CODING FOR VETERANS
CAPSTONE PROJECT:

Report Outlining Development of:
Fitness Freelancer Website

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Submitted: 9 October 2025

Contents

What does this project offer?

Purpose

The purpose of this project was to create the Fitness Freelancer website. This website will be used by the business that the author plans to start with his partner to sell copy to small gym owners.

Goals

The goals of this project and website were to:
- sell Business to Business copy (advertisements, added contented, tips, emails, promotions) to small private gyms;
- provide a means to attract customers;
- gather feedback from users; and
- communicate with clients.

Synopsis

Annex B provides an overview of how the website is constructed. The pages that the public can access are:

1. Home: This is the landing page for the website that contains basic information about the business.

2. Contact Us: This page allows the user to either use the information in the "Reach Us" column to directly call or email the business or the user can send a request to be contacted.

3. About Us: This page explains why the business-to-business copy being sold will be valuable to the small gym owner and it also contains a FAQ section.

4. Services: This page provides a detailed explanation of the services available and the costs.

5. Book a Call: This page allows the user to send a request to book a call to ideally set-up an account. This page also makes use of the "off the shelf" Calendly.com inline widget to allow the user to find a time when a business representative is available.

To access the pages below, the user needs to sign in through the Login page. Once logged in, the following pages are available:

1. Content: This page contains hyperlinks (using Google Drive) to allow the user to download the paid content (business-to-business copy).

2. How are we doing?: This page allows the user to send feedback to the business.

All these .php and .html programs are contained on GitHub at:

https://github.com/trevordavies1973-gif/FitnessFreelancer

and the code to build the mySQL database is at the above link under the folder called "Reports." Also, in the folder called "Reports" is a file called "Start Here." This document explains how to set up the website on another computer.

In addition, A video walk through of this website is provided at: https://youtu.be/MvxGjfskhIc

Wireframe Diagram and Planning Documents

Documentation

Annex A contains the project proposal (planning document) along with the initial wireframe document. This proposal was accepted by my instructor (Cameron Thain) on 11 August 2025. Annex B contains the wireframe document after the project was completed.

Project Plan

Annex C contains a project plan that was used to help guide the construction and acceptance of the website. Specifically, it outlines:

1. What component needs to be built and in what order;
2. Subtasks for each component;
3. Acceptance Criteria for each component; and
4. Acceptance Criteria for the whole project.

Did the project adhere to the initial design?

Overall, the project did adhere to the initial design shown in Annex A. However, if you compare this initial wire frame diagram with the one contained in Annex B, some aspects of the website were changed. The three changes were:

- The original admin webpage was removed. It was found that it was easier to make the changes directly in the mySQL GUI.

- It was also decided to merge the Annual Plan and the Premium Plan into one basic service. This service would allow the user to access all the paid content under the "[user's name] Fitness Content" webpage. The reason for this is it would be easier to administer and program. There would still be a custom option, but this would be done outside the website (direct client to business interaction).

Technology Stack and Rationale

The stack that was used for this project was HTML for the presentation, PHP for the programming and mySQL for the database. The major reason for this choice was that the programmer had direct experience using these programs during his course work. Also, the chosen stack suited the nature of this website: present/receive information (html) and have it stored/retrieved from mySQL while using the PHP programming.

Is this project up to industry standards?

Testing Methods

Testing was done by simulating the environment where the website will be used (basic desktop computer with access of the internet). This was accomplished using the Ampss software. My business partner was also continually involved at each component step to ensure the website responds to his needs. I also used my spouse as a "client" to get his feedback and see how he interacted with the website for each component. By doing so, an iterative style of testing was employed.

The above testing was done after the completion of each component of the project (outlined in Annex C) to meet that component's "Acceptance Criteria."

After the project was completed, the "Acceptance Criteria for the Project" (outlined in Annex C was used). The overall result was that the website met all the induvial component acceptance criteria and all the goals of the overall project (see above).

Security

The FILTER_SANTIZE_SPECIAL_CHARS command was used to sanitize the input preventing it from being interpreted as HTML or MYSQL code thereby reducing the likelihood of HTML injection and cross-site scripting cyber attacks.

Since the plan is to use this website as a business platform, it would be prudent to have someone with a cyber security specialization to look over my work (as my speciality is in programming).

