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COMMON ASSESSMENT TASK

Level 3 Digital Technologies and Hangarau Matihiko, 2019

91909 Present a reflective analysis of developing a digital outcome

Credits: Three

Achievement Criteria		
Achievement	**Achievement with Merit**	**Achievement with Excellence**
Present a reflective analysis of developing a digital outcome.	Present an in-depth reflective analysis of developing a digital outcome.	Present an insightful reflective analysis of developing a digital outcome.

Type your School Code and 9-digit National Student Number (NSN) into the header at the top of this page. (If your NSN has 10 digits, omit the leading zero.)

Answer all parts of the assessment task in this document.

Your answer should be presented in 12pt Arial font, within the expanding text boxes, and may only include information you produce during this examination session.

You should aim to write between **800–1500 words** in total.

Save your finished work as a PDF file with the file name used in the header at the top of this page ("SchoolCode-YourNSN-91909.pdf").

By saving your work at the end of the examination, you are declaring that this work is your own. NZQA may sample your work to ensure that this is the case.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

Excellence
07

INSTRUCTIONS

Read all parts of the assessment task before you begin.

Choose any digital outcome that you developed during the year.

Type your chosen digital outcome in the space below:

Website

Begin your answers on page 3.

ASSESSMENT TASK

(a) (i) Describe and explain the digital outcome that you developed.

> For my digital outcome, I designed a responsive website for the purpose of sharing artworks by my artist client. In this, I had to consider implications including social, cultural, and more, targeting my specific client base of art collectors, sellers, buyers, and so forth. To ensure that the website was functioning in a responsive manner, I used bootstrap's responsiveness methods which allow images and text fluidity as well as the responsiveness on multiple screen sizes, devices, and more. To ensure that the project stayed within time constraints and was finished to its highest possible standard I used project management techniques and tools such as the Agile project management technique and Microsoft Planner as a project management tool. In addition to these aspects, I needed to ensure I had the required skills necessary to complete as successful outcome, thus, I used online tutorials to teach myself.

(ii) Explain how decisions you made in the development process are **linked** to your chosen digital outcome's characteristics, referring to:

- the selection of the tools and techniques used to develop the outcome, AND
- ways of addressing implications and end-user considerations.

> Bootstrap was an integral tool and technique in ensuring the responsiveness and functionality of the outcome were successful. Bootstrap has a 12 grid system which allows for creating responsive column-like formats that will drop down when screen sizes become too small to fit the whole component in. for my main navigation bar, I tested out bootstrap techniques. I found that the 12 grid system would not be the most efficient technique as it disrupted my layout and symmetry, thus, I left the gris system behind but used other bootstrap techniques which allowed me to have a drop-down effect when screen sizes became too small to accommodate the navigation bar. In addition to this, I used such techniques on a variety of my buttons and text components to avoid the ill-functioning of overlapping content due to different devices and screen sizes or browsers.
>
> One way to improve the efficiency of my styling and coding was with CSS pages. CSS or Cascading Style Sheets create the key styling tool of developing a website outcome, they can be connected to HTML pages. For each page of my website I used only one CSS sheet, thus, improving the overall time management by shortening the amount of code necessary to complete a component. For example, I can use one style sheet to produce the backgrounds for all of the website's pages if I have a very consistent style. For my legality pages, however, I used only one style sheet for the three of them as they each have identical functions and aesthetics such as backgrounds and drop-down buttons.
>
> Microsoft Planner was an integral aspect in the development of my digital outcome. In planner I was able to modify and add each of my tasks into broken down components in their 'bucket' system. Such a system allowed quick access and

simple manipulation; making for a personalized and simple experience. Additionally, I was able to download Planner onto multiple devices such as my mobile phone and thus, you can receive notifications for when a task is coming up. This keeps one on track and motivated, having such simple techniques of access and modification abilities.

Similarly, agile project management techniques made up a key aspect of the development process of my digital outcome. Agile project management techniques include scheduled meetings for feedback and task preparation as well as completion. In this, you are able to keep up to date with not only your own development process and tasks but also with other members of the groups, allowing time for feedback and help. In this, when you are stuck on a component of your outcome you can simply have feedback from peers attending the Agile meetings who may have already faced similar struggles.

Lastly, though I was able to have peer support and feedback on my development of my outcome, it was also important that I used external sources of tutorials and education that would support the development and success of my outcome. In this, I used YouTube videos and W3schools.com to look up specific components and observe how other might have addressed similar aspects that I was struggling with, in a more efficient manner. For example, many of my bootstrap methods were supported by helpful tutorials found on W3schools.com where I was able to read through code and see previews of their outcomes.

(b) (i) Explain how decisions you made **affected** the development process of your chosen digital outcome's characteristics, referring to:

- the selection of the tools and techniques used to develop the outcome, AND
- ways of addressing implications and end-user considerations.

