

# Coursework Report

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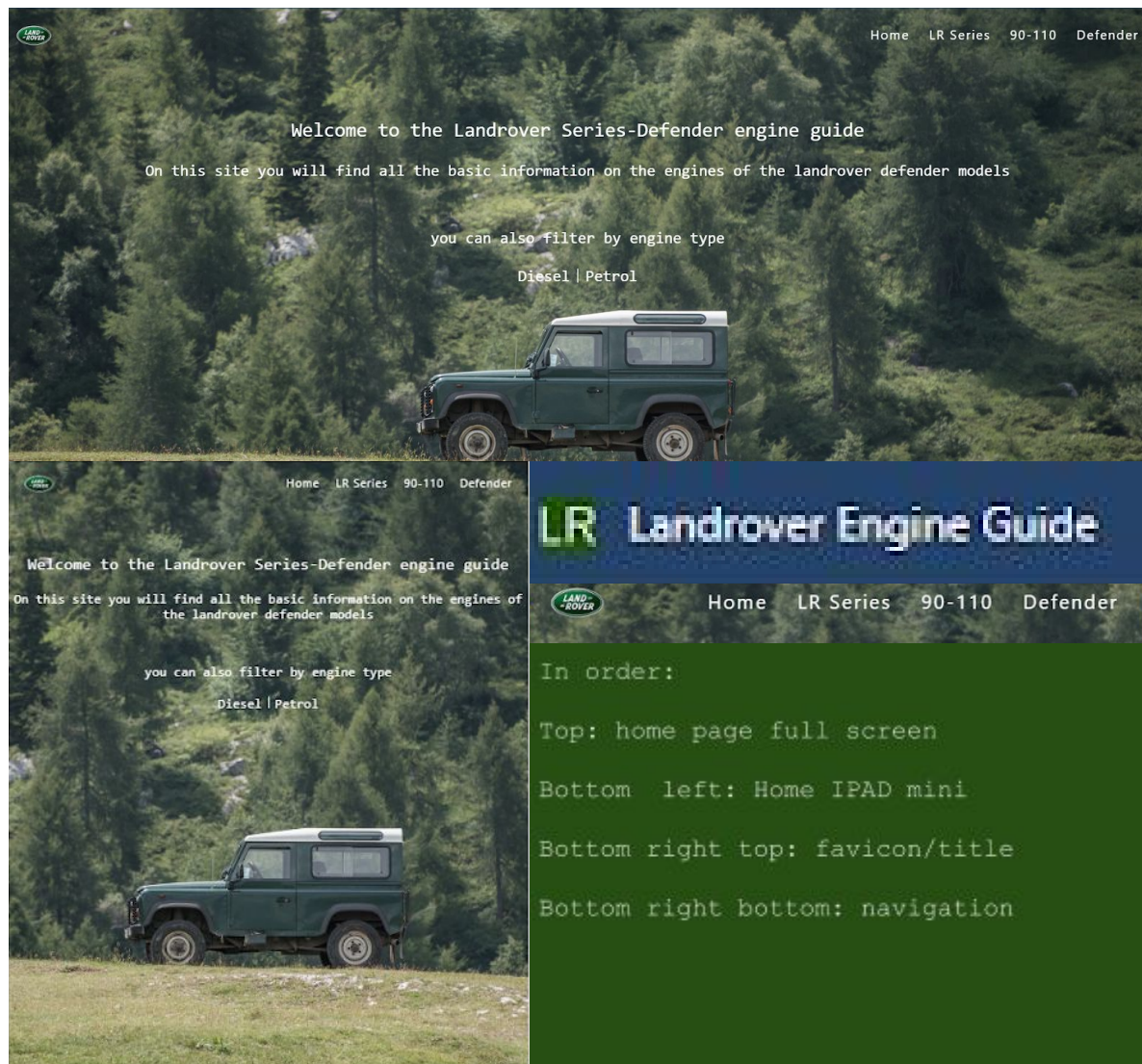
Edinburgh Napier University - Advanced Web technologies CW1 (set09103)

