



Case study / Scenario

CLIENT DETAILS: ML Strength - Health and Fitness

We train athletes – professional, collegiate, youth, and anybody that wants to train like an athlete. When we speak of training we are talking about speed, strength, power, and sports therapy.

Our business is aimed at a health conscience adult who wants to move beyond the usual local gym.

About us

We are a Brisbane based company with clubs at Ashgrove, Brisbane City, Chermside, Graceville and Westlake.

ML Strength are Australia's newest brand in health and fitness, with gyms opening throughout the Brisbane metropolitan area. ML Strength believes fitness comes first and keeping fit and improving your health is not just a fad - it's a way of life. Whether your goal is weight loss, body building, nutrition or diet improvements, having more energy, or just looking and feeling better - we're here for you!

ML Strength can offer cutting edge exercise options, including group fitness classes and one-on-one personal training sessions for weight loss, circuit training, boxing and karate. Our trainers are all Les Mills accredited instructors and are second to none – all have Bachelor Degrees in Human Movements.

We are a family operated business that has little to do with the rest of the fitness industry. Our gym world does not include the annoying telemarketers or membership consultants. Our gyms speak for themselves, our members do our marketing. We believe that word of mouth has way more credibility than something that a marketing machine dreams up. You are always welcome to look through any of our gyms at your own pace, with no pressure whatsoever. With hard-selling 'health club' sales consultants hustling you on every corner, we pride ourselves on being a refreshing change from that. Our 'no obligation, no pressure' attitude is clearly evident with our \$10 CASUAL visit rate.

We have created gyms that we would love to train in and share that passion and enthusiasm with our valued members. Our gyms have an old school feel with a new school attitude!

We are open 24:7. YOU can now train any time you like, weekdays, weekends & public holidays. WE ARE OPEN! Unlike other so called 24:7 gyms, we are staffed all the time. If you need a late night workout, a protein bar or shake, supplements or a cool t-shirt, we are open for you. Our class times change constantly so check out on the web site for the timetable at each of our clubs.

The range of group fitness classes provided by ML Strength is listed below.

- Body attack
- Zumba
- Body pump
- Body step

- Rpm
- Body balance
- Body combat
- Body jam
- Body vive
- Cycle
- Cycle extreme
- Pilates
- Yoga
- Aqua fit & aqua mode
- Boxing & TAE box
- Step moves, step basic & step burner
- Rejuvenate, low impact & gentle fitness
- Cardio blitz & cardio circuit
- World dance & dance
- Hilo & fat burner
- Sculpt & combo
- Power hour
- ABT
- Abs blast
- Tai chi
- Chi ball

About the owner and his philosophy

Hi, my name is Maurice Lidman and my background is in boxing. I competed as an amateur in my early years and now like to share my knowledge and expertise as a coach. It is not unknown for me to jump into the ring as your sparring partner.

For over three decades Maurice has been involved in the boxing scene. He has competed as an amateur in his early years and now shares his knowledge and expertise as a coach, by running his boxing classes with passion and enthusiasm.

The atmosphere in our boxing classes is fun, exciting and highly energised.

Whether it is your first class or you're an intermediate level boxer, you will gain a lot by becoming involved. It is one of the best cardiovascular workouts available.

The site footer should contain copyright information, your name and student number, as a minimum

PART 1 – Five (5) Page Website Project requirements

You are an employee of **Uptown IT** and you work with the Commercial Creative Department. Your role is to design and develop websites. Your manager has assigned you to a new project and you have received documentation regarding the client's requirements and attended two project meetings. The client wants a website to advertise the services they provide and entice people to visit the health and fitness centre.



Important

You should use the **UptownIT Assessment Report** as the basis to complete this assessment. You will need to make changes to headings and sections as appropriate. You should include all screenshots and images within this document.

Ensure you have followed the file naming convention given in the Submission Details section above before submitting your final assessment

Task 1. Identifying the HTML requirements

Your task is to create a five (5) page website for the scenario presented. Read the scenario and identify the content that you plan to include into each page. The client wants to keep the pages to a minimum so there would be no additional pages created at this stage of the project.

Traditional web pages tend to have individual pages, one per file, with a set of common dependencies. These dependencies may include an external CSS file and some scripting code such as JavaScript. If necessary, to format the position or appearance of a specific element you can use inline CSS. This project mainly involves working HTML and CSS but some scripting may be included to enhance the user experience if desired.