To physically code my website, I used the Brackets application. Brackets has certain features such as highlighted text and live previews which allow for efficiency of code and the frequent testing of functionality and aesthetics. Thus, when using bootstrap responsiveness methods, having live previews on brackets was an integral aspect in ensuring that my code was working as intended. In this, I was able to test how a user would navigate through my website; testing the overall user experience and interface as I was programming.

In regard to CSS and HTML programming, choosing to use as little CSS pages as possible was a key aspect in improving the overall efficiency of the code and in turn, the functionality of the website. by using only one CSS page I was able to make changes to multiple pages at once by manipulating one CSS page. this was extremely helpful for the code of the legality pages as they were each identical except for the actual text content. CSS, also being the integral styling component of my website, meant that I needed to be aware of the content I am uploading to an online outcome in regard to wider implications of the people viewing. For example, implications I needed to consider were that of the culture of my target market, and so forth. In relation to culture implications, I needed to consider any aspects that could be taken as a threat or offense such as colour or imagery. Thus, I used consistent and simple colours over my style sheets as well as using only my own imagery or artworks that were abiding by copyright and creative commons rules and regulations. Furthermore, this is where the importance of having legal pages became integral as they allow for the safety of each user; knowing their rights, and hence forth protecting my clients and myself as an aspect of safety and legal implications.

Microsoft Planner and Agile methodology was also an integral aspect of the development process which had a large effect on the development and success of the digital outcome and its characteristics. Because Agile and Planner were the primary project management techniques and tools of my process, I relied heavily on their support for planning ahead of time and keeping on schedule. It allowed me leave time for testing and improving, as well as any errors or miscommunications with my client, thus, avoiding a buildup on unfinished tasks due to a lack of time management or overload of errors. Moreover, to ensure that the development process was not held up by a lack of skills necessary to complete the outcome, I used video and written tutorials to help enlighten me on topics that I would otherwise have not recognized before the creation of an aspect or during its development.

Clearly, the testing and trialing of my digital outcome was a key aspect in the development process. Continuing on from the concept of errors or time management failing due to being 'stuck', it was important that I constantly test each component as it is being developed. In this, live previews on Brackets were very helpful, but I also found that Google Chromes inspection tool was integral. Chrome's inspection tool allows you to investigate where components are connected to code – if something is lost or out of place – as well as toggle between different browser's views to test how the website would function and be viewed from different devices and screen sizes. This tool was important in testing the user experience and interface as it allows viewing from multiple perspectives.

(ii) Explain how the development process of your chosen digital outcome was guided by the new knowledge and skills that you gained during that process.

Over my entire development process, it was necessary that I was constantly learning new skills to help overcome problems as well as save time for the future by learning about certain elements beforehand; so that I do not start off without any prior knowledge or experience.

To use bootstrap responsive techniques and to code using brackets, all for the first time, I needed to learn new skills during and before the development process so that I would be able to use these tools and techniques to a high standard and with efficiency so not to disrupt the time management plan. Thus, before and during the development process I used websites such as W3schools.com and the brackets website and on-application tutorials to understand how the key features functioned and could be used to help me during the development of the outcome. For example, I needed to learn how bootstrap methods such as the grid system or drop-down buttons worked, in order to ensure the responsiveness and therefore successful functioning interface for all users over multiple browsers and screen sizes. In this, having such successful functions means each user is able to view and navigate through my website in fair and identical manner to any other user, making the most of each function provided on the interface. Thus, the development of my outcome was largely guided by these new learnt skills as they were necessary for the production to be successful and efficient.

With previous experience working with HTML and CSS code I was largely familiar with the skills needed; thus, I did not need to learn basic or beginning skills. However, this meant that I was able to explore more advanced techniques to make my website more interactive and professional overall. In this, I learnt skills on how to develop a parallax effect for backgrounds and how to add animations with a mix of JavaScript, HTML, and CSS code. learning such skills not only helped to guide the development process, but they also resulted in a more interesting user experience and created personal user engagement and interactivity with the overall outcome. I also learnt skills on futureproofing code as a wider implication of the development process. future proofing code can include adding comments to your CSS or HTML pages to label different aspects or explain what is happening in a certain component, it can also relate to file management, thus, creating an efficient method of accessing the pages. Future proofing code is a key aspect in insuring that in the future, other editors are able to simply use or modify my code. this can also be related to when I need to go back and edit something, having futureproofed the code I am able to do this with ease.

To use Agile methodology and Planner as a time management technique, I had to learn new skills as I had never used the planner application before, nor attended or been a part of agile meetings. To learn about planner, I used the basic starter tutorials on their website, and learnt the rest in action. Similarly, with Agile, learning about the process is primarily more about simply being a part of the process and regularly attending meetings. In this, I was able to make the most of such techniques and keep within time limits of the development process.

