

Internal Assessment Resource

Digital Technologies Level 3

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| This resource supports assessment against:  Achievement Standard 91635v3  Implement complex procedures to produce a specified digital media outcome |
| Resource title: Web Development – Now That’s Fit!  Due Date: Refer to Teams Assignments  Name: Adwait Mane  **Candidate’s Statement**  This assessment has been done entirely by me. I have neither borrowed work from others nor lent my work to others to use  Signed Adwait Mane Date: 14/05/2020 |
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| Achievement | Achievement with Merit | Achievement with Excellence |
| Implement complex procedures to produce a specified digital media outcome. | Skilfully implement complex procedures to produce a specified digital media outcome. | Efficiently implement complex procedures to produce a specified digital media outcome. |

Student instructions

Introduction

In this activity you are required to implement a website based on your conceptual design for a stakeholder that will benefit the community. The target audients may access it on a personal computer or device, such as desktop, laptop computer, tablet or mobile phone.

This is an individual task.

You will have approximately five weeks of in-class and out-of-class time to complete the task.

You will be assessed on how well (how skilfully and efficiently) you implement complex procedures to produce a website.

Brief

Create a website for a client. You have developed a Conceptual design for a client during Term 1, it is now time to implement the proposed design. If you choose not to proceed with the client, you must come with a brief and specifications for teacher to approve your work.

Task

Develop a multi-page responsive website that can be accessed on various devices. The website must be suitable for the intended audience, and incorporate quality images and designs that communicate the purpose of the website.

You will need to get the content from your stakeholder clients:

* Prepare the content so that it is ready for inclusion in your website
* Incorporate the design techniques that you have researched
* Include the images or other media that your stakeholder wishes to include. See Student Resource A for a full set of specifications that your website must meet.

Steps

Plan the process to create and test your website to meet the specifications.

Select the software applications, tools and techniques you will use to create, edit, and implement the website.

Develop the website by applying a set of complex tools and techniques so that it meets the specifications in the brief.

Apply data integrity testing procedures as appropriate to the media.

Ensure you address any legal, ethical and moral responsibilities as appropriate to the outcomes.

You will need to show evidence of:

* accuracy in the application of complex tools, techniques and procedures
* independence with regard to decision making in the selection of software and application of complex tools, techniques and testing procedures
* applying complex tools and techniques, and producing the website in a way that economises the use of resources.

Final submission

Once you have fully tested your website folder with all resources must be handed in cPanel

Web Development Include:

* documentation with annotated notes to support your decision-making regarding selection of software tools and application of techniques to implement your outcome such as:
* screenshots of the layouts
* screenshots showing styles selectors
* screenshots of testing in two different browsers
* screenshots of the metadata that you have used
* screenshots of the computer tools used to create or edit images and other media
* user testing procedures, outcomes from testing, and any modifications and/or refinements.

Student Resource A: Website specifications

Functional specifications

The website may include:

* HyperText Markup Language / Cascading Style Sheets (complex skills)
* scripting (manipulating content using JavaScript, JQuery, PHP)
* dynamic data handling
* interaction between user and content
* respond to multiple screen sizes
* complex tools and techniques used for editing images or creating media

Physical (aesthetic) specifications

The website must:

* use design elements and apply design principles
* incorporate images/photography and relevant media to enhance the aesthetics

**Student Resource B: Log of Development**

Make a document that has these tables in it. Use them table to record your complex techniques and your testing. We are looking for efficiency, independence and accuracy

