PROJECT 2: AZURE AND CLOUD FUNDAMENTALS REPORT

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INTRODUCTION

For this project, I created a resume website using WordPress in accordance with the project guidelines. Additionally, to enhance various aspects of the website as well as have greater ease in editing multiple plugins were utilised. Plugins are one of the great benefits of WordPress as they enable one to easy implement a variety of functionalities into a website using a no-code approach. The types of plugins used for this website include a front-end page builder plugin, an SEO plugin, a cache management plugin, an analytics plugin as well as an themes plugin.

WEBSITE DESCRIPTION

The main concept behind the design, colour scheme and layout of this website is simplicity and professionalism. I wanted my website to have the relevant information displayed clearly and easily accessible. At the same time, I wanted the information relevant to the resume to be concise and straight to the point. Thus, in order for increased simplicity, this website is just one page that can be scrolled down, with all the relevant information required for a resume. Additionally, the colour scheme is largely monochrome with some sections with colour through background images with a black overlay. This is done so that the colour scheme does not distract the visitor from the information, and that the text remains easy to read.

PLUGINS

THEMES PLUGIN

This plugin gives access to multiple starter themes for different types of websites. I was drawn to using this plugin as the starter themes appeared highly professional while having room for editing in order to create the type of website I wished. Additionally, using starter themes aided in having a chosen colour scheme and style for the website. Having such a template was an incredibly helpful starting point for a first-time user of WordPress such as myself.

FRONT END PAGE BUILDER PLUGIN

The front-end page builder plugin that was used for this website was Elementor as opposed to other plugins such as Divi or Beaver Builder. Firstly, unlike Beaver Builder and Elementor, Divi does not offer a free version and hence is not the most financially viable plugin for a first-time user of WordPress. While both Beaver and Elementor have a visual builder and are easy to use for beginners, Elementor has a greater quantity of templates to choose from. Thus, due to the variety and user-friendly interface, Elementor was chosen as the front-end page builder plugin.

SEO PLUGIN

Search Engine Optimisation (SEO) is a method of optimising the content of a webpage in order for it to have a higher result when searched for in a search engine. The SEO used for this website is Yoast SEO, a highly popular plugin. The feature that checks the content of the website and checks for any problems is a good base indicator in order to optimise the website. Overall, the configuration of the plugin was simple, and the website content checking feature was useful for a simple site as my resume website.

CACHE MANAGEMENT PLUGIN

Caching signicantly optimises a website by improving speed and performance. The cache management plugin used for this website is W3 Total Cache. It was easy to configure and once activated, it appeared that the website was loading comparatively faster.

ANALYTICS PLUGIN

An analytics plugin enables the administrator of the website to view and monitor the site traffic and thus manage the website accordingly. Analytics plugins are incredibly useful as they serve as a good indicator for when the website needs to be adjusted in order to sustain higher traffic. As this is a simple resume website that is not expecting a high quantity of traffic the analytics plugin chosen for the website was Monster Insights. Additionally, a Google Analytics account was connected to the Monster Insights Plugin. This shows the website speed and site traffic among other important data. Benefits of using the plugin include an easy and smooth set up as well as the analytics being available to monitor on the dashboard.

CONCLUSION

Overall, while this was my first-time using WordPress to create a website, I learnt the basics of the program and how it can be used to create a website of one's choice through the use of plugins.

WEBSITE AND LEARNING MODULE URL

The URL for the website is: https://simranbhalla.azurewebsites.net

The URL for the learning modules is: https://docs.microsoft.com/en-us/users/simran-4292/

Note

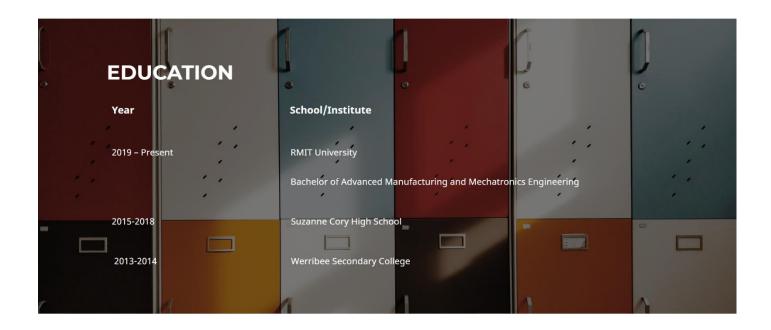
I've been having issues with my website URL. While I can access the URL when I am logged in, the URL doesn't work publicly and I'm not sure why. I've contacted MSA staff privately regarding the issue, however, I will attach screenshots of the website below until the issue can be sorted. Apologies for the inconvenience.



