

# CIW User Interface Designer Objectives and Locations

*User Interface Designer* is the second course in the CIW Web And Mobile Design series. This course introduces strategies and tactics necessary to design user interfaces, with particular emphasis on creating user interfaces for mobile devices. It focuses on teaching specific development techniques and strategies.

This course teaches how information obtained from the client, sales, and marketing to design and develop compelling visual experience Web sites for multiple platforms, including mobile, tablet, and desktop. You will learn more about wireframes, color schemes, tones, design templates, formatting, and typography. This course builds upon your abilities to implement user analysis techniques, usability concepts, usability testing procedures and the vital role of testing to publish and maintain a Web site.

You will also learn branding considerations and responsive design implementation in relation to the user interface design of Web sites.

| User Interface Designer Objective                                                                                                                                          | User Interface Designer Courseware Lesson(s) and Section(s)                                                                                                                                                               |
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| <b>Domain 1: User Interface Design Projects</b>                                                                                                                            |                                                                                                                                                                                                                           |
| 1.1 Describe how Web user interfaces have evolved as more devices access the Internet.                                                                                     | <b>Lesson 1: Introduction to User Interface Design</b> <ul style="list-style-type: none"> <li>- Evolution of Web User Interfaces</li> <li>- Lab 1-1: Exploring the UI design evolution of several Web sites</li> </ul>    |
| 1.2 Explain current trends in user interface design, such as mobile devices and responsive design techniques.                                                              | <b>Lesson 1: Introduction to User Interface Design</b> <ul style="list-style-type: none"> <li>- Current Trends in Web Design</li> <li>- Lab 1-2: Demonstrating current Web UI trends</li> </ul>                           |
| 1.3 Explain the responsibilities and tasks of Web design team members.                                                                                                     | <b>Lesson 1: Introduction to User Interface Design</b> <ul style="list-style-type: none"> <li>- Web Design Team Roles and Responsibilities</li> </ul>                                                                     |
| 1.4 Describe the basic tasks of Web design project management, including project management phases, project documentation and communication.                               | <b>Lesson 1: Introduction to User Interface Design</b> <ul style="list-style-type: none"> <li>- Web Design Project Management</li> </ul>                                                                                  |
| 1.5 Describe the advantages of Web design project collaboration.                                                                                                           | <b>Lesson 1: Introduction to User Interface Design</b> <ul style="list-style-type: none"> <li>- Collaborative Web Design</li> </ul>                                                                                       |
| 1.6 List the benefits of creating a personal Web design project portfolio.                                                                                                 | <b>Lesson 1: Introduction to User Interface Design</b> <ul style="list-style-type: none"> <li>- Creating a Web Design Portfolio</li> </ul>                                                                                |
| 1.7 Start planning a fictitious Web-based business, including drafting a goals statement (types of customers, feel of work, mission statement) and creating a design team. | <b>Lesson 1: Introduction to User Interface Design</b> <ul style="list-style-type: none"> <li>- Creating a Plan for a Web-Based Business Project</li> <li>- Lab 1-3: Creating a plan for a Web design business</li> </ul> |