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# Landrover Engine Guide


## Website Introduction

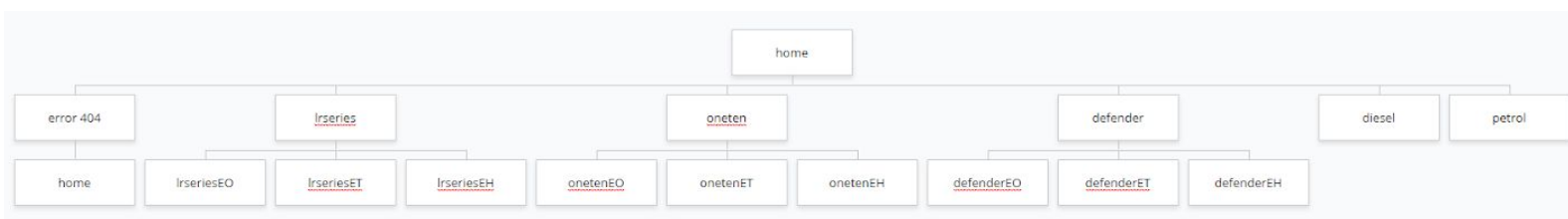
My web-app is designed to try and help people who are wanting the tech specifications of the engines from Landrovers all the way from the Series Landrovers to the modern Defenders. The audience of my site are likely going to be Landrover enthusiasts or people who are looking into buying a Landrover and wanting to know some of the specifications of the engines of the car they might buy. The website must give detailed information of the engines and include items such as engine size, horsepower and torque as these are very important for potential buyers. The core features of this webapp will be the ability for users to choose from any age range of defenders and have engine information be well presented to them. other features will include the implementation of a way of categorising the different engines, e.g via the fuel type of the engines. The webapp must also contain error effective error handling and contain effective titles on each page and make use of a favicon. Users must be able to navigation the site quickly and be usable by any potential user.



## Design

With my website I wanted to embody the look and style of landrovers and the countryside, so I went for a Green, White and Cadetblue #5f9ea0 colour scheme, I felt these colours worked well together and were easy on the eyes meaning users would not have any eye strain reading information. I chose the font family monospace, this gave the look of the site a very military and utilitarian feel with the titles being in the standard web sans serif font. I felt this mixture made the website easy to look at and navigate around, I spent a long time deciding on the background image and I chose this one as it was perfect for the colour scheme and really let users know the purpose of the website instantly.

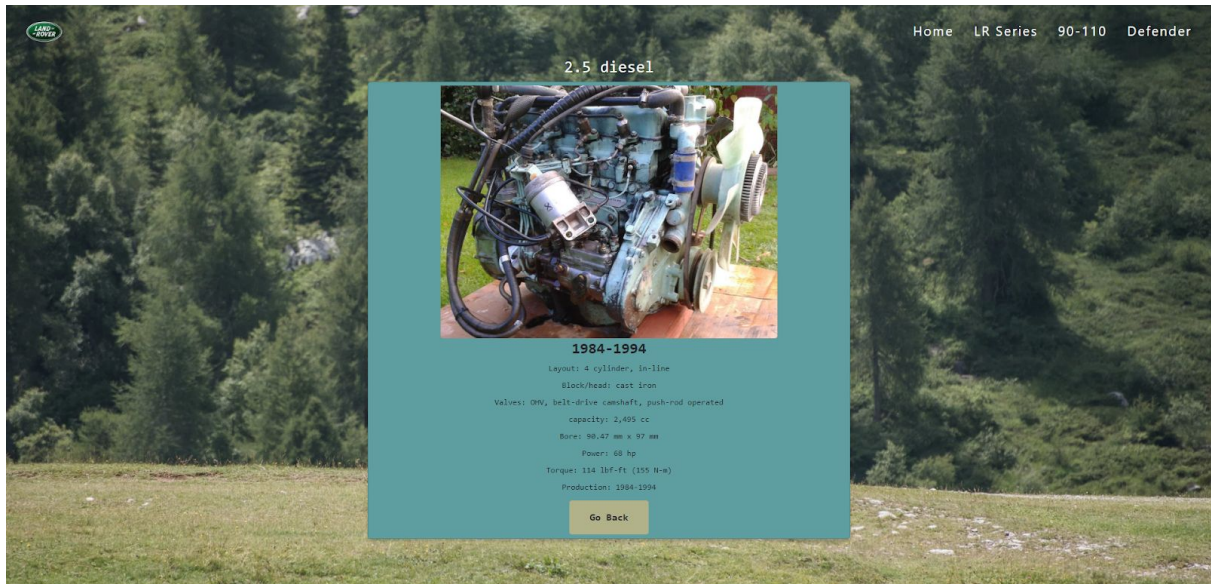
The logo of the website is  this is also the favicon of the site, it simply is the landrover name shortened down with a white on green colour scheme to fit the rest of the webapp. From the home page you have two ways of navigating to the different engines, you can choose by type of landrover (this is located in the navbar) or you can choose between petrol or diesel. This produces a sitemap that looks like this.



