

K-Fit Website Design Report

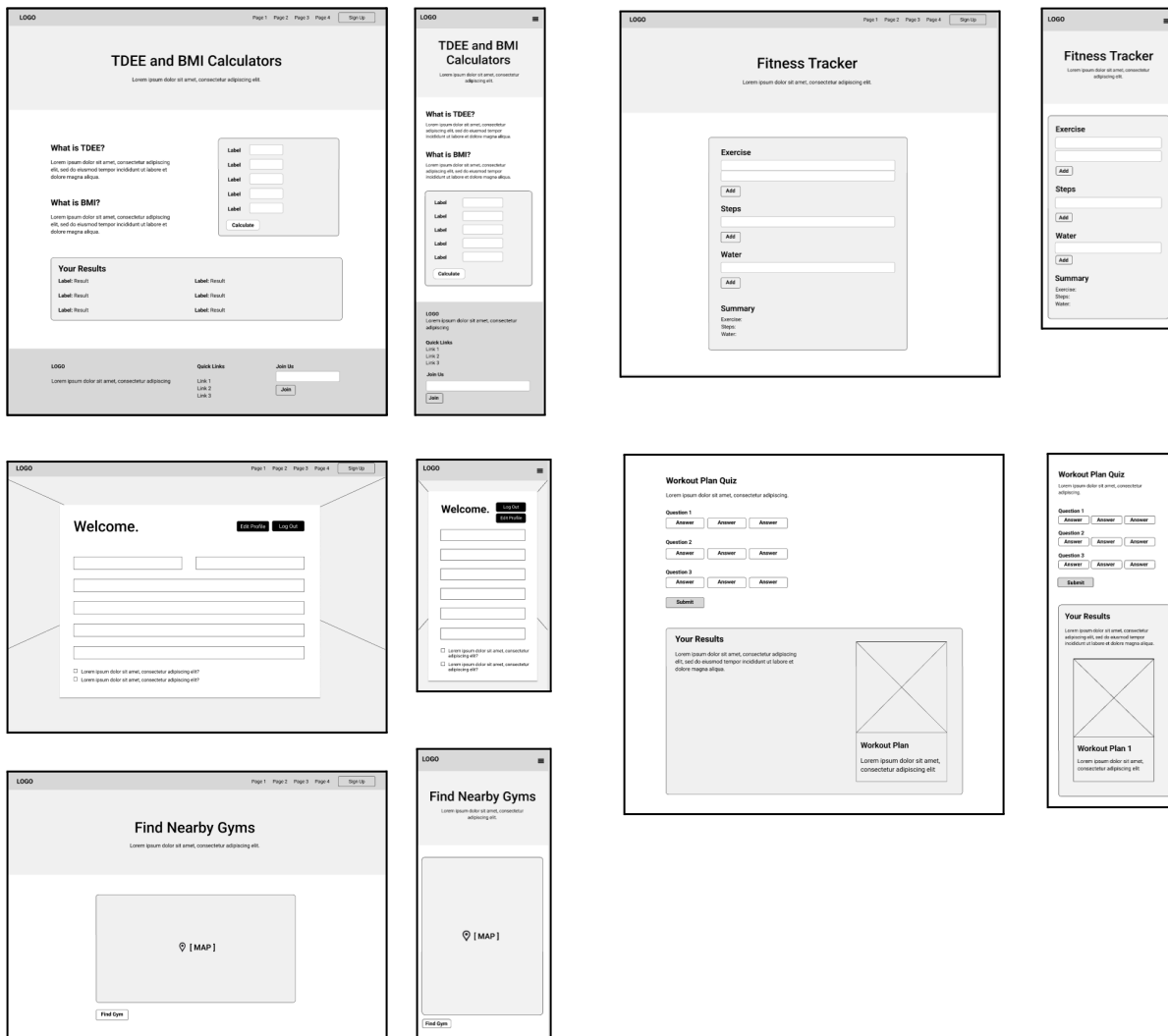
COMP0021 Coursework 2 Design Document

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1. Layout

I retained my website's minimalistic style, with all content centred on the page and no side sections for a more focused experience. I used contrasting colours, cards, boxes, shadows and catchy headings to highlight certain content and make clear divisions between each section. I also included several images, as these help make fitness feel more relatable and motivating for the user.