| User Interface Designer Objective                                                                                                                                                                                  | User Interface Designer Courseware Lesson(s) and Section(s)                                                                                                                                                                             |
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| <b>Domain 2: User Interface Design Process</b>                                                                                                                                                                     |                                                                                                                                                                                                                                         |
| 2.1 List steps in a basic Web design project's development process, including bottom-up approach, Agile approach, vision, strategy, specifications, mindmapping, site map, wireframe.                              | <b>Lesson 2: User Interface Design Process</b> <ul style="list-style-type: none"> <li>- Choosing a Web Design Methodology</li> </ul>                                                                                                    |
| 2.2 Describe the Agile Web development approach, including streamlining project workflow, eliminating bottlenecks, focusing on value, facilitating changes in requirements.                                        | <b>Lesson 2: User Interface Design Process</b> <ul style="list-style-type: none"> <li>- Agile Web development manifesto and principles</li> <li>- Lab 2-1: Comparing bottom-up and agile design methodologies</li> </ul>                |
| 2.3 Define a project vision for a Web site or mobile app interface.                                                                                                                                                | <b>Lesson 2: User Interface Design Process</b> <ul style="list-style-type: none"> <li>- Creating a Web Site Vision Statement</li> <li>- Lab 2-2: Creating a vision statement for your company site</li> </ul>                           |
| 2.4 Explain the user interface design process, from vision to strategy.                                                                                                                                            | <b>Lesson 2: User Interface Design Process</b> <ul style="list-style-type: none"> <li>- Creating and Implementing a Web Site Strategy</li> <li>- Lab 2-3: Defining a Web site strategy and tactics to implement the strategy</li> </ul> |
| 2.5 Define the specifications for designing a Web site.                                                                                                                                                            | <b>Lesson 2: User Interface Design Process</b> <ul style="list-style-type: none"> <li>- Creating a Web Site Specification</li> <li>- Lab 2-4: Creating a specification for your company site</li> </ul>                                 |
| 2.6 Discuss considerations for site publishing, including FTP uploads, mobile apps, publishing tools.                                                                                                              | <b>Lesson 2: User Interface Design Process</b> <ul style="list-style-type: none"> <li>- Publishing a Web Site</li> </ul>                                                                                                                |
| 2.7 Describe various choices and challenges of site hosting, including security, costs.                                                                                                                            | <b>Lesson 2: User Interface Design Process</b> <ul style="list-style-type: none"> <li>- Choosing a Web Site Host</li> </ul>                                                                                                             |
| 2.8 Describe the security maintenance required for Web sites.                                                                                                                                                      | <b>Lesson 2: User Interface Design Process</b> <ul style="list-style-type: none"> <li>- Securing a Web Site</li> </ul>                                                                                                                  |
| 2.9 List guidelines for ethical Web design, including comparing unethical vs. illegal.                                                                                                                             | <b>Lesson 2: User Interface Design Process</b> <ul style="list-style-type: none"> <li>- Creating Ethical and Legal Web Sites</li> </ul>                                                                                                 |
| 2.10 Apply the mindmapping process to user interface design projects.                                                                                                                                              | <b>Lesson 2: User Interface Design Process</b> <ul style="list-style-type: none"> <li>- Creating a Mind Map</li> <li>- Lab 2-5: Hand drawing a mind map of your company site</li> </ul>                                                 |
| 2.11 Determine metaphors for a user interface design.                                                                                                                                                              | <b>Lesson 2: User Interface Design Process</b> <ul style="list-style-type: none"> <li>- Using Metaphors</li> </ul>                                                                                                                      |
| 2.12 Define the purpose of creating word lists and mood boards in relation to the Web design process. Create a word list for your Web site using the two-step process and mood board using the eight-step process. | <b>Lesson 2: User Interface Design Process</b> <ul style="list-style-type: none"> <li>- Creating Word Lists and Mood Boards</li> <li>- Lab 2-6: Creating a word list and mood board for your company site</li> </ul>                    |
| 2.13 Create a site map for a fictitious business.                                                                                                                                                                  | <b>Lesson 2: User Interface Design Process</b> <ul style="list-style-type: none"> <li>- Creating a Site Map</li> <li>- Lab 2-7: Creating a site map for your company site</li> </ul>                                                    |

| User Interface Designer Objective                                                                                                                                                             | User Interface Designer Courseware Lesson(s) and Section(s)                                                                                                                    |
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| <b>Domain 3: User Centered Web Design</b>                                                                                                                                                     |                                                                                                                                                                                |
| 3.1 Explain the optimal relationship between Web users and site design, including customers vs. contributors, attracting and retaining users, needs-driven design, and scenario-based design. | <b>Lesson 3: User-Centered Web Design</b><br>- User-Centered Web Design                                                                                                        |
| 3.2 Identify Participatory Design and its involvement with all stakeholders.                                                                                                                  | <b>Lesson 3: User-Centered Web Design</b><br>- Participatory design and scenario-based design                                                                                  |
| 3.3 Explain Scenario-based design and when it is used.                                                                                                                                        | <b>Lesson 3: User-Centered Web Design</b><br>- Scenario-based design<br>- Lab 3-1: Creating scenarios for your company Web site                                                |
| 3.4 Describe the importance of Cognitive Psychology in relation to Web Design.                                                                                                                | <b>Lesson 3: User-Centered Web Design</b><br>- The Cognitive Psychology of Web Design<br>- Lab 3-2: Applying cognitive principles to your Web site design                      |
| 3.5 Identify the terms "personas" and "usability" to understand your audience.                                                                                                                | <b>Lesson 3: User-Centered Web Design</b><br>- Personas and Usability<br>- Lab 3-3: Creating a persona for your Web site design                                                |
| 3.6 Explain use case and use case scenarios.                                                                                                                                                  | <b>Lesson 3: User-Centered Web Design</b><br>- Use cases and use case scenarios                                                                                                |
| 3.7 Describe the purpose and importance of site usability testing.                                                                                                                            | <b>Lesson 3: User-Centered Web Design</b><br>- Usability testing<br>- Lab 3-4: Creating personas, use cases, and use case scenarios                                            |
| 3.8 Given a scenario, determine how to improve site accessibility.                                                                                                                            | <b>Lesson 3: User-Centered Web Design</b><br>- Accessibility                                                                                                                   |
| 3.9 Explain how to improve site accessibility for mobile devices.                                                                                                                             | <b>Lesson 3: User-Centered Web Design</b><br>- Optimizing accessibility for mobile devices<br>- Lab 3-5: Optimizing the accessibility of the mobile version of your site       |
| <b>Domain 4: User Interface Design Principles</b>                                                                                                                                             |                                                                                                                                                                                |
| 4.1 Apply user interface design principles to Web site design.                                                                                                                                | <b>Lesson 4: User Interface Design Principles and Legal Guidelines</b><br>- Web UI Design Principles<br>- Lab 4-1: Demonstrating UI design principles                          |
| 4.2 Describe CARP (contrast, alignment, repetition, proximity) and how it is important to UI design principles.                                                                               | <b>Lesson 4: User Interface Design Principles and Legal Guidelines</b><br>- Visual Design Principles                                                                           |
| 4.3 Describe ERBU (emphasis, rhythm, balance, unity) and how it is important to UI design principles.                                                                                         | <b>Lesson 4: User Interface Design Principles and Legal Guidelines</b><br>- ERBU: Emphasis, Rhythm, Balance, Unity<br>- Lab 4-2: Using CARP and ERBU to assess Web page design |

