time: 50 minutes)

Follow these steps to utilize this activity for this project:

a. In this activity you will introduce students to wireframes, why they are an important part of the design process, and how to create them.

b. Ask students to create a wireframe for their site.

Note: If the client requires the site layout and design to be viewable on several different-sized devices, students may need to create a separate wireframe for each device. They may choose to create wireframes for desktop and laptop computers, tablet computers, and smartphones.

13. At this juncture it is recommended to ask students to present their design documents (including flowcharts), wireframes, and project plans to the client.[2.6] Ask the client to give an assessment of how the information organization, visual placement, and project schedule meet their goals and address their target audience. Make sure at least one member of each team takes notes on the client's comments.

14. Have teams revise their design documents, flowcharts, wireframes, and project plans in response to the client's feedback.

15. Activity: Design comps   ACA Exam Objectives: 1.6, 1.3, 3.2, 1.5, 1.3, 1.3
    (Suggested time: 50 minutes)

Follow these steps to utilize this activity for this project:

a. This activity introduces the concept of a design comp and how they are used to create and present multiple design ideas.

b. Explain that students will create design comps, using their wireframe, for the client website. Show students some sample design comps.[1.6, 2.3] You can use the example electronic files in the activity.

c. Ask each team to make two or more design comps of the home page and a sample content page for each wireframe.

d. After individuals have completed their comps, ask each team to select their two best home page comps and their two best content page comps to share with clients.

16. *Activity:* Design project review and redesign

    (Suggested time: 50–100 minutes)

    ACA Exam Objectives: 1.1, 2.6, 1.1, 1.4, 1.1, 2.6, 1.1, 1.6, 1.1, 1.4, 1.1, 1.4

Follow these steps to utilize this activity for this project:

a. This activity introduces students to conducting a review and redesign cycle. In this project, students will conduct the review and redesign with the client.

b. Remind students of what they learned earlier in the *Working with clients* activity and ask students to prepare a presentation for the client that includes some or all of the following: [2.6]

   • How their two design comps address the client's goals, audience, and content requirements

   • Screenshots of the color, font, and page samples, accompanied by the reasons for the design, page layout, and navigation choices

   • Question-and-answer session in which the client gives feedback

c. Ask the clients to give feedback to each team. At this point have each team ask their client to select the color and font samples and the visual layouts they prefer, indicating any changes they believe should be made. (If a person from outside the classroom is acting as the client, the instructor might mediate the question-and-answer sessions to help student teams take note of the requested changes.)

d. Ask teams to revise the design comps based on client feedback and present their comps to the clients again. Ask students to get client approval for the finalized color and font samples and the page layout and navigation designs. Students should document these elements in their design documents before proceeding to production. Teams can begin to incorporate final graphics and content as parts of the comps are approved.

17. *Activity:* Creating storyboards for web projects

    (Suggested time: 50-100 minutes)

    ACA Exam Objectives: 2.5, 1.5, 1.6

Use this activity to introduce the storyboard concept to tell the visual story of a web project, with sufficient detail to enable the production crew to understand what they will create. Have your students create a storyboard for their client website.

18. *Activity:* Prototypes

    (Suggested time: 100-150 minutes)

    ACA Exam Objectives: 2.5, 2.6, 1.5, 1.6

Follow these steps to utilize this activity for this project:

a. Use this activity to introduce building a prototype to give a realistic preview of what all or part of a web project will look like and how it will work.

b. Have each team present the prototype to their client for approval in preparation of the technical site build.[2.6] Allow time for any necessary revisions based on client feedback.

19. Once student teams have client approval of all project planning and design deliverables, they can begin production work as outlined in Project 3: *Web development and deployment.*

Extension Activities

You can extend the project in the following ways:

- *Map an existing site*: To help students understand flowcharts, have them create a flowchart for a simple site on the Internet. You might find a small site for students to map. For example, students would draw the pages linked to the home page of this site and then the pages linked to those pages. By clicking through the links, students will begin to understand how a flowchart relates to a constructed site and will be able to create their own flowcharts more easily.

- *Milestones*: To help students manage their time during long projects, you can create milestones that give intermediate deadlines within the larger project. For this activity, you might have a class discussion to identify deadlines for each section of the design document. The sections are:
  - Goals, objectives, and site messages
  - Audience
  - Goals for redesign
  - Technical specifications
  - Site content
  - Site structure
  - Visual design

- *Professional designer*: You might ask a professional designer to talk to the class about creating design documents, explaining how they are helpful in the production process and in communicating with the client.

Assessment

This is a high level view of what student should create during this project. Refer to the assessment rubrics in each activity for more detailed/specific assessment rubrics for each part of the project.

