Alex Cox 434076501 Statement of Intent

# Introduction

For my Year 12 Industrial Technology; Multimedia Major Project, I intend to design, construct and host a HTML5-based website for hypothetical local business “The Mill Wholefoods and Café”. This website will follow the genre and design aesthetic of the business, employing a vintage contemporary aesthetic that will combine clean design elements with vintage-influenced styling that will portray the combination of modern class and natural context within the business. “The Mill Wholefoods and Café” website will serve the purpose of both promoting and extending the business through an online presence, which will be accomplished through at least six internally hyperlinked pages constructed and designed using HTML5, CSS, JavaScript and PHP, that will house other elements such as vector graphics, high quality images, Scalable Vector Graphic (SVG) animations, e-Stores and a contact form.

# Motivation and Inspiration

There are multiple motivating factors for the creation of “The Mill Wholefoods and Café” website as my Year 12 Multimedia Major Project, including my ongoing interests in Graphic Design, Visual media, website design, coding, and photography, as well as the extreme relevance to the real-world and industry practices within the Multimedia sector within the project. I developed a fascination for mark-up coding and styling in HTML5 and CSS3 in Year 11 when we were tasked with creating a five page website of our choosing, as the medium of webpages combines my love for traditional print design with in-depth problem solving and data processing. Photography will be featured heavily within the website, as it is a hobby I am extremely invested in and have been doing it for the last four years. The motivation for creating a website for this hypothetical business is based on the interest I developed for the business when I had to create a hypothetical business as a Year 11 Preliminary Business Studies Assessment, complete with a comprehensive business report.

# Parameters

“The Mill Wholefoods and Café’s” goal is to provide a large range of high quality, local wholefood supplies and beverages that cater to Wagga’s expanding population of vegan, vegetarian and health fanatic consumers and people with other dietary requirements. This is achieved through the application of a unique sales format and a friendly and enjoyable environment for both our customers and our staff. The implementation of an in-depth website and online store will allow for the business to reach a larger demographic, both in terms of geographical locations across Australia and Internationally as well as to gain a higher concentration of health-conscious people, generally in an age bracket between 16 to 40 years old. The combination of the vintage contemporary aesthetic and a user-focused interface that leads to an easily navigated site will help to appeal to this kind of audience.

The creation of “The Mill Wholefoods and Café” website will have to be organised and constructed to factor in certain limitations. These limitations include the time and availability I will have to work on the project as I will have other school work, assessments and study, as well as my Visual Arts HSC Major Work. The project will also experience limitations such as out-of-school commitments and other time used to balance my life, as well as technical limitations. These Technical limitations include there being many different commonly used web-browsers, each having their differences, and therefore some HTML5, CSS3, JavaScript and PHP code will not be compatible with some of these browsers, especially if the viewer is using an older version of the browsers. Another downfall to using a modern-day website is that there are still many people that either don’t access or don’t have access to the internet, where this platform will be unreached.

Despite the limitations, the use of HTML5, CSS3, JavaScript, and SVG animation allows for a robust and sophisticated website that will fully cater to the “The Mill Wholefoods and Café” needs and desires, accomplishing the goal of widening the business’ consumer base, increased interaction with their customers and in-turn increasing capital. “The Mill Wholefoods and Café” website can be assisted in reaching these goals through parring the website with other social media platforms such as Instagram, Facebook and Snapchat as well as more traditional promotional strategies such as placing advertisements within print documents and liaising and partnering with other businesses and websites.

# Research;

## Resources;

<https://codepen.io/nikrowell/pen/YLmJjr>

<https://codepen.io/liamj/pen/NegxNB>

<https://codepen.io/ryankbrown/pen/vrWYgw>

## Technology - Software;

https://www.codementor.io/mattgoldspink/best-text-editor-atom-sublime-vim-visual-studio-code-du10872i7

### Atom.io;

Atom.io is a powerful text editor produced by GitHub, an industry leader in web-based hosting and coding, released in 2014. Advertised as “A hackable text editor for the 21st Century”, the relatively new and free program has gathered an extremely strong following within the four years since its release. This is due to its many features optimised for developers by developers, such as; cross-platform compatibility, smart auto-completion and multiple-pane interfacing along with a customisable user experience that allows users to install, edit and create plugins, packages and themes for Atom.io that can allow for optimised individual productivity.

