**WHAT DOES IT DO?**

**1) State of art**

Web development is the process of creating a website that is available and can be accessed via the Internet. This field varies from building just a single static page to enterprise applications that have millions of users. It can be divided into many sub-fields, including web engineering, web design, web server, network security, etc[1]. Many programming languages and platforms can be used in the process of making a website, depending on the scale, resources and purposes of the project.

**2) What can be done now?**

Web development has experienced incredible improvement over the last decade. It is an essential part of any industry at the moment. For example, business owners can now open an e-commerce website to raise their sales. In large corporations, websites are used to extract, visualize and analyze data to help them come up with better business solutions. In addition, using websites is an excellent resource for people to consume information and even create and share their content in the form of blogs or social media. Modern websites provide users with a high-quality user interface and dynamic content, which means that what the website display will change according to users' input. Moreover, with the help of databases, all of the users' data can be saved for their future sessions. Companies can also utilize that information to develop strategies to help keep old customers and attract new ones. Furthermore, everyone can have their online presence on the Internet; they can upload, share and even sell any digital product like images or videos on the Internet. Humans can contact each other by chatting or video calls by using social platforms.

**3) What is likely to be able to do be done soon (say in the next 3 years)?**

Web development will undoubtedly keep growing in the next few years. The number of new back-ends and front-ends frameworks for building websites will continue to rise, allowing IT specialists to develop, maintain, and deploy websites most efficiently. As a result, websites will see a massive improvement in performance and complexity. More websites will have 3D graphical interfaces, providing users with a more realistic and interactive experience [2]. This can even help simulate real-life situations for science research, like autonomous cars or even astronomy exploration. Artificial intelligence and machine learning technologies can also be applied to e-commerce and entertainment websites for suggesting recommendations for users based on their historical use of the website[3]. Website owners can use chatbots on their sites to resolve any questions from the customers without the need for virtual assistants. With the help of blockchain, all websites will have much better security and privacy when people can own their digital content and not rely on any network of big corporations [4].

**4) What technological or other developments make this possible?**

Those break-through of web development are the results of many reasons. The first and most apparent cause is the thrive of new advanced fields in IT, including artificial intelligence, machine learning and blockchain. These fields can be implemented in order to make websites have a higher quality in every aspect ranging from user experience to network privacy. The second reason is that websites have to be continuously improved to meet people's requirements, from day-to-day activities like shopping or connecting to scientific research. The final reason is the massive improvement of electronic devices. More and more types of phones, tablets and desktops with different brands, designs and operating systems are available in the market. As a result, organizations have to develop sites that can run efficiently across all of those devices to continue increasing their revenue.

**What is the likely impact?**

**​What is the potential impact of this development? What is likely to change?**

Web development has revolutionized many industries in our lives, and it will assuredly continue doing so in the future. For example, in education, there will be more and more online course websites that can support students from any level to learn any kind of subject they like, from art to science. Moreover, those websites will provide users with experiential learning, when they can practice the skills they just learnt right on the website. This can lead to the steady replacement of online learning to face-face teaching. With the help of AI/ML, entertainment platforms like social media, streaming or gaming will provide users much more engaging experience. The number of e-commerce websites will also rise considerably to help business owners increase revenue and allow customers to make online orders and payments easily.

Web development changes many aspects of human habits and improves our lives in many ways. Online businesses, courses and entertainment platforms are constantly being built, maintained, and enhanced to help us have easier, more happy, and productive lives.

Which people will be most affected and how?

People across all industries are affected by web development. The IT industry always has to evolve to deliver high-quality websites for other industries. Therefore, people working in this field must always stay up-to-date with the latest technologies in order to come up with websites that suit users' needs. The development of website technologies can be considered a win-win case for both business owners and customers; business owners can dramatically attract more users and increase their revenue while customers will have a better experience when using the websites.

Will this create, replace or make redundant any current jobs or technologies?

Web development helps create many IT jobs, ranging from developers, designers to business analysts or testers. US Department of Labor projects that there will be a 13% growth of jobs for Web Developers and Digital Designers between 2020-2030 [5]. There have not been many concerns about web development replacing existing jobs. However, the rise of online learning and shopping can have a negative impact on teachers and owners of traditional stores.

**How will this affect you?**

**In your daily life, how will this affect you?**

As students of RMIT, integrating ourselves with websites is an essential part of our daily routine. We use websites for many purposes, from supporting my study to entertaining. The advancement of website technologies allows us to access and consume the contents of websites much faster and simpler than at the moment. As a result, it will be much more efficient whenever we need to research for our university study. Moreover, with many high-quality and practical online course websites available online, we can study any subjects and new skills that we like without the help of instructors. We also use a lot of entertainment platforms. The advancement of AI/ML and 3D Graphics in websites will bring us a much better time enjoying online games, music and movies.

**What will be different for you?**

Web development has changed our lives over the past decades. For example, online payment on websites was unavailable in older days, but now we can transfer money quickly with only a few clicks. Looking into the future, with the rise of blockchain, we can use cryptocurrencies to deal with transactions on websites, which is much more secure than bank transfers. In addition, since website contents are getting more and more privacy and focusing more on individuals instead of communities, we can also create, share and even sell content on the Internet without any issues related to authorization.

**How might this affect members of your family or your friends?**

Our friends will most likely take advantage of the advancement of websites to enhance many parts of their lives just like us. They will have a better experience while studying, relaxing, shopping or even creating and sharing content on websites. Our family members mostly use websites to update news, and they are not very familiar with complex technologies. Therefore, since websites are being designed to become easier and easier to navigate, our family members will benefit greatly.

Ref:

[1] Wikipedia. “Web development.” <https://en.wikipedia.org/wiki/Web_development> (accessed Dec. 9, 2021).

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[3] C. Borodescu. “The AI of Personalized Ecommerce Product Recommendations.” MorphL. ​​<https://morphl.io/blog/ecommerce-ai-recommender-system/> (accessed Dec. 9, 2021).

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[5] N. Carlson “Mobile Versus Desktop.” Business Insider. <https://www.businessinsider.com/mobile-versus-desktop> (accessed Dec. 9, 2021).