

Computer Science 301

Web Technologies & Security

Practical 2: Week beginning 2 September 2024 [100 Marks]

Task 0

To access the practical files, each student needs to open up a file explorer (on windows) and open up the following link \\CS3-DEV\Practicals\{STUDENTNUMBER}\ and then find your own student number on the list. Alternatively, open your File Browser (on Windows), Click on **This PC**, then select on **Map network drive** and click on map network drive. You will then copy and paste the following link on the folder option and click finish:

\\CS3-DEV\Practicals\{STUDENTNUMBER\}.

The authentication for this is all handled via the domain. This is seamless if you are in the Hamilton labs. If you are outside Hamilton or using a private device you will need to use your domain credentials to access the share. So, follow the same process but when it comes to connecting to the server, un-tick **Reconnect at sign in** and tick on Connect using different Credentials. This will be done each time you want to access the web server that we are using for this course. When connecting outside Hamilton building, you will also need to add **ICT\student_no as username** in order to access the server and use your ross or ruconnected password. You cannot access the server if you are not using Eduroam or on Rhodes network.

Task 1

By now you should have a website that is mostly made of HTML Code. In this practical, you will be creating a css file that will be used in adding style to your existing website. Make sure that this css file is in the same directory as the HTML file. You are not allowed to use any framework for this practical including but not limited to Bootstrap, Tailwind CSS, Foundation, Bulma Skeleton. You will get a Zero if you use a framework.

You are expected to perform the following tasks (not arranged in any order) using CSS:

- 1. Last week you added Navigation functionality to your webpage. Having easy-to-use navigation is important for any web site. With CSS you can transform boring HTML menus into good-looking navigation bars. Using CSS, create mobile-friendly, responsive navigation bars, Navigation Links.
- 2. Every menu should have CSS Padding, responsive Sidebar, Slide Down a Bar, drop down menus and Off-Canvas Menus.
- 3. Your website should accommodate the Responsive Design feature i.e. creating responsive layouts that makes use of the ability of current mobile browsers to shrink or grow the web page to fit the width of the screen being used be it a tablet, phone or larger screen. There are four key components that make responsive design work, use any two.
- 4. There are tons of different layout designs to choose from. Your .css should have this information well defined.
- 5. Comments are a MUST have in your this .css
- 6. Accommodate CSS Layout attributes float and clear, CSS Multi-column Layout that allows you to construct Multicolumn Layouts.

- 7. Use Flexbox to align the label and corresponding input field in each form on your website group side by side. Add attributes that suit your site's preferences.
- 8. Your website should have CSS forms (at least 3), CSS Lists links (at least 3), CSS Tables (at least 3) and File paths (at least four). What you put in these Tables and file paths is up to you. Do consider that you will add a database to this website in your prac 4.
- 9. Your website should have links to any three social media sites and YouTube.
- 10. CSS media queries are a way to apply style rules based on the medium that is displaying the file. You can use these queries to look at the capabilities of the device, and then define CSS rules to target that device. Make sure that your website accommodates its functionality. How you implement it is up to you.
- 11. Additional points will be allocated for creativity and use of functions or attributes not directly stated. In essence, if you follow all of this your best mark will be 80%. 20% has been left for grabs for initiative (read creativity). Make sure you comment this clearly in your file so that your tutors can see it and award you the marks. Inform them of your additional features.
- **12.** https://www.w3schools.com/css/default.asp This link plus many others have nice explanations on how to do most if not all of the things that you are expected to do in this practical. Make use of it.
- 13. You will submit your .css file on reconnected so that your tutors can mark it.