	0 – Does not meet expectations	3 – Meets expectations	5 – Exceeds expectations
Teamwork	Absent or incomplete.	Student collaborates with other students as required to provide feedback or assistance. Fulfills assigned team roles and contributes equally to project work. Sometimes consults with other team members on major project decisions but makes minimal effort to help others build skills.	Student collaborates freely with other students to provide feedback or assistance. Fulfills assigned team roles and contributes equally to project work. Consults with other team members on major project decisions and voluntarily helps others build skills to complete the project.
Time management	Absent or incomplete.	Student allots time for each phase of the design and development process. Completes most phases on schedule.	Student thoughtfully and effectively allots time for each phase of the design and development process. Completes all phases on schedule.

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 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 Photoshop,* see *Photoshop* Help.

- For an overview of the interface and for more information on the technical aspects of *Adobe Fireworks,* see *Fireworks* Help.

Keywords

- project plan
- design solution
- client communication
- purpose
- audience
- information architecture

- flowchart
- wireframe
- design comp
- navigation
- production storyboard
- design review

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

1. Creativity and Innovation

   Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

   a. apply existing knowledge to generate new ideas, products, or processes.

   b. create original works as a means of personal or group expression.

   d. identify trends and forecast possibilities.

2. Communication and Collaboration

   Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

   b. communicate information and ideas effectively to multiple audiences using a variety of media and formats

3. Research and Information Retrieval

   Students apply digital tools to gather, evaluate, and use information. Students:

   a. plan strategies to guide inquiry.

   b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.

   c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks

4. Critical Thinking and Problem Solving

   Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate digital tools and resources. Students:

   a. identify and define authentic problems and significant questions for investigation.

   b. plan and manage activities to develop a solution or complete a project.

    d. use multiple processes and diverse perspectives to explore alternative solutions

5. Digital Citizenship

   Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

       a. advocate and practice safe, legal, and responsible use of information and technology.

       b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.

       c. demonstrate personal responsibility for lifelong learning.

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

1.1 Identify the purpose, audience, and audience needs for a website.

1.2 Identify web page content that is relevant to the website purpose and appropriate for the target audience.

1.3 Demonstrate knowledge of standard copyright rules (related terms, obtaining permission, and citing copyrighted material).

1.4 Demonstrate knowledge of website accessibility standards that address the needs of people with visual and motor impairments.

1.5 Make website development decisions based on your analysis and interpretation of design specifications.

1.6 Understand project management tasks and responsibilities.

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.

2.2 Produce website designs that work equally well on various operating systems, browser versions/ configurations, and devices.

2.3 Demonstrate knowledge of page layout design concepts and principles.

2.4 Identify basic principles of website usability, readability, and accessibility.

2.5 Demonstrate knowledge of flowcharts, storyboards, and wireframes to create web pages and a site map (site index) that maintain the planned website hierarchy.

2.6 Communicate with others (such as peers and clients) about design and content plans.

Adobe Certified Associate, Visual Communication objectives

1.2 Demonstrate knowledge of standard copyright rules or images and image use.

1.3 Demonstrate knowledge of project management tasks and responsibilities.

1.4 Communicate with others (such as peers and clients) about design plans.

3.2 Demonstrate knowledge of layers and masks.

3.3 Demonstrate knowledge of importing, exporting, organizing, and saving.

4.1 Demonstrate knowledge of working with selections.

4.2 Use Photoshop guides and rulers.

4.6 Demonstrate knowledge of drawing and painting.

4.7 Demonstrate knowledge of type.

5.1 Demonstrate knowledge of preparing images for web, print, and video.

Adobe Certified Associate, Video Communication objectives

1.1 Identify the purpose, audience, and audience needs for preparing video.

1.3 Demonstrate knowledge of standard copyright rules (related terms, obtaining permission, and citing copyrighted material).

1.4 Demonstrate knowledge of the production planning and management process.

2.6 Communicate with others (such as peers and clients) about design and content plans.

Adobe Certified Associate, Interactive Media Communication objectives

1.1 Identify the purpose, audience, and audience needs for preparing image(s).

1.4 Demonstrate knowledge of standard copyright rules (related terms, obtaining permission, and citing copyrighted material).

1.5 Understand project management tasks and responsibilities.

1.6 Communicate with others (such as peers and clients) about design and content plans.

2.4 Use a storyboard to design interactive media elements.

Adobe Certified Associate, Graphic Design & Illustration objectives

1.1 Identify the purpose, audience, and audience needs for preparing graphics.

1.2 Demonstrate knowledge of standard copyright rules for artwork, graphics and graphic use.

1.3 Demonstrate knowledge of project management tasks and responsibilities.

1.4 Communicate with others (such as peers and clients) about design plans.

Adobe Certified Associate, Print & Digital Media Publication objectives

1.1 Identify the purpose, audience, and audience needs for preparing page layouts.

1.2 Demonstrate knowledge of standard copyright rules for content use in page layouts.

1.3 Demonstrate knowledge of project management tasks and responsibilities.

1.4 Communicate with others (such as peers and clients) about design plans.

2.1 Demonstrate knowledge of the appropriate properties of page layouts for print, web and digital publishing.

For more information

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