Each model of landrover would contain 3 engines so I would follow a naming standard for the site, for example if the user goes to defender.html and they want to view the first engine the link is call defenderEO.html as in “Engine One(EO)”, the second engine is always “Engine Two(ET)” and the third is “Engine tHree (EH)”. This follows throughout the site and helped me with development by maintaining a naming protocol. If the user clicks on the diesel or petrol links on the home page they will be redirected to a page that contains links to all the engines of the specific fuel type they chose. Every engine details page contains a button that will send the user to the previously viewed page by using a small line of javascript. I have also made use of error handling on this website with regards to ERROR 404. If the user incorrectly types something into the url or perhaps clicks on a broken or old link rather than being presented with a standard error 404 page that many non computer literate people will not understand and will panic some users. The page instead retains the previous background image and contains a small line of text letting the user know a simplified reason for the crash and also containing a link back to the home page.

On the content Pages I would make use of the colour cadetblue (shown in the example below) this I felt complemented the site well as landrovers are often seen in this colour and it fits, the retro utilitarian feel of the app. I would display the content in a central format with the type of content on the left and the content on the right, I kept all the information centralised so the user does not have to keep moving their vision from requesting information to having it displayed.





When a user clicks on a desired model of landrover or the desired fuel type, they will be shown this screen



As can be seen here, the user has a small list to choose from, upon clicking on the desired choice they will have the picture shown above the current displayed with the engine details, on this page is a "Go Back" button, this will take the user to the previously visited page saving the user time and also meaning they do not need to remember what page they were on, saving confusion and aiding the usability.

## Enhancements

I believe for a first attempt at producing a python made product I made something that is both functional and usable but I believe there are a few changes I would make to this app if I had more time or experience. For a start I would implement a user account system that would allow users to sign up and converse with one another, creating a forum and area for users to discuss topics of interest. From this forum I would eventually like to develop this further to allow for users to suggest content to be added, if enough users suggest sensible suggestions then it could be implemented.

With regards to changes to what I already have I would like to add more ways of finding different engines, so for example there are currently only 2 different ways to filter but I would like to add the ability to filter engine size or age as well. On the topic of engines I would also like to add more information on each engine as currently i'm only displaying the tech specs but I would also like to describe the history of the engine as well as a user review section on the engines so that people can make an even more informed decision when it comes to purchasing a car with specific engines. For example say someone is torn between a defender puma engine or a TD5 and they look at the tech specs and see that they are somewhat similar, they would then look at the reviews and would have more information to help them with their purchase.

I believe that the fonts I used were appropriate but I would have liked to have spent more time looking for a more appropriate sans serif font for the navigation and the titles, I felt that the font I used was a little standard and with a bit more research and testing I could have come up with a font that represents the theme more appropriately.

