**Web Based Major Project – Proposal**

My project will be using a client that I am part of; it will be the local Royal Air Force Air Cadets squadron based within Aberystwyth. I am a member of staff there and thus am able to easily communicate with them for both requirements and testing purposes. Following a meeting on 31/01/2018, I will have a clearer outline of requirements and what the client wishes from the website itself, so the outline proposed here may be subject to slight change in some of the features. RAFAC is also a registered charity and a uniformed youth organisation modelling the Royal Air Force for young adults from the age of 12-20. I will be providing a ‘squadron website’ which provides basic information on the squadron with the premise of recruiting more young adults to join the squadron. I will also be providing a secure administration area, catered to specific needs within the air cadets ‘progressive training syllabus’ and some other information storage.

The site itself will be split into two as mentioned above; there will be a visible area serving as a recruitment and information area for prospective young adults and parents to browse before being able to contact the squadron. The other area will be an ‘admin’ area, for staff members of the squadron whom have fulfilled certain requirements (having completed MoD mandated protecting information and hold a valid DBS) are able to check on what parts of the ‘progressive syllabus’ they have completed, edit information in regards to that and potentially produce graphs and such from it. They will also be able to record events and information in regards to the squadrons ‘give and take policy’, which records what public events they have attended so they can be selected for various courses available within the air cadets. In regards to the ethics of holding information of young adults, as previously mentioned only certain authorised staff will be able to access the secure site, featuring a login system where logins can only be allocated by the head of the squadron. The only information of the young people held will be their name, as all other information is held within the secure management system provided by the RAFAC (and extension RAF and MoD) itself.

The site will have a database attached for storage of the information contained within the ‘admin’ area. Depending on complexity and future discussion, I may add the ability to modify the website from the admin area (of textboxes and pictures only), which would also be held in the database. The current number of pages is uncertain; however they will contain much of the same code depending on the section and thus not be too difficult to reproduce if more are required. The hardest part, after ensuring that the database connections and calls work correctly will be presenting the site and providing the ‘front end’ site editor itself, which may have parts of libraries incorporated into them to provide ease of use and best practice.

Technology to be used is going to be a standard front-end framework, such as bootstrap to provide responsive design and ease of use along with its associated addons like JQuery. There will be at least one php framework used in the form of a secure login/signon or library. This will ensure best practice and that it has the best security possible. There is the potential for other libraries pending investigations over the next few weeks during prototyping to find the best way possible of achieving the outlined aims.

Finally, there are a number of related sites that can be investigated and analysed. The first is various other standard websites of other RAFAC squadrons whom use it for recruitment and suchlike, which will be investigated to gain information and best practice for what to put into a site like that itself. There are many of these and a broad spread will be looked at, both good and bad to determine what the best to use is. The second area, the administration area will look at other stock ‘admin’ sites for various programs, such as server providers, CMS’s and so on. The more specific site to the RAFAC is known as SMS, Squadron Management System. This contains personal data and is used for day-to-day administration of an air cadet unit and will be looked at, both in good and bad to determine if there are any sort of ideas that can used from this. While there are no direct features being used from the system, as it is created solely for the purpose of the RAFAC it will prove useful to investigate. The findings for the SMS ‘investigation’ itself will be vague pending confirmation from HQ RAFAC about being able to show this to personnel not a part of RAFAC itself.