(c) (i) What could have been done differently to improve both the development process and digital outcome, and why?

To improve the overall outcome and development process, there are innovative aspects that could be considered. To ensure that my website respond with fluidity over multiple browsers, screen sizes, and devices I used many of the Bootstrap methods and techniques. I did not, however, utilize their 12-grid system in areas where it may have made code and functionality more responsive and efficient. For example, the footer on each page, though functioning, does not look as aesthetically consistent and pleasing on mobile devices as it does on desktops and laptops. To improve this aspect, I could have used the bootstrap 12-grid system to ensure that each component of the footer dropped down in an ordered and clean stacked list, rather than becoming scrambled due to margins and so forth. This has implications on the user experience and would improve the overall outcome by creating a more successful and functional user interactive website.

I recognized after integrating all of the legality pages into one css, that this method may have also been more efficient for some of the other pages of my website or at least for the backgrounds. If I used one index style sheet for all of the page backgrounds this would have save a lot of time in my management plan as well as the amount of code necessary to have each of the pages functioning identically in the key/basic aesthetics and navigation aspects such as the main navigation bar (which is the same on each page of the website). instead, much code, such as that of the menu bar, had to be copied and pasted over multiple different CSS pages.

To improve the use of Agile and Planner as project management tools and techniques, I could have had more frequent use and engagement to improve the development process. planner was a key aspect of the development process, and thus, it was important to check off finished tasks and complete each task on time. However, in this process, I did not have alerts on which meant that I often found myself checking all the checklists off when I had finished the task, rather than as I went along and finished them each individually. In this, I could have improved my time management by using all the given features such as phone alerts during the development process. furthermore, in regard to agile project management, I could have attended meetings more frequently and been more involved with stakeholder or peer feedback. Meaning rather than focusing solely on getting tasks done, I engaged in given feedback and meetings to finish tasks to a high standard.

For testing, I was able to upload my website to the FTP server to test my website on multiple different devices. To improve the use of such, I could have done more frequent uploads and testing to avoid a sudden overload of oncoming feedback due to a lack of testing during the development process. for example, I thought I had finished several components when I uploaded my outcome to the server, yet when using this method of testing, I found that the responsiveness on multiple layers was ill functioning. Thus, if I had had more frequent uploads and testing, I would have found such issues much earlier on and would have been able to modify such errors earlier on in the development process; so not to disrupt the time management plan.

Lastly, though I integrated social media links and references, there are innovative improvements that could have been made related to such areas. An interactive and interesting component that can be added to a digital outcome as such are live social media feeds such as twitter or Instagram. Such elements help to increase user engagement and help a viewer know who you are and what you represent on a more personal level, while still being professional. However, using mail merge and contact forms was an alternative way that I integrated a personal contact system.

(ii) What conclusions can you draw from your completed digital outcome and / or the development process? In your conclusions refer to:

- the exploration of less-obvious implications, including intellectual property and cultural implications, AND
- innovative connections.

From my completed digital outcome, I had to consider a variety of different implications and innovative connections. Firstly, it was important that I consider a variety of different legal implications that would have an effect on myself or viewers of the website. creating a website for an artist, meant that visual components were a critical aspect in the success of the outcome, however, in using imagery on a website you must consider legal implications such as intellectual property, regarding creative commons and copy right, as well as ethical considerations. In this, I ensured that all of the website's imagery was owned by the artist or created by myself. This meant that any animations, text content, imagery, was all connected to the artist or me and no one else, this using our own property for the regard of legal and ethical implications. This also avoids any issues in using unlawful imagery that does not belong to you or disregarding any copyright rules. To further support this legal aspect to an online digital media outcome, I ensured that I included legal pages that were not only straight forward to understand, but also easy to find and interactive so that all users are more likely to consider such rules. In this, my website considers the safety of the creators and the users.

Furthermore, considering the health and safety of all viewers, I ensured that there were no triggering colours or lighting effects that could trigger an epileptic seizure, and that all GIFs or videos were safe for viewing for all users.

Again, in regard to innovative connections, I used mail merge and excel data spread sheets to create a live and functioning contact form which is functional for all users. I also integrated interactive aspects such as animations, parallax effects, and videos, increasing the overall user interactivity and user experience of the outcome.

Excellence Exemplar 2019

Subject	Digital Technologies		Standard	91909	Overall grade	07
Q	**Grade**	**Annotation**				
		The candidate met all the requirements for an Excellence grade. They presented an insightful reflective analysis of the development of the digital outcome, and then evaluated decisions made in great detail. Not only did they explain what was done, but also outlined their reasoning and touched on how the outcome could be improved. Reference was made to intellectual property, cultural implications and innovative connections.				