ECC006 Homework Assignment #7

1. How would you link to the named fragment #jobs on the page employ.html from the home page of the site?

a. Jobs
b. Jobs
c. Jobs
d. Jobs

Answer: a

2. Which pseudo-element can be used to generate content that precedes an element?

a. :after
b. :before
c. :content
d. :first-line

Answer: b

3. Which of the following is a mobile web design best practice?

a. Configure a multiple-column page layout.
b. Avoid using lists to organize information.
c. Configure a single-column page layout.
d. Embed text in images wherever possible.

Answer: a

4. Find the Error. The page below is intended for the navigation area to display on the right side of the browser window. What needs to be changed to make this happen?

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Find the Error</title>
<meta charset="utf-8">
<style>
body { background-color: #d5edb3;
color: #000066;
font-family: Verdana, Arial, sans-serif; }
nav { float: left;
width: 120px; }
main { padding: 20px 150px 20px 20px;
background-color: #ffffff;
color: #000000; }
</style>
</head>
<body>
<header role="banner">
<h1>Trillium Media Design</h1>
</header>
<nav role="navigation">
<ul>
```

```
<li><a href="index.html">Home</a></li>
<li><a href="services.html">Services</a></li>
<li><a href="contact.html">Contact</a></li>
</ul>
</nav>
<main role="main">
<p>Our professional staff takes pride in its working relationship with our clients by offering personalized services that listen to their needs, develop their target areas, and incorporate these items into a website that works.</p>
</main>
</body>
</html>
```

ANSWER

To change the position of the navigation to the right side it should be

```
nav{
float: right;
}
```

Web research

As you read about mobile web design best practices in this chapter, you may have noticed some overlap with techniques that provide for accessibility, such as alternate text and use of headings. Explore the Web Content Accessibility and Mobile Web document at *http://www.w3.org/WAI/mobile*. Explore related links that interest you. Write a one-page, double-spaced summary that describes areas of overlap and how web developers can support both accessibility and mobile devices.

Answer:

Mobile has revolutionized the way we use the web. This is especially true of disabled users, for whom mobile devices open the door to a whole new spectrum of interactions.

And they are taking advantage of it. A July 2013 survey of adults with disabilities done by the Wireless Rehabilitation Engineering Research Center found that 91% of people with disabilities use a “wireless device such as a cell phone or tablet.” Among these users, screen reader usage is common, even on mobile devices.

Despite this, many basic best practices for accessibility are forgotten on mobile websites. Developers implement complex solutions such as responsive design and responsive images, yet forget about basic techniques such as image replacement. Therefore, disabled users — who have a difficult enough time on the desktop — are frequently presented with interfaces that are at best frustrating, and at worst, impossible to use.

While accessibility can be a complex topic, following a few best practices goes a long way towards building accessible sites and applications. In this article we’ll discuss a few practical measures that address the most common issues disabled users encounter. Specifically, we’ll

look at the importance of the following:

making sure everything works with a keyboard,
marking up forms semantically,
providing plenty of contrast,
ensuring that screen readers know what your controls do,
testing your website on an actual screen reader.
We'll see that following these best practices leads to a better experience for everyone, not just disabled users.

1. Design for mobility

U.S. Census Bureau data shows that 20% of Americans 18 years and older — about 48.2 million people — had a functional limitation in 2014, including 1.7% — about 4.1 million people — who had "difficulty using a phone." Functional limitations can interfere with the use of touchscreens, or hinder its use completely.
To optimize for touchscreen interactions, touch targets should be at least 9mm x 9mm and surrounded by a small amount of inactive space. To prevent accidental selection, actions should be carried out only when the finger is lifted off the screen, rather than when it makes initial contact with the screen.
To accommodate for a thumb's range of motion, the most commonly-used elements should be placed within range, while keeping in mind that this differs for right- and left-handed users.
Finally, in the absence of dexterity, designers can provide alternative input methods. In the event that both hands are occupied, or if a functional impairment prevents the use of either or both hands, options like voice control, physical switches, and keyboards are crucial.

2. Design for hearing

U.S. Census Bureau data also reveals that 7.1% of Americans — about 17.1 million people — experienced a serious hearing difficult in 2014, including 1.4% — about 3.4 million people — who were deaf. Differences in hearing can significantly impact access to information, particularly when information is presented in audio or video format.
To accommodate access to audio content, the same content should be presented in text format (i.e., in the form of a transcript). To accommodate access to video content, the relevant content — including non-verbal elements — should be captioned and/or presented in a text transcript.
Not only do these accommodations benefit people who are deaf or hard of hearing, they can also benefit anyone who is accessing content in a loud bar, or in a quiet library with the volume off on their mobile devices

3. Design for sight

U.S. Census Bureau data shows that 5.1% of Americans — about 12.3 million people — had serious difficulty seeing in 2014, including 0.7% — about 1.6 million people — who were blind. For people who are blind or low vision, it's important for designers to pay attention to contrast and the underlying information architecture.
When designing for limited vision, it's important to design for visual clarity and contrast. Colors should meet certain contrast criteria, and text should be readable with up to 200% magnification.
Many people who are blind or low vision rely on screen reader software to navigate their mobile devices. Screen readers work in a linear fashion, which means that interface elements should be labeled and structured for ease of navigation. For example, relevant images should be labeled with descriptive, alternative text. Screen reader users should be able to skip repetitive page elements and be able to navigate entire sites and applications without getting trapped on any interface element.

4. Design for the ways we learn & understand information

U.S. Census Bureau data also reveals that 9.7% of Americans — about 23.2 million people — had a condition that limited mental or cognitive functioning in 2014, including 3.5% — about 8.5 million — who had a learning disability. It's important to structure mobile sites and applications in ways that are familiar and easy to use.

One way to design for ease of use is to present the most relevant information first (i.e., above the fold), making it possible to access high-priority content with minimal interaction. Similarly, consistency across screens and pages helps users manage their expectations while interacting with a site or application. The clarity of information benefits everyone, especially when people are multitasking, distracted, or simply tired at the end of the day.

Another way to design for familiarity and ease of use is through language. Designers should ensure content is easy to read and understandable within a mobile context. For English, a good rule of thumb is to use language that can be read at a lower secondary education level (i.e., around grades 5–7 in the U.S.). This can improve accessibility for everyone, such as those who are learning English as a second or third language.