Figurea 1-10 | Wireframe of added pages

2. Description of Features

I used Bootstrap to enhance and speed up the design process. I implemented an organised and responsive navigation bar using Bootstrap's dropdown menu and collapsible feature. Furthermore, I used Jumbotron classes to create simple headers, container-fluids to style full-width page backgrounds, and containers to hold page content. I also added a carousel for the customer reviews section. Additionally, I used other Bootstrap classes to easily create and style cards, buttons, spacing, and forms across all pages.

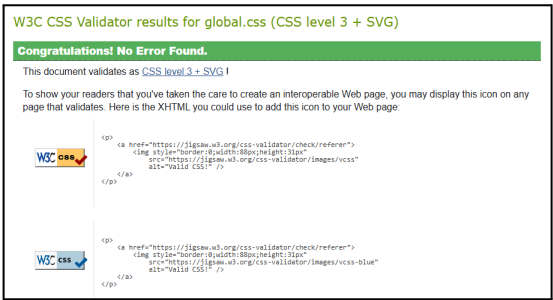
I integrated JavaScript and jQuery to implement advanced HTML features, specifically the Geolocation API and localStorage. The Geolocation API powers the *Gym Finder* page, automatically detecting the user's location and displaying it on an interactive map. When users click the *Find Gym* button, they are redirected to Google Maps, which has nearby gyms already pinned. For data management, I used localStorage to maintain session data, storing the authenticated user's data and a register of all members' information. Additionally, I established a premium content protection system using modals. The modals appear immediately or are triggered after users scroll a set distance, requiring account creation for further access. For convenience, I added a scroll-to-top button that immediately brings the user to the top of the page. Furthermore, I created various functions to handle dynamic content visibility, real-time content updates, and interactive buttons.

3. Implementation

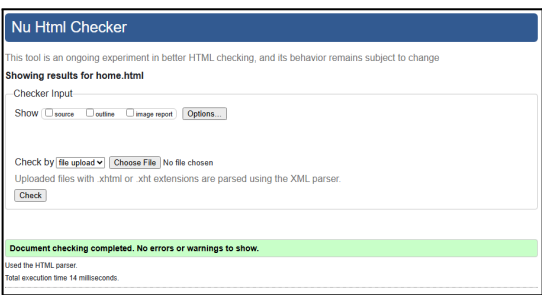
The final version of my website differs slightly from my original design due to my limited understanding of Bootstrap, JavaScript, and jQuery at the wireframe design stage. As I gained more knowledge on these tools during development, I made some key improvements. For instance, I enhanced the navigation bar by replacing a single row of links with organised drop-down menus. Additionally, instead of completely hiding premium content from non-members as originally planned, I made use of modals, allowing users to get a glimpse of the content.

