SIT-120

Introduction to Responsive Web Apps

Task 1.2-P

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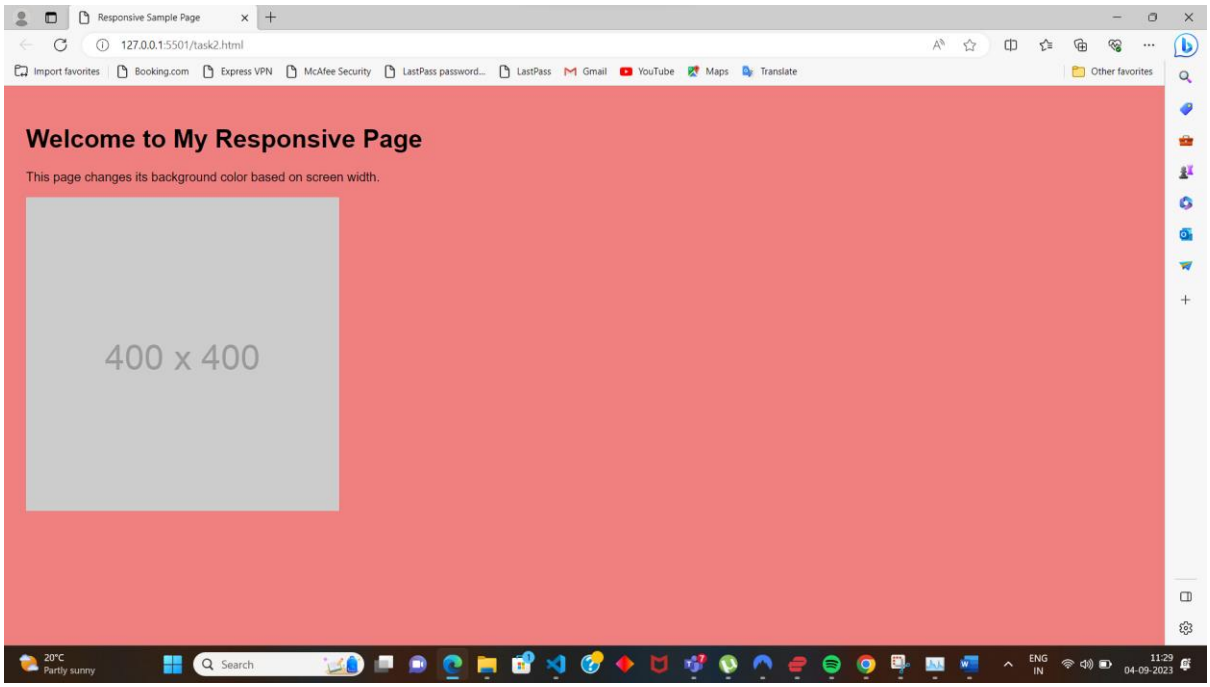
Screenshot of the website:



Link to Video

https://video.deakin.edu.au/media/t/1_rxjf35gh

Link to Github:

https://github.com/PAHUL12/SIT120--TASK-2.git

I. Responsive Web Design

The goal of responsive web design (RWD), a design strategy, is to have websites render effectively and correctly across a range of devices and window or screen sizes (Marcotte,

2010). Web pages were traditionally created for a single standard screen size by web designers. But when more devices—from PCs to tablets and smartphones—became available, it became essential for websites to dynamically adjust to various screen sizes, viewing angles, and other factors.

RWD's significance may be summed up as follows:

User Experience: Providing a smooth user experience is one of the main justifications for adopting RWD. A website that adapts and appears the same across all platforms gives users a good experience, which increases the probability that they will remain on the site longer and engage more.

An increase in mobile traffic is a result of the growing number of people using mobile devices to access the internet (Google Developers, 2014). A responsive design makes sure that mobile visitors enjoy an experience that is tailored to their device.

Cost and Time Effective: RWD enables developers to construct a single site that adapts to fit any screen size rather than having to design distinct websites for various devices. As a result, maintenance expenses and development time are cut.

SEO Benefits: Responsive websites are prefered by Google and other search engines. Because they provide a better user experience across devices, websites using RWD typically score higher in search results (Google Developers, 2014)

Future Scalability: A responsive site is more likely to continue to be compatible and functioning when new devices are introduced, assuring lifespan and lowering the need for regular overhauls.

In conclusion, RWD is not only a fad but a crucial strategy in the current online design and development environment. Responsive design is essential to a website's success due to the range of devices accessible and the requirement for the best user experience (Marcotte, 2010).

References:

- Marcotte, E., 2010. *Responsive Web Design*. A List Apart. [online] Available at: https://alistapart.com/article/responsive-web-design/

- Google Developers, 2014. *Build Responsive Sites*. [online] Available at: https://developers.google.com/web/fundamentals/design-and-ux/responsive/

II. Implementing responsive web design with HTML and CSS

Media queries, adaptable pictures, and flexible grids are the main components of responsive web design (RWD). Websites may adjust to any screen size and device by integrating these components (Marcotte, 2010).

Flexible Grids: Use relative units like percentages as opposed to pixel-based dimensions. This guarantees that your layout will change to fit the width of the screen (W3C, 2018).

Flexible pictures: Using the CSS properties max-width: 100% and height: auto, you can make sure that pictures are scalable and will adjust to the size of the contained components.

For RWD, media queries are crucial. Media queries allow CSS to apply styles based on device properties, most frequently the browser width (W3C, 2012).

References:

- Marcotte, E., 2010. *Responsive Web Design*. A List Apart. [online] Available at: https://alistapart.com/article/responsive-web-design/
- W3C, 2018. *CSS Flexible Box Layout*. World Wide Web Consortium (W3C). [online] Available at: https://www.w3.org/TR/css-flexbox-1/
- W3C, 2012. *Media Queries*. World Wide Web Consortium (W3C). [online] Available at: https://www.w3.org/TR/css3-mediaqueries/

Reflection:

Fundamentals of JavaScript and responsive web design (RWD) were combined in this assignment. RWD emphasised the necessity of web device flexibility, highlighting the usercentric aspect of contemporary online design. The role of flexible grids, pictures, and media queries was underlined when RWD theory was applied in practice. JavaScript was highlighted because of how versatile it is in web development, from string manipulation to sophisticated function calls. This thorough investigation served as a testament to how closely related web design and development are, and it also served to remind me of the need for both aesthetic flexibility and functional dynamism in producing complete web experiences.

Overall, the mix of theoretical and practical activities underlined how web development is always changing and how important it is to keep up with it.