| User Interface Designer Objective                                                                                                                                                                                           | User Interface Designer Courseware Lesson(s) and Section(s)                                                                                                                                                                                                        |
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| 4.4 Explain branding considerations in user interface design.                                                                                                                                                               | <b>Lesson 4: User Interface Design Principles and Legal Guidelines</b> <ul style="list-style-type: none"> <li>- Branding</li> <li>- Lab 4-3: Creating a branding plan for your Web design company</li> </ul>                                                       |
| 4.5 Given a scenario, describe and resolve legal issues in Web design.                                                                                                                                                      | <b>Lesson 4: User Interface Design Principles and Legal Guidelines</b> <ul style="list-style-type: none"> <li>- Legal Issues Impacting Web Design</li> </ul>                                                                                                       |
| <b>Domain 5: Color, Typography, Layout, and Wireframing</b>                                                                                                                                                                 |                                                                                                                                                                                                                                                                    |
| 5.1 Describe the importance of color usage in user interface design.                                                                                                                                                        | <b>Lesson 5: Color, Typography, Layout and Wireframing</b> <ul style="list-style-type: none"> <li>- Color</li> <li>- Lab 5-1: Creating a color scheme for your company site</li> </ul>                                                                             |
| 5.2 Consider font choices and challenges in user interface design.                                                                                                                                                          | <b>Lesson 5: Introduction to JavaScript</b> <ul style="list-style-type: none"> <li>- Typography</li> <li>- Lab 5-2: Creating a typography scheme for your site</li> </ul>                                                                                          |
| 5.3 Identify elements of effective Web page layout (e.g., content, navigation, space), and discuss variables that may apply to specific situations or site types. Given a scenario, determine an effective Web page layout. | <b>Lesson 5: Introduction to JavaScript</b> <ul style="list-style-type: none"> <li>- Layout</li> </ul>                                                                                                                                                             |
| 5.4 Create a Web page wireframe for a fictitious business.                                                                                                                                                                  | <b>Lesson 5: Introduction to JavaScript</b> <ul style="list-style-type: none"> <li>- Wireframes and Mockups</li> <li>- Lab 5-3: Creating a sketch and wireframe of a page from your site</li> <li>- Lab 5-4: Creating a mockup of a page from your site</li> </ul> |
| 5.5 Explain page layout techniques when creating user interfaces for mobile devices.                                                                                                                                        | <b>Lesson 5: Introduction to JavaScript</b> <ul style="list-style-type: none"> <li>- Responsive Web Design</li> </ul>                                                                                                                                              |
| <b>Domain 6: Designing a Basic Web Page User Interface</b>                                                                                                                                                                  |                                                                                                                                                                                                                                                                    |
| 6.1 Create a simple Web user interface using best practices.                                                                                                                                                                | <b>Lesson 6: Designing a Basic Web Site</b> <ul style="list-style-type: none"> <li>- Creating a Web Site</li> </ul>                                                                                                                                                |
| 6.2 Identify the basics of HTML, CSS and responsive design.                                                                                                                                                                 | <b>Lesson 6: Designing a Basic Web Site</b> <ul style="list-style-type: none"> <li>- HTML and CSS refresher</li> </ul>                                                                                                                                             |