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| Complex Technique Describe the complex techniques used | Evidence (snip) |
| **Destructive & Non destructive** editing of images on Photoshop, using tools such as: **Masking**, **layers**, **visual effects, colour enhancements, etc.** | My client has given me multiple images to use throughout the website, however they are unedited from the photoshoots and will not look very interesting or eye-catching alone. Therefore I have used photoshop to enhance the images and to add more elements to the images to make them more interesting.  This is the beginning image:  And this the image after going through multiple editing stages:    I did this with all the following images, which will be used in the image slider and more: |
| **Media Queries for a Responsive Website** | Media queries were used to make everything on the website responsive, meaning it will adapt in size or layout depending on the user’s screen size. By using media queries, the website should adapt for different desktop screen sizes, and also for a mobile screen. For my website, everything was made responsive using media queries, such as the navigation bar, logo, slideshow, images, cards, content, text, buttons, footer and more.  The following code shows all of the media queries I have used for my website. This means that whenever the screen size is less than 800 pixels, everything will adapt to suit a smaller screen.    These are some of the media queries I have used: |
| **Javascript & jQuery Image Sldeshow** | I have used JavaScript and a jQuery to make an image slider. This image slider is made so it cycles through images automatically and shows different images of the drone.    **Slider with 3 different images:** |
| **Optimising Images using**  **Imagecompressor website** | It is important that all of the images used on the website are low in file size so that they can load quickly and as effeciently as possible. It is also important since it will take up less space on the cloud, which will reduce website maintenance and hosting costs. It is important to make sure the images are optimised so that they take up less space, while still maintaining their aspect ratio and clarity (they should not become blurry).  A screenshot of a cell phone  Description automatically generated  Before putting it through the image compressor website, I also saved the Photoshop images as JPEG files rather than PNG, since it maintains the high quality, while taking up less space. For example, the same image below takes up more space as a PNG file rather than JPEG. |

**C. Log of Testing:**

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| **Testing**  **Describe the testing Used:** | **Why I did this** |
| **Testing the code on W3Validator** | The W3 Validation service is used to check HTML files. The service goes through the web page and checks for any syntax or other errors so the I can fix them in order for the website to work as efficiently as possible.  I have tested all of the html files on the validator.  **Index.html**  Initially, there were some errors as shown above, however after I fixed them I ran the test again and there were no issues.  **Products.html**  I fixed these problems that were consistent in all of the HTML files, and now there were no errors:    **Aboutus.html**  After fixing:    **Gallery.html**  After Fixing: |
| **Testing all the webpages on different browsers: Google Chrome, Microsoft Edge & Opera**  This is very important since not everyone uses Google Chrome as their main web browser, so the website should obviously be accessible and consistent on all browser types and still be responsive. | **Google Chrome**    Everything works perfectly as intended, with responsiveness for different screen sizes. |
|  | **Microsoft Edge**        Everything works perfectly as intended, with responsiveness for different screen sizes. |
|  | **Opera Browser**    Everything works perfectly as intended, with responsiveness for different screen sizes. |

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| **Testing**  **Describe the testing Used:** | | **Why I did this** |
| I have tested that **all the 4 webpages are linked together** and work as intended through the navigation bar on both desktop and mobile version of the website. Everything should be linked properly that you can access any of the pages in any combination. | | Testing that all of the webpages are linked together is extremely important especially since there should not be any bugs or errors for when a user will be navigating the website. It should be easy, quick and clear which webpage the user is on and should be easy to go through the various pages.  I have tested every single combination of navigating through the webpages in both the main navigation bar and the footer (in both desktop and the mobile versions). |
| Testing that **all the buttons** work correctly.  I did this by using <a href””> tags on the buttons, which were linked to products.html.  As you can see to the right, when the Learn more button is clicked, the user is redirected to the Products page, where there is more information about each product.  As of now, the prices buttons do not redirect the user anywhere, since there is currently no database available for shopping cart features. | | I needed to test that the “Learn More” buttons on thee homepage worked correctly and redirected the user to the products page, so that the website will flow nicely and efficiently for the user. If the buttons were not linked properly, the button would literally be useless and it does not actually take the user to a page where they can “Learn more” about the product. |
| **Testing social media icons**  The image on the right shows the AeroKontiki Facebook page that the user will be redirected to when they click the Facebook icon.  The image on the right shows the AeroKontiki Twitter page that the user will be redirected to when they click the Twitter icon.  The image on the right shows the AeroKontiki Youtube page that the user will be redirected to when they click the Youtube icon. | | In the footer of the website, there are social media icons that are linked to Aerokontiki’s corresponding social media pages: Facebook, Twitter & Youtube. It is important that these icons work properly as they serve as an extremely easy way for the customer to learn more about the company and possibly reach out, in a very familiar and efficient way. Therefore the icons must be linked properly.    The above code shows how the Facebook, Twitter and Youtube links are embedded into the icons, meaning that when they are pressed, the user will be redirected to the social media page. |
| **Testing Responsiveness – Navigation Bar**  Navigation bar when the screen width is greater than 800px:  Navigation bar when the screen width is less than 800px and the hamburger icon is clicked: | | The navigation bar had to be responsive since when the screen size is small (or mobile), the desktop version wouuld not be easy to use and would not be aesthetically pleasing. It would fall out of its box, overlap and would be difficult to use. Therefore, when the screen size is small, I have decided to ussue a dropdown menu that is enabled when the user clicks on the hamburger icon, that will automatically show when the screen width is less than 800px (it will not show when the screen width is greater than 800px). |
| **Testing Responsiveness – All Pages** | **Mobile Home Page:**  **Products Page:**      **About Us Page:**        **Gallery Page:** | |

