Current Issues

Designing a responsive website

As someone who is by no means an expert on website design, and who has never used WordPress before, creating websites is challenging and limited to my skill set in web technologies. Therefore, to create a responsive and interactive website, I need something to bridge this knowledge gap and allow me to still be creative with my designs.

This brings up the question of what elements I want to include in my website. As my concept revolves around creating a website for the Student Accelerator program, I think the following would be appropriate to have:

- A method to contact the Student Accelerator team
- A page housing information for users who may be interested in the program
- A way for me to monitor traffic on my website and identify my user demographic
- Relevant visual matter regarding Microsoft and the MSA program
- External links to relevant information

A fast and fluid website

A slow website is a bad website. When users click on my URL, they will expect a load-time within milliseconds. Anything slower than that will result in a worse off user experience, making my website feel clunky and score poorly.

As such, it would be beneficial to have some method to quickly deliver content to my users easily and serve my webpages lightly.

Security

Cybers security is an extremely prevalent topic, and for good reason. The threat of attackers sniffing traffic or manipulating data on my application is very real, and so it is my responsibility to do my best to prevent such things.

Therefore, I need some measures to ensure that users are secure and can safely navigate my website. Moreover, I will also require some protection against malicious behaviour such as SPAM or bots flooding traffic.

Implementing features

Looking at what my website needs, I can assign common solutions to my desired features outlined above.

Desired Features	Common Solution
Method of contact	Contact form
Page of information	Static page, FAQ
Monitor traffic	Analytics & Dashboard
Relevant visual matter	Images, videos
External links	Anchors, buttons
Quickly deliver content	Cache, CDN
Secure website	Encryption, Anti-spam

Why do I need plugins?

As mentioned previously, I do not have much experience developing websites – so I would not really know where to start implementing some of these things. Moreover, with the limited time to work on this project, it is much easier to spin up and configure a resource than it is to build these features from the ground up.

Thankfully, plugins fill the gap in knowledge that I require to implement many of these features, quickly resolving the problems that I have. Furthermore, using a trusted plugin will provide all the dependencies and ensure that my features are robust and thorough, enforcing proper standards in my design.

For example, security is a complex field that is hard to get right. So, it is much safer that I utilise a dedicated plugin for my purposes than to learn all about secure web practices in a month and stuff it up when trying to build it myself.

Plugins that solve my issues

For each of these issues, WordPress has a plugin inside of its large library that I can use. For some aspects, I require more than one plugin or external services as shown in my findings below.
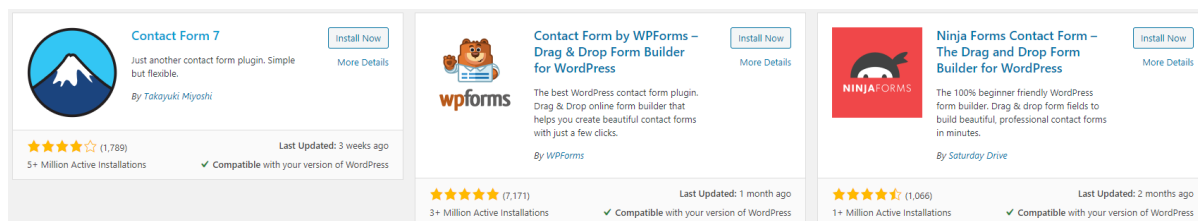
Common Solution	Plugins	External service
Contact form	Contact Form	
Static page, FAQ	FAQ Builder	
Analytics & Dashboard	WordPress Analytics	Google Analytics
Images, videos	Content editor	
Anchors, buttons		
Cache	Cache management	CDN
Encryption	SSL	SSL CA
Anti-spam	Anti-spam	CAPTCHA

My chosen plugins

Contact Form

Choosing a plugin

For the contact form, I went with the **Contact Form by WPForms – Drag & Drop Form Builder for WordPress** plugin. This decision was made after considering the top 3 options in the marketplace (as seen below) since all of them could be used to add the functionality I wanted.

The choices were weighted against each other based on the following factors:

- **Compatibility**
  - All three were compatible with my version of WordPress

- **Support**
  - Contact Form 7 seemed to have more up-to-date support (3 weeks ago) with Ninja forms being worse off at 2 months

- **Active installations**
  - Contact Form 7 had the most active users with 5+ million installations

- **Rating**
  - The deciding factor however came to WPForms having a higher gross score (5 stars with 7000 ratings) compared to Contact Form 7 (4 stars with 1800 ratings).