The site must be responsive to different screen sizes. Sample wireframes have been included to guide you through the page layout and implementation on at least two devices (screen and phone). Duplication of header, footer and navigation is discouraged, find a way to overcome this problem and generate common sections from a single instance.

Before proceeding to design the page ensure that you understand the message that the client intends to convey to their potential customers with the page's content and layout.

For sections 1.1 to 1.3, write a response below each question. Provide detailed answers.

- 1.1 What does the client want to achieve with this web page?
- 1.2 Who is the target audience for the page?
- 1.3 Are there any legislative or organisational standards that the designer/developer must comply with in the development of the web page?

Research legal obligations for online business and complete the table below. A good starting point is visiting [Business Queensland](#). You should also consider web and accessibility standards in your research.

LEGAL OBLIGATION	ACTIONS REQUIRED	SOURCE
E.g. Privacy		
Add rows as necessary		

Task 2. Prepare site environment: folder structure, naming convention

- 1.4 Create an appropriate folder structure. All folders must contain relevant files and each folder should not exceed 1 MB.
- 1.5 The index.html file must be placed in the root folder
- 1.6 Naming convention: All filenames must be descriptive of the content, lowercase, and no spaces are allowed in the names of files and objects as specified in the style guide.

Task 3. Responsive page layout design considerations

- 1.7 The page layout design must conform to these requirements:
 - a) A responsive five (5) page website (to suit multiple devices)
 - b) A hamburger menu that is responsive
 - c) Animated :hover state for menu items
 - d) Format and appearance as per style guide
 - e) Web Form page:
 - A minimum of seven form fields
 - Four different input types
 - Attributes with input restrictions: pattern, maxlength, max, min and title for error message
 - Every input field needs a label and error div
 - Element(s) for errors in form input empty by default
 - A 'help' function on mouse hover (link)
 - Use of a scripting language to add interactivity is allowed but not mandatory
- 1.8 Create a wireframe or skeletal outline of the page layout, that is, a diagram or sketch that identifies each section of the page, with elements positioning and dimensions. Name all sections in the layout diagram. It is expected that the 5 pages will have a common basic layout but small differences are allowed for example, for the web form page. Create a **separate wireframe diagram** for any page that partially modifies the layout (*this includes the form page which should detail the form requirements given above*).

These diagrams will be used as the blueprint to create the HTML pages.

You need two (2) versions of the page layouts (wireframes) to suit the layout of at least two (2) devices, for example a PC/laptop screen and a mobile phone screen.

- 1.9 Access the style guide provided and **document** the typography, iconography and colour scheme for each elements/section outlined in the wireframe diagram. *You can use the style guide as an example of how to document this information.*



Note

This information will form the basis for the styling of your site so you should refer to this as you are developing your website

Task 4. Create HTML 5 page layout sections

- 1.10 HTML5 has been selected as the most appropriate markup language for the task. Create the pages as per your wireframe structures (*you should include images within your content as appropriate*) and making sure that you:
- Use semantic elements only for the layout structure
 - Use ID and CLASS elements as required when no semantic element exists for the function
 - Create the menu with *HREF* elements that target the appropriate pages
 - Ensure that pages are correctly linked
 - Correct indentation of HTML code

PART 2 – Creating the external CSS file to format the site layout and appearance

- 2.1 Create a single external CSS file and save it in the CSS folder. This file will provide the common formatting features for the five (5) pages.
- 2.2 Create the necessary CSS rules to produce the required format and appearance:
- Flex and/or Grid model and @media queries to achieve responsiveness
 - Layout should be in flow. No position: absolute (*position: fixed mobile view allowed*)
 - Layout style on user-defined classes
 - Common CSS for site pages – external CSS
 - One common menu using list items li elements (*included in every page via CSS or code*)
 - One common footer (*included in every page via CSS or code*)
 - Demonstrated use of:
 - two (2) types of CSS combinator; and
 - three (3) pseudo-classes
 - Text styles consistently applied for headings, paragraph, and figcaption as per style guide
 - Form CSS:
 - Use grid layout and @media query to remove one of the input fields on mobile devices

- Use @media query rules to remove the form labels in mobile view and set the form width to 100%
- Use four (4) form-specific pseudo-classes to aide in user input functionality
- Use ::before or ::after pseudo-element to denote fields with required attribute
- Ensure the user is aware of erroneous input as they are inputting text into your form
- Use an absolutely positioned icon inside each relatively positioned text ::after
- Create a 'help' link that overlays an absolute or fixed position video element (A popup window) when the user hovers over the link. *Note this will be functional on desktop version only.*

Ensure that the layout is consistent with the wireframes prepared/refined in Task 3 -1.8.