While Atom.io is a highly customisable text editor, it also suffers from its relatively short time within the industry, with its performance reportedly feeling slow to use compared to other industry-standard text editors, experiencing lag when executing tasks such as opening files and switching between multiple text documents and other tabs. Another reported weak point of Atom.io is that the Packages and Plugins installed and added to the program may fail, and need reinstalling, however this occasional failure is generally with plugins created by amateur developers and can be easily avoided.

### Adobe Dreamweaver;

Dreamweaver CC is the Adobe Creative Cloud’s Website development program originally released in 1997. As a part of the Creative Cloud Suite and owned by Adobe Systems, the Macromedia developed program has gained an extremely strong following, with its features and innovations. These including code hints, multi-monitor support, Live Preview, Git support and support for a plethora of coding languages Asp, C#, CSS, XHTML, XML, XSLT, HTML, Java, JavaScript, PHP and Visual Basic among many others.

As Dreamweaver CC is a part of the renowned Adobe Creative Cloud Suite, it requires an annual subscription that is fairly expensive at $343.07 per year due to Adobe’s industry market and reputation. However, despite the reputation of the software giant, Dreamweaver CC has been found to have a few practical shortcomings including frequent bugs and heavy resource intensive reliance of the Live Preview feature that results in the program crashing without warning and opening the possibility for work to be lost.

### CodePen;

CodePen is advertised as “a social development environment for front-end designers and developers”. It is a community and coding web-service that allows for the online testing, sharing and showcasing of individually or collaboratively-created HTML, CSS and JavaScript. This community and platform was founded in 2012 and six years later currently has an estimated user count of 330,000 with the users contributing code snippets, also known as ‘pens’ to the community, allowing for an enriching environment for improving and broadening a person’s skills in code-based projects. As this environment is an online based service, users are able to access a basic level of CodePen for free, but are then also able to choose between multiple levels of annual plans ranging from $96 to $312 a year, with each plan unlocking various features of the service.

However, as CodePen is a web-based service, it isn’t designed or optimised as a long-term, full scale text editor for creating complex mark-up such as that found-in large websites. This is due to it missing features such as autocomplete features and all-in-one style page layout typical of classical text editors.

### Sublime Text;

“A sophisticated text editor for code, mark-up and prose”, Sublime Text is considered the industry standard text editing program and was released in 2008 by Jon Skinner and Will Bond. Ten years after its release, Sublime Text has gathered an immense following, and formed itself as an industry standard for coders, thanks to its refined user-interface and unique features. Some of these features include ‘GOTO ANYTHING’, a built in, shortcut-based file explorer, ‘GOTO DEFINITION’, an index of syntax definitions and uses, and the ‘COMMAND PALETTE’, which allows for easy-accessibility to syntax, indention and organisation settings, among other features such as split-window capabilities, cross-platform compatibility, and a code layout preview, ‘Minimap’.

Sublime text is a refined text editor written in C++ and Python, and therefore is less compatible with plugins and packages than other text editors available. As Sublime text is a market-leading text-editor, it is available for download for free as a free-trial, but for extended, licensed use, the program has a one-time cost of AU $113.65.

### Notepad++;

Notepad++ is one of the most widely recognised and used text and source code editors within the development industry, being around for 15 years since its initial release in 2003. Designed to replace Microsoft’s “Notepad” as an in-depth text editor, Notepad++ is a light weight, feature packed program that is free to use, and supports over 70 coding and mark-up languages. The program has pioneered features and plugins such as; Multi-document and Multi-window workspaces, syntax highlighting, autosave, guided indentation, line bookmarking, document mapping and the finding and replacement of regular expressions as well as many more being able to be explored through externally sourced plugins.

As Notepad ++ was developed in 2003, its user-interface and up-to-date innovation for the text editor emulates its age, which in some cases, for instances in a long-term use scenario, this may cause a ‘heavy’ user-experience that causes fatigue more quickly.