Implementing the plugin

To implement the plugin, I did the following:

1. Install and activate the plugin
2. Create a new contact form
3. Start with the 'Simple Contact Form' template
4. Add some new fields and questions in the form
5. Change the email that responses are sent to
6. Save the form
7. Paste the plugin short code into my desired webpage
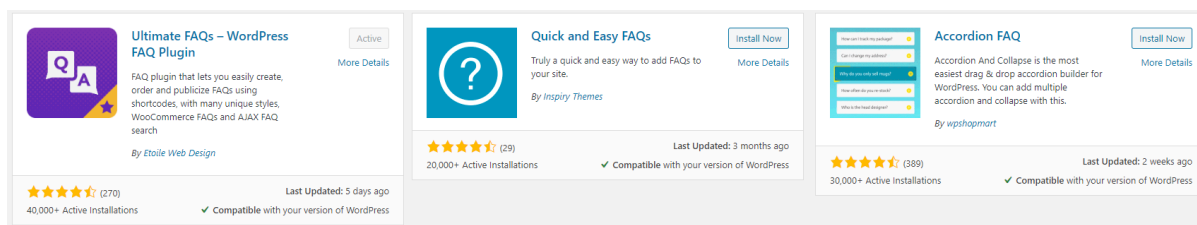
Benefits of the plugin

The benefits of having a contact form is that users can now easily send in questions and contact the owner without having to leave the website. This way, there is no confusion because they just need to fill out a simple form and they spend more time on my site (better for my traffic statistics).

Moreover, having a contact form does not expose my email address to the public, which can be a security vulnerability that leads to things like personal targeting, third-party attacks, phishing and more.

FAQ Builder

Choosing a plugin

For my FAQ Builder, I chose the "Ultimate FAQs – WordPress FAQ Plugin" plugin based simply on it having the most active installations and the most recent update.

Implementing the plugin

To implement the plugin, I did the following:

1. Install and activate the plugin
2. Create FAQ groups to sort my Q&As
3. Create new FAQs and sort them appropriately in the groups
4. Modify the settings of the FAQ form
5. Paste the plugin short code into my desired webpage
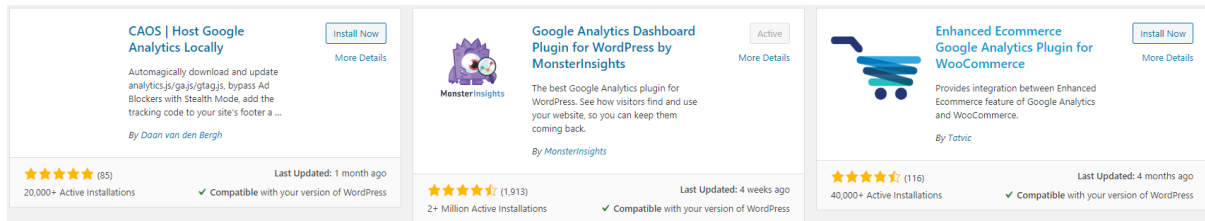
Benefits of the plugin

FAQ pages provide the benefit of easily compartmentalising useful information that users will generally want to know about. This saves them from having to find answers themselves or emailing these questions and increases the overall user experience.

Moreover, this also boosts my online visibility on search engines like Google who boost websites with basic features like FAQs. As such, this can lead to more clicks, more traffic, more users, and more people interested in the program.

WordPress Analytics

Choosing a plugin

This was an easy choice. The **Google Analytics Dashboard Plugin for WordPress by MonsterInsights** plugin had an obnoxiously higher userbase with over 2+ million compared to the rest.