| User Interface Designer Objective                                                                                                                   | User Interface Designer Courseware Lesson(s) and Section(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| 6.3 Apply a default page template to a Web site.                                                                                                    | <p><b>Lesson 6: Designing a Basic Web Site</b></p> <ul style="list-style-type: none"> <li>- Part 1: Creating One Site Page</li> <li>- Lab 6-1: Organizing your company site design materials</li> <li>- Lab 6-2: Revising your Web site vision, strategy, and specification</li> <li>- Lab 6-3: Revising your mind map, word list and mood board</li> <li>- Lab 6-4: Revising your page sketch, wireframe, and mockup</li> <li>- Lab 6-5: Gathering and creating assets for the page template</li> <li>- Lab 6-6: Building the default page template</li> </ul> |
| 6.4 Apply a set of custom page templates to a Web site.                                                                                             | <p><b>Lesson 6: Designing a Basic Web Site</b></p> <ul style="list-style-type: none"> <li>- Part 2: Creating the Remaining Site Pages</li> <li>- Lab 6-7: Revising the site map</li> <li>- Lab 6-8: Creating custom page templates</li> <li>- Lab 6-9: Gathering and creating assets for a site page</li> <li>- Lab 6-10: Creating the remaining site pages</li> </ul>                                                                                                                                                                                          |
| 6.5 Use spelling and grammar tools to review site text.                                                                                             | <p><b>Lesson 6: Designing a Basic Web Site</b></p> <ul style="list-style-type: none"> <li>- Spell- and Grammar-Check the Site</li> <li>- Lab 6-11: Spell- and grammar-checking your site</li> </ul>                                                                                                                                                                                                                                                                                                                                                             |
| <b>Domain 7: Web Site Navigation Concepts</b>                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 7.1 Explain why navigation is critical to interface design, including user-centered design concepts, and "mystery meat" navigation.                 | <p><b>Lesson 7: Navigation Concepts</b></p> <ul style="list-style-type: none"> <li>- Why is Web Site Navigation So Important?</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 7.2 Identify best practices for Web site structure, URLs and file names. Create a site navigation system.                                           | <p><b>Lesson 7: Navigation Concepts</b></p> <ul style="list-style-type: none"> <li>- Site Structure, Directory Structure and URLs</li> <li>- Lab 7-1: Revisiting and revising your site and directory structures</li> </ul>                                                                                                                                                                                                                                                                                                                                     |
| 7.3 Describe familiar conventions used in site navigation, including breadcrumb trails, logos, menus, visited links, home page, naming conventions. | <p><b>Lesson 7: Navigation Concepts</b></p> <ul style="list-style-type: none"> <li>- Positional Awareness</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 7.4 Compare primary and secondary navigation elements in a Web site.                                                                                | <p><b>Lesson 7: Navigation Concepts</b></p> <ul style="list-style-type: none"> <li>- Primary and Secondary Navigation</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 7.5 Identify the benefits of guided site navigation.                                                                                                | <p><b>Lesson 7: Navigation Concepts</b></p> <ul style="list-style-type: none"> <li>- Navigation Elements</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                             |