## Technology - Hardware;

### Computers and Accessories;

#### Thermaltake Custom PC;

My personal desktop computer is a basic custom computer housed in a Thermaltake V3 Black Edition chassis originally built 8 years ago by an independent PC builder and was last serviced and updated with hardware in November of 2018 by Crown Custom Computers. The computer features the following specifications:

* AMD Athlon II X4 640 Central Processing Unit (CPU) at 3.00GHz
* 8GB Corsair DDR3 Random Access Memory (RAM)
* Installed NVIDIA GeForce GTX 750 Graphics Processing Unit (GPU)
* 480GB Western Digital Green SATA Solid State Drive (SSD)
* 64-bit Windows 10 Education Edition

This Computer is setup to tailor for my workflow and needs, with multiple accessories that allow me to work efficiently and comfortably. These are as follows:

#### Accessories;

##### Monitor – Philips 276E7QDAB/75;

This monitor is an LCD Ultra Wide-Colour Panel from Philips’ E-Line monitors. This 27” monitor features various Picture Modes including three variable strengths of ‘LowBlue’ modes that reduce the amount of harmful Blue-Light emitted from the screen, allowing for reduced eye-strain and reduced effects on the body’s sleep anti-oxidant development. Due to the large screen size and inputs of VGA, DVI and MHL-HDMI, this monitor allows for increased workspace real-estate that enables effective use of multi-tasking functions. When purchased, this monitor was very affordable at approximately $199.

##### Hard drive – Western Digital Elements 1TB Portable Hard Drive;

This portable 1 Terabyte was originally purchased four years ago, and still performs to a high standard, with its USB 3.0 connectivity and its slim form factor. This drive is currently used in the place of a smaller USB drive, as it allows for the efficient access of all my files across multiple computers and devices, as well as the ability to have it as another portable place to create a back-up of all working files. When purchased this device was approximately $65.

##### Hard drive – Western Digital Passport 2TB Portable Hard Drive;

This 2 Terabyte Hard drive is a larger, higher quality drive than the previously mentioned WD Elements Hard drive, with its USB 3.0 connectivity, solid dual material construction, and high-quality transfer cable. This drive is currently used as a main file storage device and back-up device due to its fast read and write speeds, and its non-slip pads that keep the larger device in place. When purchased this device was approximately $109.

##### Keyboard & Mouse Combo – Logitech MK850 Performance;

This wireless keyboard and mouse combo features the K850 Performance Wireless Keyboard and the M720 Triathlon Multi-Device Mouse and are both optimised for high-level comfort and productivity within a long-term, diverse workspace. This is achieved with both devices being constructed with features of;

* High-quality material construction
* Unifying Bluetooth transmitters, allowing the pair of devices to easily connect with 3 separate devices, through either the ‘Unifying receiver’ or through *Bluetooth Smart*
* K850 Keyboard;
  + - * + Full-sized keyboard
        + Full-length cushioned palm rest, curved key frame, and adjustable tilt legs that all allow for a more natural and comfortable typing experience, preventing discomfort and medical problems
* M720 Triathlon Mouse;
* Minimalistic, ergonomic design
* Adjustable scrolling speed and tactility
* Additional customisable buttons and a gesture button
* Compatible with Logitech Flow, which allows for seamless movement across connected PC’s and Laptops, as well as the ability to copy and paste files and text across said devices directly from the mouse

This Keyboard and mouse combo is able to be fully customised with Logitech’s Options Software and current is $179.95.

#### School - HP EliteDesk;

The HP EliteDesk desktop computers that are owned by Wagga Wagga High School are the high-end computer model offered by the NSW education system, featuring the following specifications;

* Intel Core i5-6500 Central Processing Unit (CPU) at 3.20GHz
* 8 Gigabytes of Random-Access Memory (RAM)
* Installed NVIDIA GeForce GT 730 Graphics Processing Unit (GPU)
* 64-Bit Windows 7 Education Edition

The school network has a personal drive that is approximately 5 Gigabytes in size. When using these computers, to ensure fast read and write speeds and ample storage, I store all my files on a 1 Terabyte Western Digital Elements Portable Hard-drive that also allows for an easy transfer of files.

The computer is typically setup with a Miscellaneous IBM Monitor that has a questionable level of colour-correctness, and default NSW Education software, resulting in a less than desirable work-flow.