Implementing the plugin

To implement the plugin, I did the following:

1. Install and activate the plugin
2. Create a Google Analytics account
3. Link my website to my analytics report
4. Connect Google Analytics to the WordPress plugin
5. Send test traffic and verify configuration

Benefits of the plugin

Analytics allows me to monitor the traffic on my websites and optimise my strategy accordingly with the data it provides. By knowing when and what users come onto my website, I can think about catering more towards that audience; for example, choosing a more professional design for older people or a more fun and colourful design for younger users.
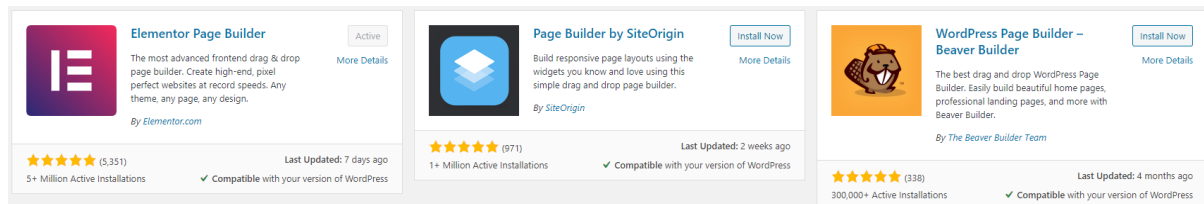
Alongside this, the data allows me to see where I can improve and how my different pages and elements of my website are doing. I can see which pages are more popular and in turn discover what changes I need to make to my unpopular pages. I can find how long users are spending on my website and add more relevant information to keep them there longer or find out which links users like more and develop content that suits their tastes.

Furthermore, having a WordPress plugin for analytics allows me to view this data from the WordPress Admin portal without having to constantly go onto another website (Google Analytics to view that information). This allows me to easily manage and configure my set-up in one place and saves time in the long run.

Content editor

Choosing a plugin

I went with **Elementor Page Builder** to design and build my website so I could easily drag-and-drop the elements I wanted (from headers, to sliders, to images, etc) with little to no code. Compared to the others, Elementor was the most popular page builder by far and has more support and functionality on the FREE plan compared to SiteOrigin or Beaver Builder. Moreover, I could use the classic editor to add custom HTML and CSS in parallel with Elementor without any hassle or prior knowledge.

Implementing the plugin

To implement the plugin, I did the following:

1. Install and activate the plugin
2. Create a page for my website
3. Edit the page using Elementor Page Builder
4. Drag elements into my page as desired
5. Edit the elements content and settings
6. Save and publish page
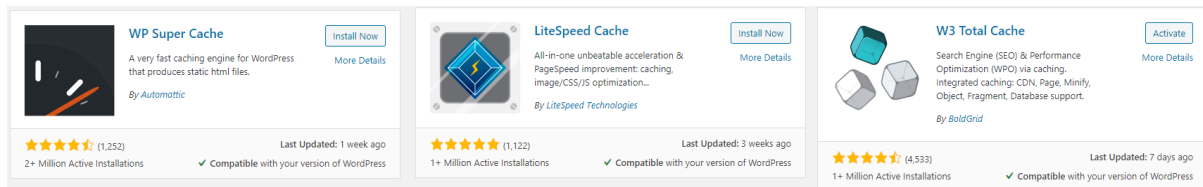
Benefits of the plugin

Elementor has an extremely easy and intuitive interface that allowed me to quickly get in and start piecing together my website. By having the elements as blocks that I can drag and drop, I have control over how my website looks in real-time and all the complexity behind is abstracted away.

Furthermore, having access to themes in the plugin allowed me to draw inspiration from curated designs and make my website more professional looking than it would have been without it.

Cache management

Choosing a plugin

The **W3 Total Cache** was the most attractive option here, having 4,500 ratings, the most recent update and more features outlined for WPO (Performance Optimisation) and SEO (Search Engine Optimisation). Moreover, it had support for integrated caching that beat out the alternatives for me.

Implementing the plugin

To implement the plugin, I did the following:

1. Install and activate the plugin

Benefits of the plugin

This plugin improves the user experience of my website my increasing its performance and reducing load times for repeat users. Moreover, it allowed me to leverage features such as CDNs to delivery content to my users based on their geographical location rather than relying on one static server.
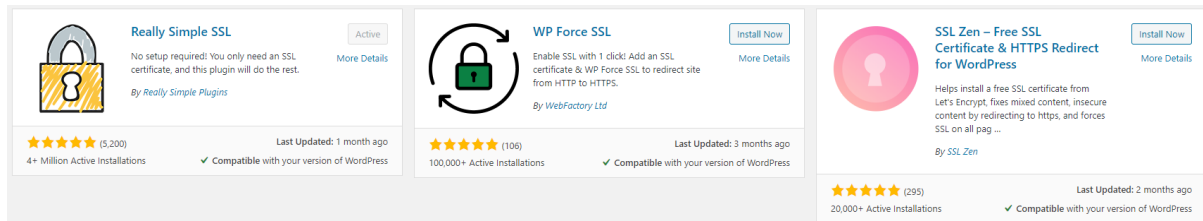
This could result in higher search engine rankings, near-instant page views due to caching being enabled and optimised rendering for my pages – which could result in more visitors to my website.