SKILLS

- Proficient in CATIA
- Detail Oriented
- Dependable
- Fundamental knowledge in C++
- Analytica
- Strong written and oral communication



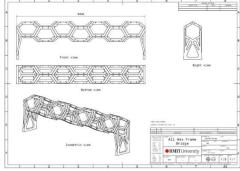


ENGINEERING PROJECTS



CAD PHONE HOLDER GROUP PROJECT

- Designed a phone holder suitable for a desk on CATIA through the design process as part of a group, in accordance to a design brief
- Created a scaled model of the design using rapid prototyping (3D printers)



MECHANICS BRIDGE GROUP PROJECT

- Designed a bridge meeting specific measurement requirement on CATIA as part of a group
- Assessed the mechanics of the bridge design using simulation software, identifying joints that would bear the greatest stress
- Calculating the mechanics of the bridge including bending moments, shear stress and joint tension
- Created a model of the bridge using 3D printers

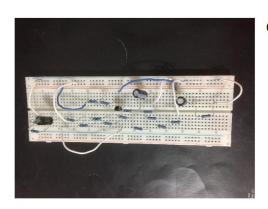






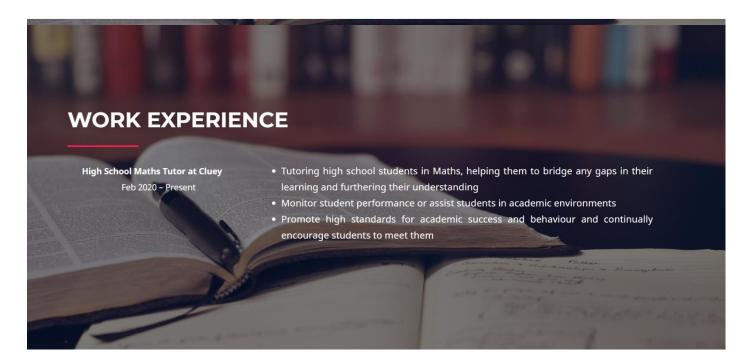
TENSILE TESTING

- Conducted a tensile test during a laboratory class on a variety of materials including steel, aluminium, fibre glass and plastic
- Created a stress strain graph and calculated ultimate tensile strength, fracture strength, yield strength and Young's modulus using the graph
- Designed tensile test pieces on CATIA which were later printed using the 3D printers
- A tensile test was conducted on the sample pieces and a stress strain graph was created. Using the graphs, the ultimate tensile strength, fracture strength, yield strength and Young's modulus was calculated for each sample piece.
- Determined the tensile test piece that could bear the maximum amount of stress through calculations from the stress strain graphs and incorporated the design of the tensile test piece in the design of the bridge



CIRCUIT BUILDING PROJECT

- Built and simulated simple circuits using the NI Multisim Software
- Built simple circuits on using various components including operational
 amplifiers, BJT (bipolar junction transistor), capacitors and resistors as well as
 the Analog Discovery which were simulated using the software Waveforms.
 Circuits that were built on the breadboard including op-amp feedback circuits,
 DC Bias circuit as well as BJT Common Emitter Amplifier Circuits



OTHER

Member of the SSCC (Student - Staff Consultative Committee) (2019)

- Voicing concerns of the student body as well as any feedback on how the course is being run to the program coordinator in meetings
- Discussing the pros and cons of units and providing suggestions for improvement in the course in meetings

Student Ambassador Program (Semester 1 2020)

- Completed the training required for the Student Ambassador Program
- Participated in various focus groups representing the student body that revolved around different topics including the transition to online delivery of classes, use of different platforms, outlook on employment and internships given the current climate as well as testing new websites for ease of use

General Committee Member of FIRE (Females in RMIT engineering) club (2020)

- Attending regular meetings and discussing any new ideas for future club events, as well as recapping progress made on other events by committee members
- Part of the FIRE website team which is involved in creating an official website for the club (ongoing)
- Involved in organising an online networking event in collaboration with the Women's IT Club (ongoing)

LET'S CONNECT



Email

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