4. Testing Process: *Functionality, Responsiveness, Validity, Accessibility, and Browser Compatibility*

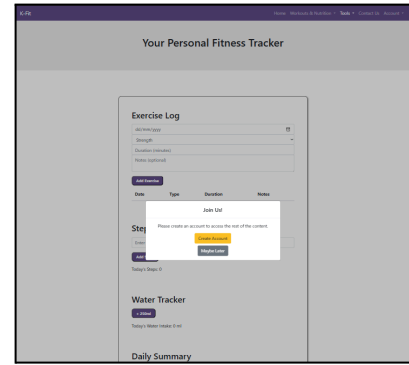
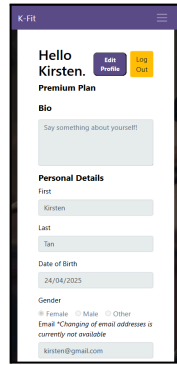
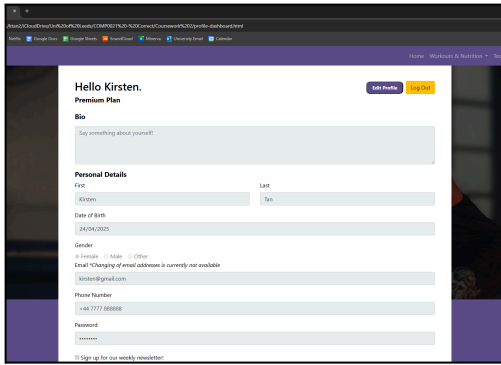
First, I tested my website's functionality by simulating a new user's journey from viewing the home page to signing up for a membership and using the premium features. I further tested my data handling methods by adding more users to the database and ensuring each user's data was stored properly. Next, I ran each file through W3's HTML and CSS validation services to confirm my code complied with coding standards. Afterwards, I evaluated its responsiveness using Google Developer Tools to preview the website on different devices and screen sizes and verify proper scaling of elements. Then, I evaluated its accessibility using the Silktide Chrome extension, which provided ratings and simulations for various impairment conditions. Finally, I confirmed the website's cross-browser compatibility through testing on Chrome, Edge, Firefox, and WebBLE (a browser for visually impaired users), checking for possible rendering issues.



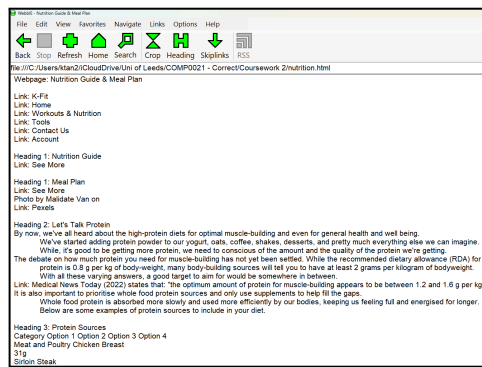
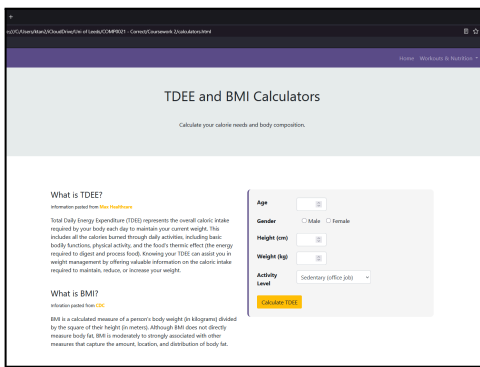
Figures 11-12 | Testing on W3 CSS Validator



Figures 13-14 | Testing on W3 HTML Validator



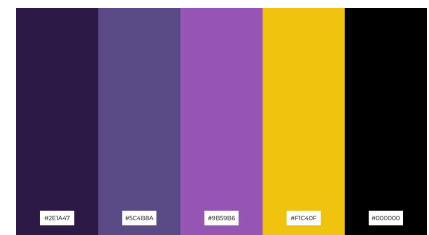
Figures 15-16 | Proof of testing on Google Chrome (desktop), Google Chrome (mobile), and Microsoft Bing (tablet).



Figures 17-18 | Proof of testing on Firefox (desktop) and WebblE (desktop).

5. Colour Scheme and Fonts

I kept my website's original colour scheme and fonts. Purple and gold symbolise power, ambition, nobility, luxury, and creativity (Advantage Fitness, n.d.), representing my brand's commitment to providing high-quality, reliable information about health and fitness. The fonts Roboto and Open Sans offer a clean, professional look while adding warmth and character (My Personal Trainer Website, n.d.), aligning with my brand's values of honesty and reliability.



References

Advantage Fitness. (2018, September 18). *Color psychology & how it affects your fitness center*.

Advantagefitness.com.

<https://advantagefitness.com/color-psychology-how-it-affects-your-fitness-center/>

My Personal Trainer Website. *The 10 best fonts for your personal training website*. My Personal Trainer Website. Retrieved 26 February 2025, from

<https://www.mypersonaltrainerwebsite.com/blog/best-fonts-personal-training-website>