| User Interface Designer Objective                                                                                                 | User Interface Designer Courseware Lesson(s) and Section(s)                                                                                                                                                                                |
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| 7.6 Given a scenario, create a navigation hierarchy for a Web site.                                                               | <b>Lesson 7: Navigation Concepts</b> <ul style="list-style-type: none"> <li>- Navigation Conventions and Principles</li> <li>- Lab 7-2: Creating a navigation system checklist</li> </ul>                                                  |
| 7.7 Given a scenario, create a navigation action plan for a Web site.                                                             | <b>Lesson 7: Navigation Concepts</b> <ul style="list-style-type: none"> <li>- Creating a Navigation System</li> <li>- Lab 7-3: Optimizing the navigation system of your company site</li> </ul>                                            |
| <b>Domain 8: Designing an Interactive Web Page User Interface</b>                                                                 |                                                                                                                                                                                                                                            |
| 8.1 Identify why prototyping is so important.                                                                                     | <b>Lesson 8: Designing and Developing a Professional Web Site</b> <ul style="list-style-type: none"> <li>- Why is Prototyping So Important?</li> </ul>                                                                                     |
| 8.2 Explain common patterns of user activity on interfaces, including breadcrumbs, progressive disclosure, and pattern libraries. | <b>Lesson 8: Designing and Developing a Professional Web Site</b> <ul style="list-style-type: none"> <li>- User Interface Design Patterns</li> </ul>                                                                                       |
| 8.3 Optimize the "look and feel" for a site.                                                                                      | <b>Lesson 8: Designing and Developing a Professional Web Site</b> <ul style="list-style-type: none"> <li>- Optimizing the look and feel of a Web site</li> <li>- Lab 8-1: Optimizing the look and feel of your company Web site</li> </ul> |
| 8.4 Identify the importance of forms for user input within a user interface using best practices.                                 | <b>Lesson 8: Designing and Developing a Professional Web Site</b> <ul style="list-style-type: none"> <li>- Focus on Web Forms</li> </ul>                                                                                                   |
| 8.5 Explain how a form in a Web page should be processed to a database.                                                           | <b>Lesson 8: Designing and Developing a Professional Web Site</b> <ul style="list-style-type: none"> <li>- GET and POST</li> </ul>                                                                                                         |
| 8.6 Identify an appropriate framework for a Web site.                                                                             | <b>Lesson 8: Designing and Developing a Professional Web Site</b> <ul style="list-style-type: none"> <li>- Web Framework</li> </ul>                                                                                                        |
| 8.7 Describe how UI library elements are used to create a Web site.                                                               | <b>Lesson 8: Designing and Developing a Professional Web Site</b> <ul style="list-style-type: none"> <li>- User Interface Libraries</li> </ul>                                                                                             |
| 8.8 Identify a content management system to create a Web site.                                                                    | <b>Lesson 8: Designing and Developing a Professional Web Site</b> <ul style="list-style-type: none"> <li>- Web Content Management Systems</li> </ul>                                                                                       |
| 8.9 Identify templates and themes.                                                                                                | <b>Lesson 8: Designing and Developing a Professional Web Site</b> <ul style="list-style-type: none"> <li>- Lab 8-2: Choosing a CMS theme template</li> </ul>                                                                               |
| 8.10 Compare various site publishing tools, including FTP, HTTP and vendor-specific tools.                                        | <b>Lesson 8: Designing and Developing a Professional Web Site</b> <ul style="list-style-type: none"> <li>- Additional Web Development Tools</li> </ul>                                                                                     |
| 8.11 Choose a Web host and domain name for your site.                                                                             | <b>Lesson 8: Designing and Developing a Professional Web Site</b> <ul style="list-style-type: none"> <li>- Web Hosting Services and Domain Names</li> <li>- Lab 8-3: Choosing a Web hosting service and domain name</li> </ul>             |

| User Interface Designer Objective                                                                                                 | User Interface Designer Courseware Lesson(s) and Section(s)                                                                                                                                                                                            |
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| <b>Domain 9: User Interface Design and SEO Strategies</b>                                                                         |                                                                                                                                                                                                                                                        |
| 9.1 Test a user interface, including HTML5 validation, quality assurance, security, focus groups. Validate the site code.         | <b>Lesson 9: Site Publishing, Maintenance, Security, and SEO Strategies</b> <ul style="list-style-type: none"> <li>- Making Sure a Web Site is Ready to be Published</li> <li>- Lab 9-1: Making sure your Web site is ready to be published</li> </ul> |
| 9.2 Explain the tasks required to properly maintain a Web site.                                                                   | <b>Lesson 9: Site Publishing, Maintenance, Security, and SEO Strategies</b> <ul style="list-style-type: none"> <li>- Maintaining a Web Site</li> </ul>                                                                                                 |
| 9.3 Define search engine optimization (SEO), including the relationship between SEO and Internet marketing.                       | <b>Lesson 9: Site Publishing, Maintenance, Security, and SEO Strategies</b> <ul style="list-style-type: none"> <li>- Search Engine Optimization (SEO)</li> </ul>                                                                                       |
| 9.4 Explain the relationship between written Web site content and SEO.                                                            | <b>Lesson 9: Site Publishing, Maintenance, Security, and SEO Strategies</b> <ul style="list-style-type: none"> <li>- SEO and Written Site Content</li> </ul>                                                                                           |
| 9.5 Given a scenario, explain SEO strategies for mobile apps and data.                                                            | <b>Lesson 9: Site Publishing, Maintenance, Security, and SEO Strategies</b> <ul style="list-style-type: none"> <li>- SEO and Mobile-Friendliness</li> </ul>                                                                                            |
| 9.6 Describe how metadata is used in SEO, including the <meta> tag, document identification, search engines, delayed file change. | <b>Lesson 9: Site Publishing, Maintenance, Security, and SEO Strategies</b> <ul style="list-style-type: none"> <li>- SEO and Metadata</li> <li>- Lab 9-2: Creating an SEO strategy for your company site</li> </ul>                                    |