

Responsive Web Design: Online Marketplace Interface

CS131: Intro to Web Structures | Unit 3
Assignment - Personal Website

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Project Overview

This project focused on designing and developing a responsive website using HTML and CSS. The goal was to create a clean, organized webpage that adjusts across desktop, tablet, and mobile screen sizes. I created a simple online marketplace website called *Otherstuff.com* that includes category navigation and item cards for listings such as pets, household items, cars and trucks, and computer items. The project allowed me to apply core web design principles while practicing how to build a layout that remains usable and visually consistent on different devices.

Technical Features

The website includes several features that support both organization and responsiveness. A navigation bar allows users to browse categories quickly, while item cards group listing information into a clean and readable format. The page uses Flexbox for alignment and spacing, which helps maintain structure across different screen widths. Media queries at 900 pixels and 600 pixels adjust the layout for tablet and mobile devices by wrapping or stacking content as needed. These features show an understanding of modern front-end design fundamentals.

Design and Development Process

I began by building the page structure in HTML with a site title, navigation section, category heading, and listing cards. I then used CSS to style the page with spacing, borders, typography, and layout organization. Flexbox was used to align the navigation and card sections, while media queries were added to adjust the design for tablet and phone screen sizes. This process helped me understand how layout decisions affect readability, spacing, and usability as screen dimensions change. I began by building the page structure in HTML with a site title, navigation section, category heading, and listing cards. I then used CSS to style the page with spacing, borders, typography, and layout organization. Flexbox was used to align the navigation and card sections, while media queries were added to adjust the design for tablet and phone screen sizes. This process helped me understand how layout decisions affect readability, spacing, and usability as screen dimensions change.

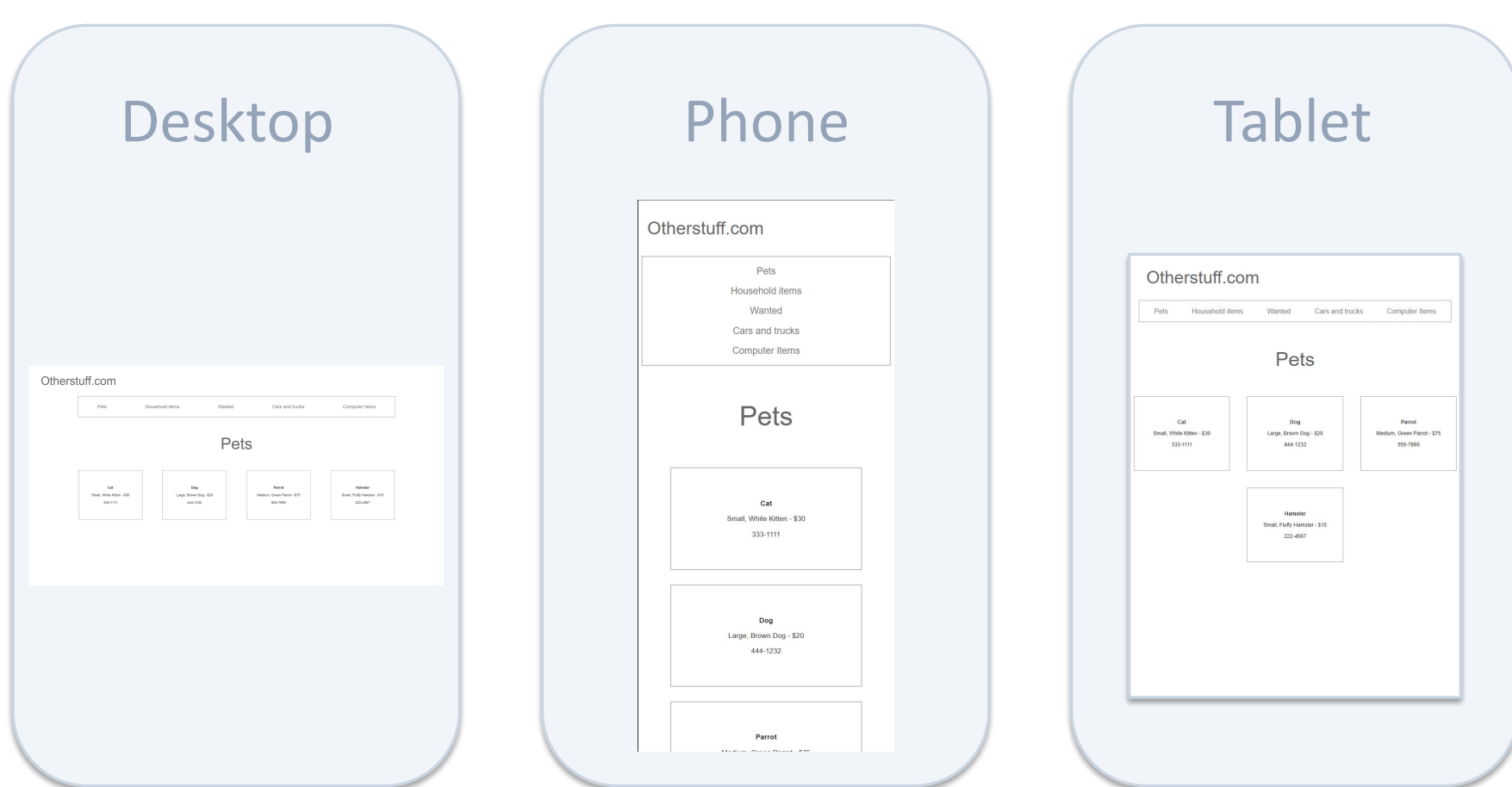
Key Skills

- HTML page structure
- CSS styling
- Flexbox layout
- Media queries
- Responsive design
- Visual organization
- Spacing and alignment
- Debugging layout issues

Challenges and Growth

One of the biggest challenges in this project was deciding how complex the design should be. At first, I wanted the website to look highly polished, but I realized that the assignment was really about structure and responsiveness. I also had to work through layout issues involving margins, widths, and wrapping behavior. These challenges helped me better understand how to simplify a design, troubleshoot alignment problems, and focus on building a functional webpage that works well across devices.

Responsive Layout Preview



Code Highlight

```
@media (max-width: 900px) {  
  .cards {  
    flex-wrap: wrap;  
    gap: 40px;  
  }  
  
  .nav {  
    width: 90%;  
    flex-wrap: wrap;  
    height: auto;  
    padding: 15px;  
    gap: 15px;  
  }  
}  
  
@media (max-width: 600px) {  
  .nav {  
    flex-direction: column;  
  }  
  
  .cards {  
    flex-direction: column;  
    align-items: center;  
    gap: 25px;  
  }  
}
```

This code shows how media queries were used to adjust the layout for smaller screens. At 900px, the cards and navigation begin to wrap for tablet viewing, and at 600px, the layout shifts to a stacked mobile-friendly format.

Reflection and Future Improvements

What I Learned

This project strengthened my understanding of how HTML and CSS work together to create a complete webpage. I learned how Flexbox can organize content efficiently and how media queries can make a design adapt across devices.

What Worked Well

The card layout and navigation structure created a clear and simple user experience. The responsive adjustments also worked well because the page becomes easier to read and use on smaller screens.

Future Improvements

If I continued this project, I would add images, more listing categories, and stronger visual styling. I would also improve the overall branding and add interactive features such as links, buttons, or forms to make the site feel more complete.