SSL

Choosing a plugin

Again, this decision was mainly based on popularity and simplicity to implement. With 5,000 reviews and 4+ million users, **Really Simple SSL** had exactly what I was after.

Implementing the plugin

To implement the plugin, I did the following:

1. Install the plugin
2. Get an SSL certificate
3. Activate the plugin
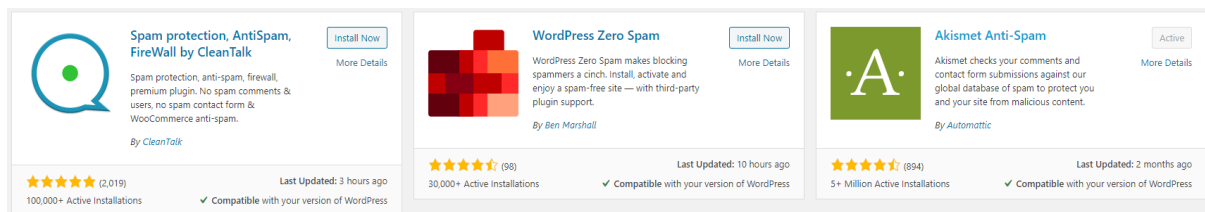4. Enable SSL

Benefits of the plugin

This plugin was extremely beneficial in setting up a critical feature for my website that addressed a very serious issue, security. To guarantee to users that my website is legitimate and ensure that traffic going through my website is encrypted, I needed a simple way to get that lock on my domain.

The plugin made it very simple to enable HTTPS and provided a security advisory centre with recommendations to make my website more secure. This in turn makes my website safer which encourages more visitors instead of scaring them away.

Anti-spam

Choosing a plugin

Akismet Anti-Spam seemed to be the most popular anti-spam choice and had integrated support with my contact form mentioned earlier. As such, this was a natural choice to have as it best suited my needs and was compatible with my other plugins.

Implementing the plugin

To implement the plugin, I did the following:

1. Install the plugin
2. Sign up for Akismet filtering
3. Enter my unique API key into my plugin
4. Activate the plugin
5. Allow the plugin to communicate with other plugins (i.e. contact form)

Benefits of the plugin

The plugin provides a simple way to automatically check comments on my website and filters spam, removing the need for me to manually go in myself. This makes my website more secure and friendly towards real users, who would be wary if they were to see spam or malicious content like suspicious URLs on my website.

Moreover, this adds another layer of protection against malicious behaviour like bots who might try to deface my website with advertising or crude content. The overall effect makes my website a safer and more friendly place for my target audience as students.

SEO Plugin

Choosing a plugin

Yoast SEO had far more users (5+ million) and 27,200 ratings with a cumulative 5-star rating which already put it leagues above the other solutions. Moreover, for someone who has no experience with SEO, it was a simple AIO (all-in-one) solution that supported live content analysis and XML sitemaps to help me optimise my website without any required knowledge.

Implementing the plugin

To implement the plugin, I did the following:

1. Install and activate the plugin
2. Profit???

Benefits of the plugin

This plugin was extremely simple to implement, with one click and was extremely intuitive to work with. Having a live analysis meant that I could edit my page and have the plugin analyse the text that I was writing and give me recommendations on how I could improve my website content. This seamless integration took away the complexity and theory behind SEO and gave me simple instructions to follow to instantly improve my SEO.

Moreover, having XML sitemaps support allowed me to easily view and edit how my website appeared on search engines and as a link preview. This gives me better control and understanding of how I can successfully brand my website – resulting in me writing better content and keeping my website in perfect shape.

SEO itself is an extremely important element for websites, as the indexing of your website on search engines directly influences how many visitors you receive. It is therefore beneficial to have SEO simplified in this manner to incrementally make changes in the right direction which would increase the amount of traffic to my website. Moreover, this would increase the awareness of the MSA brand and benefit the program by being higher up on the search results.