**Student Resource D: Daily Log**

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| Date | What have you done |
| 10/05/2020 | Today I have created the parent folder and all the necessary files/folders I will be using and modifying throughout the development of the website. It is extremely important that I have used good file management not only to find and access things easier, but also that everything is linked clearly, neatly and efficiently in the code. For example, linking an image would be as easy as “images/imagename.jpg”. There is no need to upload anything online or to follow large file paths to embed an image this way. |
| 12/05/2020 | Today I adjusted the main skeleton of the body from “The Gym” body, which included setting the doctype to HTML, adding meta information, linking the style sheet and more. I have also included the links to external icon and font stylesheets so I can use special fonts and icons on my website easily.  This also included the Javascript for the Blueberry image slider. |
| 13/05/2020 | Today I started setting up the home page of the website. I have used “The Gym” website as a guide for this, which helped tremendously to start off with. I started with the navigation bar, which meant inserting the company logo in the top left corner, with the links in the top right corner.  I did this using the following HTML and CSS:  I then copied and pasted this for every other HTML page and tested that they all worked and linked together properly (shown in testing table). |
| 15/05/2020 | Today I started on the Image slider that is on the home page. I used the the same one that we had used in “The Gym” website, which uses Javascript (jQuery) along with HTML and CSS to function. I faced minor bugs and glitches however after about 10 minutes with manipulating the code I had got everything to work properly. |
| 16/05/2020 | Next I started working on the first content section of the website. Originally in the design this was supposed to be the alternating image and text sections, however after consulting with my clients and stakeholders, we have decided to have the 3 products show up first. It just makes more sense and looks more aesthetically pleasing.  I first added the heading and subtext using <h1> and <p> tags, which I styled through CSS to make it centred and to manipulate the font sizes.  I then added the 3 images in 3 separate columns using <div class row> and <div class columns> which I then styled through CSS. I spaced it out using width:33.3% so that the 3 columns are equal in width. |
| 17/05/2020 | Today I made the buttons and text that go underneath the 3 images on the home page. Since there were already 3 separate sections for each image, doing this was very easy and everything stayed within its on columns.    Once the button worked, I styled it through CSS by adding padding, colours and also a hover element, so that when the mouse is hovered on top,  I then did this for each other image with the correct corresponding text. |
| 18/05/2020 | Today I started creating the bottom section of content in the home page, which was the alternating text and images side by side. After consulting with my client and stakeholder, he no longer wanted the text to be in bullet points, and does no longer want the heading to be the bright orange colour. To do this, I created two sections that had padding on each side so that they were side by side, as shown below:    I then added in the content and copied and pasted the sections for the bottom 2 sections. However, I swapped it around so that the image was left instead of the right.    However I was facing the problem with the white gaps in between, which I was able to fix my putting everything inside a div container, with the same colour background. This fixed the problem effeciently and everything looked good together. |
| 19/05/2020 | I faced some problems with the spacing of the content initially, where there was too big of a gap between the images and text, as shown below:      To fix this, I adjusted both padding and margins to make everything concise and compact. |
| 20/05/2020 | Next I started working on the footer. I had found a good template for this online on W3schools, and edited it on its live HTML editor to change it to how I liked. I changed the spacing, columns and added the social media links in the bottom right.    As you can see above, there was a gap between the footer and the content. To fix this, I adjusted the margins of the footer and the content section so that there was no longer a gap.  With this completed, the home page was now complete but I had to make sure everything was responsive and worked correctly.  Initially the spacing for this text and the slideshow was too close together, however I fixed it using the following code (using media queries).    I used media queries for all of the sections and the footer so that all the content was centered.      I did this by using media querys for each element of the page; the sections, slideshow, footer and navigation bar. |
| 21/05/2020 | Today I faced the following issue where the heading and paraagraph was hidden behind the navigation bar as shown below.      I had noticed that my navigation bar wass using “fixed” instead of sticky, which might have caused the problem with the margins and padding:    I then changed the position to “sticky” instead, which solved the problem immediately and still has the same function where the navigation bar stays at the top even when scrolled. |