PART 3 – Test, debug and validate web page

- 3.1 Test the webpage design and functionality to confirm that it has been developed according to the client's requirements and the layout design. You should add the relevant client and design requirements (including your styling requirements from Task 1.9) to the **UptownIT Functionality Test Report Template** (available for download in the Course Hub) and complete this document.



Tip

For Task 3.1 you should review the client/site requirements:

design requirements, wireframe layouts, styling requirements (refer to your style guide), page layout etc

and add these to the test report and use these as the basis for your testing to ensure you have met the requirements.

- 3.2 Use browser developer tools to debug page design and functionality as required until it meets the client's requirements. Check with your manager (teacher/assessor) to confirm requirements, as required. You should add the relevant functionality tests to the **UptownIT Functionality Test Report Template** and complete this document.




Tip

For Task 3.2 you should review the functional requirements for the site:

section links, page display, validation, browser/device and accessibility

and add these to the test report and use these as the basis for your testing.

- 3.3 For each page, validate the HTML and CSS using the W3C Markup Validation Service. Provide screenshots of your validation. You should correct any errors in your code and revalidate until the code is error free and provide updated screenshots.
- 3.4 Test cross-browser compatibility. The test includes at least two (2) browsers and two (2) devices. Fix as necessary. Re-test. Provide screenshots as evidence.
- 3.5 Run Autoprefixer or similar tool to parse your CSS file and add vendor prefixes to your CSS. Fix as necessary. Re-test. Provide screenshots.
- 3.6 In order to confirm accessibility has been met at the required level, you can use Achecker or similar tool. The tool checks HTML elements (sections are also HTML elements) compliance with WCAG 2.1 on each page in the website. The tool outputs a comprehensive report that identifies errors, warnings and tips.

Your task is to run an accessibility checker tool on your completed website. Test for WCAG 2.1 Level-AA. Provide report or screenshot. However, if there are errors, fix them and provide a new report and screenshot. If some errors cannot be fixed, explain why this is the case. For example, it may require assistive technology that you don't have access to. Once all errors are fixed you can add the WCAG 2.1 compliance logo to your website. 

- 3.7 There are areas of concern in terms of cyber security for this project. Recommend and outline at least 1 cyber-security measure that the client should adopt to avoid or reduce cyber security attacks for each of the following areas:
- Authentication process
 - Programmatically engineered solutions to avoid cyber-attacks
 - Internet protocols
- 3.8 Attend a meeting with your manager seeking confirmation of project completion. *For this component you can conduct the meeting with a family member, friend, another student or work colleague.* To complete this you should:
- Create a video recording of the meeting. This can be a screen capture of the site demonstration with your audio presentation.
 - You should give a brief overview of the project requirements
 - You should describe how you have met the project requirements and gather confirmation from your participant/s asking appropriate questions
 - The recording should be between 5 - 10 minutes in length
 - You should include the recording in your submission.
 - Obtain sign off from the client representative.

PROJECT SIGNOFF	
Signing off on this document signifies that the client representative is satisfied with the completed project. The client acknowledges satisfaction and completion with all elements of the project.	
Client Representative Signature:	Developer Signature:
Date:	Date:
PROJECT NOT APPROVED	
Please provide feedback below and attach any relevant information to assist the project team in making the changes needed.	

End of Assessment

DELIVERABLES:

For this assessment item you need to complete the written sections in this document, then rename it to:

- **AT3_Written_Surname_Student Number**

For this assessment item you also need to complete the testing spreadsheet, then rename it to:

- **AT3_Functionality_Surname_Student Number**

Complete the website project and rename the site folder as:

- **AT3_Website_Surname_Student Number**

Create a folder:

- **ICTWEB519_520_AT3_Project_Surname_Student Number**

Insert the three files you renamed above, ***and your meeting recording***, into this folder, compress it (e.g. with WinZip) and upload it to the Assignment Folder in Connect for ICTWEB519_520 Assessment 3 (AT3).