### Cameras and Accessories;

#### Canon 700D;

The Canon 700D is Canon’s mid-price-ranged Amateur-orientated Camera, having been released in 2013. This Camera offers;

* 18MP APS-C 'Hybrid CMOS' sensor cropped at 1.6x
* Phase detection 9-point Auto Focus
* Continuous autofocus subject tracking
* 14-bit DIGIC 5 processor
* 2.5-inch flip-out touch screen
* ISO levels of 100 to 12800
* Photography image quality of 5184 x 3456 JPEG Images or RAW images
* 1080p 30fps video recording

Being a DSLR camera, the Canon 700D has an interchangeable lens system, allowing for many different aesthetics and uses to be achieved with the one camera. The flip-out screen will allow for accuracy and flexibility when achieving shots that require a change in height, angle or movement within the one shot. Being priced at $738 with an 18-55mm lens, this camera is very reasonably priced when in comparison to others on offer. This camera is a very viable option as I myself own a Canon 700D.

#### Accessories;

##### EF-S 18-55mm f/4-5.6 IS STM Standard-Zoom Kit Lens;

The EF-S 18-55mm f/4-5.6 IS STM Lens is the standard-zoom kit lens that is sold with the Canon 700D. It is marketed and ideal for use as a compact zoom lens, with its zoom range from 18mm to 55mm being extremely versatile for a number of situations.

The maximum aperture of f/ 4 - 5.6 is a medium diaphragm size, allowing for a medium shutter speed, meaning that this lens is not the most ideal option for low-light photography.

This Lens will be used for many of the photo assets used within the “Mill W&C” website due to its versatility and the access I have to it due it being the first lens I have owned.

##### EF 50mm f/1.8 STM Prime Lens;

The EF 50mm f/1.8 STM Lens is a prime lens, meaning that it has a fixed focal length, in this case of 50mm.This f/1.8 aperture means that this lens is well equipped for low light and portrait photography as well as having an extreme shallow depth-of-field, creating a strong bokeh effect, or blurred backgrounds. As this lens is a standard EF series lens, when attached to a cropped sensor, such as my APS-C sized Canon 700D, the lens is subject to a 1.6x crop factor due to the sensor size, meaning that the 50mm native focal length becomes an 80mm focal length, allowing for a closer image. This crop can be both a positive and negative. This lens is one of the cheapest and highest recommended secondary lens among the opinions of professionals, as it is approximately $199.

Due to its extremely low price this lens does fall short in terms of focus, as the Auto-focus are of an old model, resulting in them being fairly loud and relatively slow, with them subject to hunting for a focal point. The f/1.8 aperture also results in a very sensitive-to-focus and soft image when at this minimum aperture in manual focus. In order to get a sharper image it is recommended to use an aperture of f/2.4 instead.

Despite these fall backs, they can be easily overcome once comfortable with the lens, allowing it to be extremely adept at portrait and close up photography. This lens will be used for close-up product photography for use within the “Mill W&C” website.

## Resources – Website Ideas;

<https://simplychocolate.dk/product/fresh-freddie/>

<https://www.creativebloq.com/web-design/ecommerce-website-8133816>

<https://bellroy.com/?ranMID=43345&ranEAID=2294204&ranSiteID=kXQk6.ivFEQ-fma2m4hn4UlUzcOL6D4rGw>

## Research - Materials;

### JavaScript;

JavaScript is a high-level, flexible coding language that is characterised as one of the three core technologies employed by the World Wide Web, enabling interactive web pages, and the creation of web applications and was first released in 1995. It is an industry standard within the majority of websites built today, with all major web-browsers having a dedicated JavaScript engine to execute it. JavaScript supports event-driven, functional, object-orientated and protype-based programming-styles and executions, making it one of the most flexible and valuable coding languages.

An intermediary course about SVG animation using HTML and both CSS Transitions and Animations and JavaScript. The course provided 7 practical examples within the lessons that allowed for the learning of the basics within a text editor, and the use of CodePen to create SVG animations.

“Build Responsive Real World Websites with HTML5 and CSS3” by Jonas Schmedtmann