**SIT 120 – Task 1.2P**

**1a**. Responsive web design is the approach to web design in a way which allows for websites to adapt and change according to the platform that is being viewed on, such as a mobile phone, tablet, or computer screen. In other words, the layout and elements of a responsive website would automatically adjust and re-organize themselves to provide an optimal viewing experience across different devices. Responsive web design is important because it allows for the viewing of the website through different devices, and this is especially important as users typically have different devices, with different screen sizes. This allows for inclusion of smartphone and tablet users, which will increase traffic to the website. Some key features of a responsive website would include:

Fluid Grids – Instead of fixed width layouts, fluid grids proportionally scale elements based on the screen size. This allows content to re-organize and fill the space accordingly.

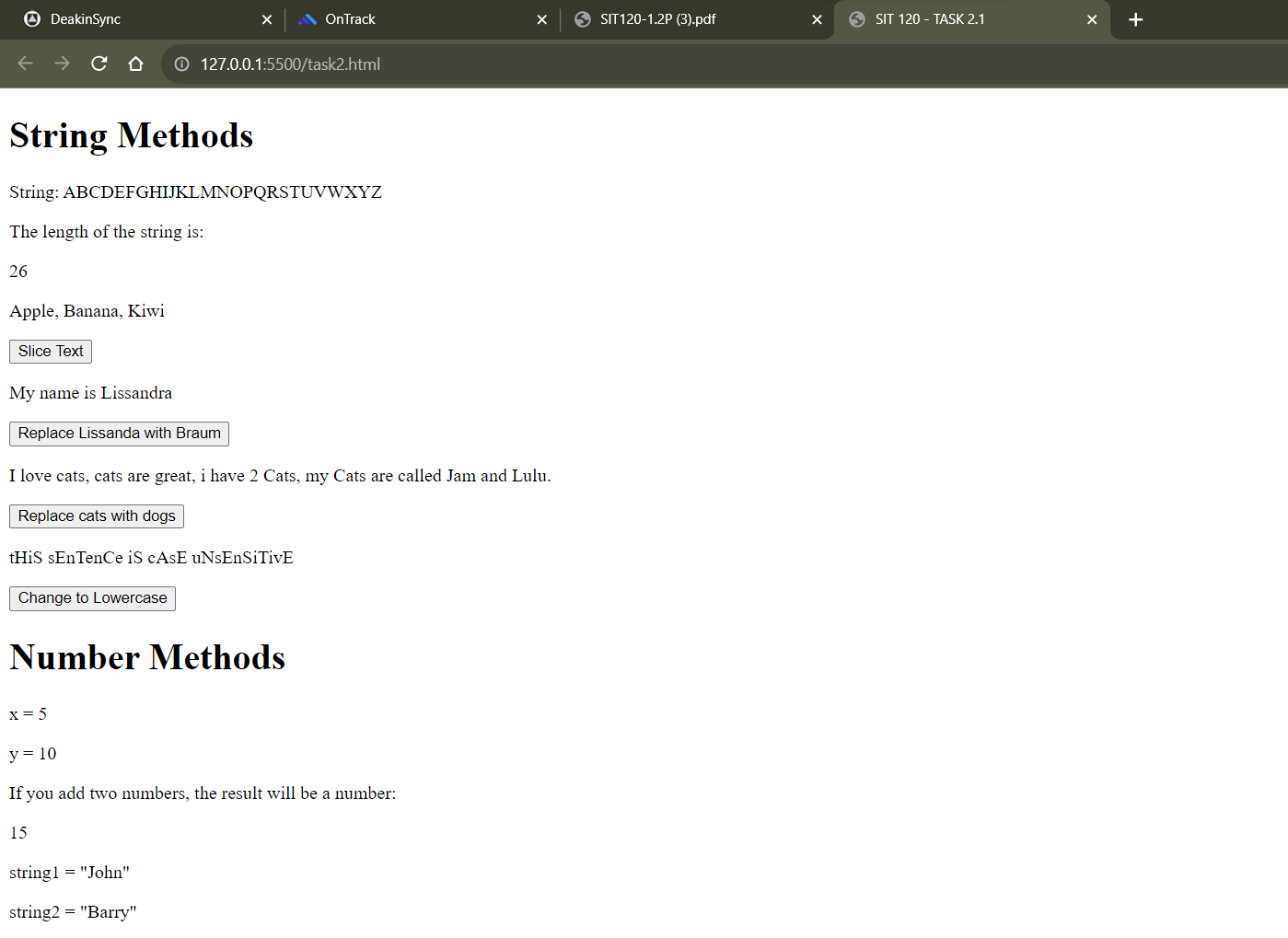
Flexible Images and Media – Images and media scale dynamically, ensuring they do not become distorted or misplaced.

Media Queries – CSS media are used to apply different styles and rules based on the characteristics of the device used to view the webpage. For example, screen width, resolution, and orientation.

**1b**. To create a responsive web page with HTML and CSS, you will need to utilize various techniques and practices to ensure that your website adapts to changes in screen size and with different devices. You would want to incorporate the viewport meta tag in the head section of the HTML file, this allows for the webpage to stretch and fit to adapt to different screen widths. Create a fluid grid and use relative units such as percentages instead of fixed units such as pixels. This allows the elements to adjust proportionally to the screen size. Then implement media queries, these are essential for applying different CSS styles based on the device’s characteristics. Define break points where your layout needs to change, such as (min-width: 720px or max-width: 1024px) for example on medium sized screens. Use CSS to ensure images and media scale appropriately and remember to use relative units instead of fixed sizes. When building the layout, start with mobile styles first and add media queries for larger screens, this mobile-first approach allows for a smooth transition from small to larger screens. Make sure to test the website on multiple devices, you can also use browser developer tools to preview your site at different screen sizes.

**3**. Completing these tasks allowed for me to broaden my understanding of responsive web design principles, to ensure a consistent user experience across devices. I learnt how to use CSS media queries to adjust styles based on screen size and to adapt to different situations. Implementing JavaScript concepts such as string, number, array, date and function methods has allowed for greater interactivity within the webpage. By learning and practicing these concepts, I have gained insight into how JavaScript can provide a whole different layer of interactivity within the webpage in contrast to just using HTML and CSS. This task broadened my understanding and improved my ability to create dynamic and user friendly web pages. Through making my own webpage, I have learnt about many other coding concepts and the useability of different elements on a webpage, this knowledge can be utilized in the future if I ever need to create a webpage.

**Screenshots**:



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