## Critical evaluation

When I started development I did not have the best experience using python, python flask, vim, or command line but towards the end I really started to understand and make sense of it all. But I feel that towards the end I had done a lot of things that I do not have time to rectify but if given the chance to do again would change. For example I did not make use of bootstrap form a majority of the work and only in the final few days did I implement it for my navigation bar, I feel that my pages that display the content on specific engines could have made use of bootstrap 4's modal feature that pops up content and darkens the rest of the screen. I am happy with how my "content" pages turned out but If I did it all again I would make this move to modals. Looking back that the work I spent a very long time making changes to individual pages but what I should have done is make use of a master page for the navbar, head and footer. Instead I had to add the html to each of my 16 templates, this was very timeconsuming and upon my realisation that I could have just been editing 1 the whole time I was very frustrated with myself. But by the time I have realised this mistake I had dug myself to far into having many templates that I was running out of time to make the change and implement it, my fear was that by changing to a master page a few days before handing the work in my whole system would break and I would end up handing in a broken or non-functional website. So I stuck with what I had and carried on.

The web app's main feature is simply displaying data on engines from landrovers to a user. This was done by presenting the user with a card that contained a picture of either the engine or the car the engine was for, underneath this contained all the information on the engine such as engine size, torque and horsepower and few other bits of information I could get from doing research online.

I would make a python file that would contain the different app routes for all the different pages and the html templates that would be run depending on the url. I would also go on to make a static folder that contained the image of the favicon as well as the bootstrap css folder, also located in this folder is my own style.css folder that I would use for styling all of the templates that I would use throughout. Every template file that I found I created from scratch using minimal bootstrap for the

navigation, all the content found on the file regarding landrovers I searched for myself and certain bits of information required me to do extensive research to find as some of the engines were more difficult to find information that others. I would also make the favicon using adobe photoshop.

One page that I am very happy with is the error 404 page, this was a highlight for me this project as it made me very happy once it was finished. I have been developing websites for 3 years now and at no point did I realise that I would have a custom error 404 page, after I finished making it it seamlessly links in with the rest of the site and allows users to easily find a way back to the homepage after either entering in the wrong url or clicking on a broken link. I feel that this works well and is something that I will be implementing in every website that I produce from here on out.

To conclude critical evaluation I would say that I am happy with the website and what I have made, the website looks the way I planned and functions as expected. But looking back with a better skill set and experience that I have learned from this module I would improve several things if I have to undertake a task such as this again :Spend more time looking for fonts, Implement a master page and add more content. I feel this last point is an important one, even though I spent a long time looking for the content for this project it does sometimes (to me anyway) appear a bit barebones, and could definitely do with some more text, perhaps a background on the engine and a bit about it's history. Things I like about this website are :Styling, body font, content delivery. I believe that the styling of the website specifically the background image really convey the purpose of the website to the user and create a very comfortable environment for the user to read content, this is exactly what I was going for and when I asked a friend to test this website they spent a very long time going through each engine and having an engaging read. So I would say overall im happy with the project but I would make improvements with regards to the code simplicity and also addition of further content.

## Personal evaluation

I believe that speaking in all honesty I could have performed much better, this is definitely the most individual module I have done and I did not cope well during the beginning of the module, after taking one day of university I felt that I fell behind but rather than working harder I just worked from one week behind my peers, this stressed me out after seeing them push ahead of me, but luckily this stress helped me to actually complete the work several days behind the deadline which was a massive relief. I have learned a lot from this course regardless of how my project turned out, and I would consider that in itself to be a success.

Learning command line, python, flask and vim was certainly a massive part of the challenge for this module having never touched them before. So I would spend a large amount of time playing around with these to try and learn them, perhaps I should have followed the workbook rather than try to learn it my own way as this jeopardised my work on more than occasion. When I first started using linux command line, python, vim I admit that I didn't understand why we had to use these but from using them I now understand the importance of learning them for the future and the possibilities that are unlocked from using these forms of developing rather than just using a standard text editor.

Overall I would say that I had a very poor start to this module but towards the end my understanding escalated massively, I have learned alot from this coursework and I will take the information I learned from it forward to future projects as well as learning from the many mistakes I made.

## References

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