| 22/05/2020 | I also realised there is a large gap between the nav bar and the image slider, however I realised this was because there was 110px padding in the blueberry div’s css: |
|  | I fixed this by reducing this padding to 3% instead of using pixels, which adds to the responsiveness of the design. |
| 23/05/2020 | Today I started working on the products page, which includes 3 simple product cards and a centered title/paragraph. I first added the title and paragraph using <h1> and <p> tags, which were styled to allign in the center of the page as shown below. I also added a row which included 3 columns for the 3 separate cards (the row keeps them alligned). For now I just used 1 image as a placeholder. I also added a border and shadow around the cards.    I wanted there to be a gap between the 3 products and the sides so that they were more compact in the middle of the page. To do this, I added margins around the card row, which made everything centered.    After this, I changed the placeholder images to the correct images, and added a subtitle underneath each with the same of the product:    I then added the rest of the product information in bullet point form, and copied and pasted the buttons from the home page into the div so that there was now a button: |
| 24/05/2020 | Today I changed the text inside the buttons so that they were now the prices of the products, rather than saying “Learn More”:  The following HTML and CSS code was used to create these product cards:    I also added media queries for the cards so that when the screen width was less than 700px (or for mobile view), the cards would be responsive and compact into a single column, stacked on top of eachother. |
| 26/05/2020 | Today I started by adding in the footer to the products page. I simply copied and pasted the code the home page (index.html) as it will be styled and positioned the same way due to the CSS styling.    I also started working on the About Us page, which would include a title, small paragraph and also 4 similar cards to display the 4 main members of the AeroKontiki team. This involved using <h1> and <p> tags, as well as using a similar card layout like in the products page. Since I had simply used these tags, they were automatically styled to allign in the center, which is what my client and I had wanted.      I then added in the same cards/columns from the products page, however the sizing of the images was completely off and did not work as planned.  I then changed the image width from 100% to 50%, which fixed this issue.        I then added media queries so that it was responsive in different widths: |
| 28/05/2020 | Today I started with the gallery page, which simply included an embedded Youtube video for now, since my client does not have that many product photos. To embed the youtube video, I simply right clicked on the video in youtube, and got the embed code, which I added into the gallery.html file.  The problem that I faced was that it was not centered. I tried adding margins however this did not work. I ended up adding “text-align: center” inside the <iframe> tag which fixed the problem. |
| 1/06/2020 | I had realised that the video I had previously added was not responsive, so it would look very weird when the screen size has shrunk, especially on mobile devices, as shown below:    To fix this, I looked up a tutorial online and found the following resource: <https://css-tricks.com/fluid-width-video/>They simply instructed to put the <iframe> inside of another div which will be responsive. After manipulating the CSS code, the embedded youtube video was now responsive to all screen sizes. |
| 2/06/2020 | Today I did some minor changes to the navigation bar, as currently the “hover” colour was white, which blended into the background colour and was not visible, making it effectively useless. Therefore today I changed it so that it simply changed to a lighter shade of the same colour when hovered upon.  I also adjusted the social media icons and linked them properly to AeroKontiki’s social media pages.    However, after consulting with my client, he no longer wanted the section of links in the middle of the footer. Therefore I simply got rid of the content inside of the div, which now looked like:  After consulting with my client, he wanted all of the buttons to look the same throughout all the pages to make it look more consistent. He wanted me to change all of the buttons (Learn more and prices buttons) to the white background, blue text and blue outline. To do this, I simply linked all of the buttons to the same CSS code:      In my opinion and my client’s opinion, this style of buttons look much cleaner and aesthetically pleasing compared to the older ones.  I also made some minor adjustments to some text and layout of some elements. |
| 10/06/20 | The website is now complete, and after lots of testing, everything is working correctly as intended.  **Home Page:** |
|  | **Products Page:**  **About Us Page:** |
|  | **Gallery Page:** |
|  | **Mobile Home Page:** |
|  | **Mobile Products Page:** |
|  | **Mobile About Us Page:** |
|  | **Mobile Gallery Page:** |