# Chapter 10 Hands-On Practice Website Case Study

Yulia Tarima

**PART 1: REVIEW THE DESIGN DOCUMENTS AND COMPLETED WEB PAGES**.

Web pages created for JavaJam follow the sitemap and wireframes structure and hierarchy.

**PART 2: PREPARE A TEST PLAN**.

1. **Browser compatibility**: test Web pages on commonly used browsers and browser versions (Chrome, Safari, Firefox, Opera):  
   BrowserStack's Free Trial, LambdaTest's Free Plan, CrossBrowserTesting by SmartBear, Microsoft Edge Developer Tools, BrowserShots
2. **Device and operating systems compatibility:** desktop/laptop, tablet, iphone/android smartphones   
   Google's Mobile-Friendly automated test (<https://search.google.com/test/mobile-friendly>), Responsinator, BrowserStack's Free Trial, LambdaTest's Free Plan, CrossBrowserTesting by SmartBear, BrowserShots, Microsoft Edge Developer Tools, Google Chrome DevTools
3. **Scale/Resolution:** site behavior for different viewport sizes (2560×1440, 1366×768, 1920×1080, and 1024×768)  
   BrowserStack's Free Trial, LambdaTest's Free Plan, CrossBrowserTesting by SmartBear, Google Chrome DevTools
4. **Bandwidths and Download time**: slow and fast connections (broadband, dial-up, hotspot) at 56.6Kbps, 128Kbps, 512Kbps, T1/DS1 (1.544Mbps)  
   Web Page Analyzer (<http://www.websiteoptimization.com/services/analyze>)  
   http://watson.addy.com
5. **HTML Validation**: W3C Markup Validation Service (https://validator.w3.org)
6. **CSS Validation:** W3C CSS Validation Service (https://jigsaw.w3.org/cssvalidator)
7. **Correct grammar/spelling:** <http://watson.addy.com>, Grammarly browser extension, Hemingway Editor, LanguageTool, OnlineCorrection.com
8. Check for Required Content and Graphics
9. **Validate Hyperlinks**: [W3C Link Checker](https://validator.w3.org/checklink).
10. **Accessibility Testing:** can be used by all individuals, including those with visual, hearing, mobility, and cognitive challenges - text alternatives for non-text content such as images, videos, and audio files (alt for images, captions for videos and transcripts for audio content); all functionality can be operated via a keyboard alone (navigation for individuals who cannot use a mouse); Clear and Consistent Layout (clear headings, consistent navigation menus, and predictable layout); skip navigation links (efficiency for screen reader users), sufficient color contrast between text and background elements (readability for individuals with low vision or color blindness); accessible forms with clear labels, error messages (clearly communicated, provide suggestions for correction, and allow users to easily recover from errors), and accessible input fields; descriptive links text (accurately describes the destination).  
    <https://web.dev/>, <https://www.section508.gov/>, <https://www.w3.org/>, <https://www.w3.org/WAI/WCAG21/quickref/>, <https://www.w3.org/WAI/eval/preliminary>, WebAIM Wave (<http://wave.webaim.org>, ATRC AChecker (<https://www.achecker.ca/checker>), <https://chrispederick.com/work/webdeveloper>, ARC Toolkit (https://www.paciellogroup.com/toolkit)
11. **Form Processing:** PostBin (https://postb.in/)
12. **Scripting/Dynamic Effects**
13. **Search Engine Optimization:**  Meta tag (description), Keywords in page title, headings, content.  
    https://web.dev/
14. **Usability Testing:** intuitive design, ease of learning, efficiency of use, memorability, error frequency and severity.  
    UX factors by Usability.gov (<https://www.usability.gov/what-and-why/usability-evaluation.html>)

**PART 3: TEST YOUR WEBSITE**.

**Results of Testing:** Overall result is satisfactory: page titles and headings are descriptive and include the organization’s name. Clear structure, clean layout, simple intuitive navigation - all of that eases the understanding of the website organization and allows for easy browsing to arrive at the desired destination even for a new user. There isn’t really a learning curve in understanding how the website works and a new visitor would be easily able to perform basic tasks on the website.   
The website follows the responsive approach and easily adapts towards differently sized screens while changing the layout towards better user experience for the various viewport sizes. Grammar and spelling is correct, no dead links, accessible images with alternative text. The website passes W3C CSS and HTML validation, all the required images can be reached, all the required content is present. Download speed less than 2 seconds on the slowest connection speed.

**Suggested improvements:**It might not be enough contrast for the visually impaired/color blind users.  
Payment functionality: the users would benefit if they could purchase directly from the website.  
Reset button value missing, No skip to content link.

**PART 4: PERFORM USABILITY TESTING**. Describe three scenarios that typical visitors to your site may encounter.

* **Browsing the Menu**: A visitor arrives at the cafe's website looking to explore the menu options before visiting in person or placing an order online. They navigate through the website's menu section, where they can view various options. They browse through the list of items, accompanied by appetizing descriptions and mouth-watering images, to decide what they'd like to try during their visit.  
  Improvement: online order function and ability to reserve a table would be beneficial.
* **Checking Operating Hours and Location**: Another visitor wants to find out when the cafe is open and its exact location. They visit the website's homepage or dedicated sections for operating hours and contact information. Here, they find details such as the cafe's opening and closing times, days of operation, and any special holiday hours.
* Improvement: the user may like to use the website's integrated map feature to get directions to the cafe's physical location, ensuring they can plan their visit accordingly. Operating hours information is missing.
* **Exploring Events and Specials:** Visitors may be interested in learning about upcoming events, promotions, or specials hosted by the café. This would be easy to achieve since the “Music” menu tab provides easy access to the page featuring live music performances.
* **Contacting the Café**: If visitors have questions, feedback, or inquiries, they may look for ways to contact the café directly.
* Email is available to the users from every page in the footer, phone number is available via the home page.
* Improvements: It is not clear how to find a phone number to call if you are not at the home page - there is no dedicated “Contact Us” section. A contact form to submit their inquiry online would be beneficial for users. Offering multiple channels for communication can help ensure satisfaction among website visitors.