

# Coursework 1 Report

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## 1 Introduction

This report shall detail aspects of the design and implementation of a website containing information and interactive features pertaining to ciphers and ciphering techniques. This assignment will test my ability to create a functioning website using HTML, CSS and JavaScript, with features and content that a web user might feasibly find and interact with online. The website itself will include an index page, 2 pages containing information and interactive elements on a cipher each. The first will be the Caesar Cipher and the second will be the Atbash Cipher which are both mono-alphabetic ciphers that were first used in antiquity.

There will be a further design page HTML file along with the necessary CSS and JavaScript files and a folder containing images used on the website.

The reading for this assignment will be Introducing Web Development by Jorg Krause, Practical Web Design for Absolute Beginners by Adrian W. West and various online sources. References will be cited in the text or linked by hyperlink from the website.

## 2 Software Design

At the outset of this assignment my web development knowledge and experience is minimal. I will begin the website construction by writing the basic framework of the site, inserting dummy text, images etc. to give the overall feel of a working website.

I will study the selected reading to learn the necessary techniques to develop the design and functionality of the website.

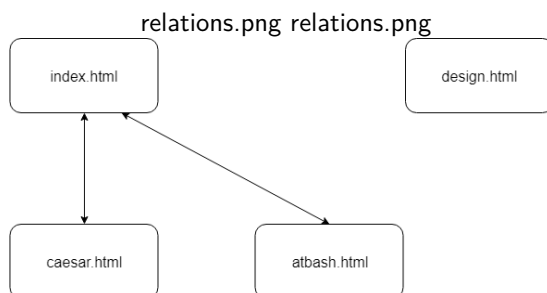


Figure 1: Webpage navigation

Naturally I will plan to have a title at the head of each page. A horizontal navigation menu will float above the title and information on the ciphers will cascade underneath with suitable images placed. Finally there will be an area at the bot-

tom of each cipher page to allow a user to encipher/decipher a message.

## 3 Implementation

I will begin implementing the site by creating all HTML files and the supporting CSS and JavaScript files. These will then all be filled in with code to give the site a basic look and level of functionality i.e. HTML files with appropriate divs and JavaScript file with function returning "Hello World!". I will be using a textbook to guide me through the process of developing the site into something more pleasing. Once this is done I will alter the design of the page to style in-line with the subject the website is exploring, adding images where appropriate and input elements to allow a user to encipher/decipher messages in the chosen ciphers. Then finally the JavaScript code for encipher/deciphering will be written starting with 2 simpler ciphers, the Caesar Cipher and the Atbash Cipher.

screenshot.png screenshot.png



Figure 2: Screenshot of design page during implementation

I would like to have some kind of animations used on the website with some kind of dummy advertisements in the sidebar and a third cipher page using a more complex cipher such as the Vigenere Cipher.

## 4 Critical Evaluation

I have not put much effort in adding animations or simulated adverts as I spend too much time caught up in writing the JavaScript for the site. I had some issues with the syntax and passing data from the HTML to the JavaScript functions.

I got the feeling that coding a website from scratch in notepad maybe doesn't give the kind of freedom of design one might want when web developing as I found changing some of the design features to be a clunky process.

The website has largely came out with the aesthetic I had in mind and is significantly less ambitious than I what I set out in the previous section.

## 5 Personal Evaluation

I feel I was able to meet most of the requirements for this project. Overall my site has a basic design but is visual appealing and easy to use. I am reasonably happy with this as I went from no web development experience and in a few weeks have a working website.

A significant portion of the time I spent on this assignment was used on learning very basic aspects of web development. This stymied my progress a little but in the end I feel reasonably comfortable with the format and given more time I know I could produce a professional looking website.

There are many possible functions, style elements etc. that can be applied to a website and I got caught up in fiddling with quite insignificant settings. Next time I will make more use of style guides to help with colour schemes and I will make more complex designs of how the pages will look rather than just how the site will be navigated.