# Unit:
# Dynamic Websites

# Assignment title:
# Home Gym Equipment (HGE)

# 20 credit version

# Spring – Winter 2022

## Important notes

- Please refer to the *Assignment Presentation Requirements* for advice on how to set out your assignment. These can be found on the NCC Education website. Hover over 'About Us' on the main menu and then navigate to 'Policies and Procedures' then scroll to the 'Student Support' area.
- You **must** read the NCC Education document *Academic Misconduct Policy* and ensure that you acknowledge all the sources that you use in your work. These documents are available on the NCC Education website. Hover over 'About Us' on the main menu and then navigate to 'Policies and Procedures' then scroll to the 'Student Support' area.
- You **must** complete the *Statement and Confirmation of Own Work*. The form is available on the NCC Education website. Hover over 'About Us' on the main menu and then navigate to 'Policies and Procedures' then scroll to the 'Student Support' area.
- Please make a note of the recommended word count. You could lose marks if you write 10% more or less than this.
- You must submit a paper copy and digital copy (on disk or similarly acceptable medium). Media containing viruses, or media that cannot be run directly, will result in a fail grade being awarded for this assessment.
- All electronic media will be checked for plagiarism.

# Introduction

Home Gym Equipment (HGE) are a new business to the market and due to Covid-19 they are expanding their business to beyond the local community and are looking for an online e-commerce website to help them with this objective.

# Scenario

The Home Gym Equipment company have approached you and asked you to help them develop a website where they can share information on gym equipment that can be used at home including wearable technology. There will be a booking section on the website for new users to book one-to-one consultations (which can be offered face to face or online). The website should be visual and should be viewable on different devices.

HGE have the following basic requirements for the contents of the website which must be mobile friendly and include responsive image and text size:

- **Home Page:** This page will introduce visitors to the Home Gym Equipment company and it will include relevant images of different home gym equipment and at least TWO (2) video clips of TWO (2) featured products this month. A search bar should be included on a clean looking home page which includes interactive elements that grab the attention of the visitor.
  The page should include clean responsive design navigation across the site and include TWO (2) different web services.
  The web page should contain:
    - Minimal text and good use of visuals to break up the text
    - Cookie information
    - Interactive Navigation bar
    - Slide show
    - Header
    - Captcha verification
    - Number of views counter
    - You are here (page) – in the footer along with relevant copyright information and social media buttons
- **Information**: This page will provide pages of interest e.g. latest products, latest fitness information.
- **Wanted:** This page allows the customers to search the online database for second hand gym equipment that is available for sale. Customers will need to create an account to login to search the online database.
- **Workshop:** This page provides an overview of the services provided in the workshop and images of some of the repairs to home equipment that have been completed. It should be a responsive page which resizes.
- **Gallery**: This is a page of "our products" and provides a gallery of the different products that are currently for sale and should include an RSS feed.
- **Contact**: This is a contact form where customers can send messages through the website (it should have a link to privacy policy).
- **Featured**: This page provides a review of the most featured wearable technology. It should include images and text about the devices. It should have a section on the right side entitled "wearable technology categories" and should list at least THREE (3) different categories, link to payment plan and top THREE (3) featured products.

At the initial stage of the development process, you are required to make an HTML/CSS prototype of the website that will clearly show HGE how the final website could work.

Content hasn't been provided. Suitable content can be found on the web e.g. images of plastic pollution in the oceans. Use creative commons (http://search.creativecommons.org/) or Wikimedia Commons (http://commons.wikimedia.org/wiki/Main_Page) as a starting point to find content. Remember the content you include in your site must be licensed for re-use. Do not spend excessive amounts of time researching and gathering content. The purpose is to provide a clear indication of how the final website could look and function. The client would provide the actual content at a later point if they are happy with the website you have proposed.

Students must not use templates that they have not designed or created in the website assessment. This includes website building applications, free HTML5 website templates, or any software that is available to them to help with the assessment. Students must create their own HTML pages including CSS files using notepad or a similar text editor.

## Aim

The aim is to create a website for HGE.

## Task 1 Site Map and HTML (25 Marks)

The website must be developed using HTML 5 **and** feature a minimum of SEVEN (7) interlinked pages specified above which can be viewed on a mobile device.

A web enabled application needs to be created to allow users to create, query, browse **and** manipulate the database **and** allow the user to create **and** delete records they are currently browsing.

The website must feature the content described above **and** meet the following criteria:
- Feature between SEVEN (7) HTML pages.
- Be usable in at least TWO (2) different web browsers including a mobile device. You should consult your tutor for guidance on the specific browsers and versions you should use.
- Responsive image and text sizes.
- A search bar.
- Cookie information.
- Slide show.
- Interactive Navigation bar.
- Header (eg logo, call to action, text or navigational elements).
- Number of views counter.
- Footer which includes – you are here, copyright information and social media buttons.
- Relevant text and images across all pages.
- Online responsive contact form to submit enquiries about the second hand products which will be stored in online database (requiring login and password).
- RSS feed.

- Contact us form (including privacy policy).
- Side section to featured page entitled "wearable technology categories".
- TWO (2) different web services.

## Task 2 – CSS (15 Marks)

Create an external CSS file that specifies the design for the website. Each of the HTML pages must link to this CSS file. There should be no use of the style attribute **or** the <style> element in the website.

## Task 3 – Database and Website (10 Marks)

A database will need to be created to allow visitors to create their own personal account. The system will store personal details of each visitor, their first name, surname and their email address. The database should be able to store the details and be searched to find the latest second hand gym equipment. The user should receive a prompt if the username does not appear in the database or login fails after THREE (3) attempts where the system should be locked for TEN (10) minutes.

## Task 4 – Critical Evaluation (40 Marks)

You are required to write a short report of 1000 words, analysing the website you have submitted.

You should:

- Start your report with an introduction and explanation of at least TWO (2) web applications and their functions. Appraise the potential benefits to HGE of these web services and how they add functionality to the website.
- Describe how you have used HTML to develop your website.
- Describe how you have used CSS to standardise your developed website.
- Evaluate the HGE website which utilises web services and how effectively it meets the objectives in the scenario.

## Task 5 – Reflection (10 Marks)

Using the Rolfe, G., Freshwater, D. and Jasper, M. (2001) model, critically review the learning that you have undertaken in order to complete this assignment.

Based upon your learning, your reflection should include a description; an analysis; and an action plan in order to bring about improvements in the future.

# Submission requirements

- For each task you should present the necessary code and screen dumps in a word-processed document.
- All references and citations must use the Harvard Style.

# Candidate checklist

Please use the following checklist to ensure that your work is ready for submission.

Have you read the NCC Education document *Academic Misconduct Policy* and ensured that you have acknowledged all the sources that you have used in your work? ❑

Have you completed the *Statement and Confirmation of Own Work* form and attached it to your assignment? **You must do this.** ❑

Have you ensured that your work has not gone over or under the recommended word count by more than 10%? ❑

Have you ensured that your work does not contain viruses and can be run directly? ❑