Challenges Faced

The main challenges that were faced during this project were:

1. <u>Finding undisturbed quiet time</u>. Since I am part of a busy family, it was difficult to find time when things were quiet in the house which I need to effectively program.

2. <u>Retaining programming skills</u>. There were skills I had learnt during my course work that I had already forgotten when I needed them for this project. Also, I found that if I left my programming work for a few days, it was difficult to start where I left off.

3. <u>Learning how to integrate HTML, PHP and MYSQL</u>. I found it challenging to get the three languages to work together. I spent a lot of time testing and experimenting to get them to mesh. I expect with more practice, this task will be easier.

Lessons Learned

The main lessons learned during this project were:

1. I enjoy the challenges of programming. I will continue to work on this project so I can launch this business with my partner. Also, I will start programming video games as hobby.

2. I learned the importance of being able to use and weave different products together (ie. HTML/PHP/MYSQL, Google Drive, Calendly.com). Before starting this project, I was under the impression that a programmer chose one language and specialized in it.

Future Recommendations

Before officially launching this website, there are few things that should be improved. Specifically,

1. <u>Appearance of the webpage</u>. The idea is to use Wiks (or a similar product) to format the webpages and then insert this Wiks html code into my program to improve its appearance.

2. <u>Add an off the shelf credit card payment method.</u> Calendly.com was used successfully in this website. Similarly, an off-the-shelf credit card addition would ensure that the highest level of security is used when dealing with customers' credit card information.

3. <u>Add more content</u>. For example, videos introducing the business, a Frequently Asked Questions section and testimonials.

Annex A: Project Proposal and Initial Wire Frame Diagram

<u>Project Proposal for Capstone Project</u>
For Trevor Davies
11 August 2025

My proposal is to create a website for a business I plan to start with a partner. This website will sell Business to Business copy (advertisements, added contented, tips, emails, promotions) to small private gyms. The Wireframe Diagram outline for this project is found in Figure 1. Figure 1 will replace "Project Outline" and "Must Haves" contained in the course instructions. My final product will adhere to the "Project Submission" requirements contained in the course instructions.

The benefit of this proposal is that I will be working on a project I intend to implement. Therefore, it will provide me with motivation and interest to create a secure, useful and orderly website.

Below are how this project addresses the key points you stressed in your 21 Mar 2025 Direct Message to me in the C4V Slack.

1. *What does this project offer, or what service does it provide?*

See first paragraph above.

2. *Is it secure?*

The project will ensure the that input validation is respected to reduce the chances of a cyber infiltration/attack.

3. *Did the project adhere to your initial design and follow your documentation?*

I will start with an initial design of the website (see attached wire frame diagram). I will then use an iterative process (seeking feedback from my partner) as the project progresses. I will keep notes indicating any design changes.

4. *Is this project up to industry standards?*

The plan is to have this project close industry standards as I plan to use it for our company after some polishing and extra help where needed.

Wellness Promotions Webpage
Wire Frame Diagram

Home

Logo   Wellness Promotions   *Social Media*

Home   About Us   Contact Us   Login

Graphics & text welcoming and selling product.

When you are ready to take the next step to better promote your gym...

Gym Name :   Contact Name:
Phone Number: OR Email:
SUBMIT

About Us

Logo   Wellness Promotions   *Social Media*

Home   About Us   Contact Us   Login

Texts and graphics showcasing company's team to include:
Who we are?
What we do?
Why we do it?
Testimonials ?

Contact Us

Logo   Wellness Promotions   *Social Media*

Home   About Us   Contact Us   Login

You can send us a message

Gym Name :   Contact Name:
Email:
Message:
SUBMIT

or contact us at (xxx) xxx -xxxx.

Login

Logo   Wellness Promotions   *Social Media*

Home   About Us   Contact Us   Login

Already a member, please enter your information below
Username:
Password:
SUBMIT

If you've forgotten your password, please Contact Us.

And if you are interested in becoming a member, send us your contact information at Home.

Year Plan

Accessible by: Account Type – admin
Membership Plan – Year and Premium

Logo   Wellness Promotions   *Social Media*

Home   About Us   Contact Us   Logout

Year Plan   Premium Plan   Admin

List of gym promotion copy for each month of the year. Enjoy!

Hyperlinks to download PDF docs.

If you have any feedback so we can improve the product for you, please Contact Us.

Premium Plan

Accessible by: Account Type – admin
Membership Plan – Premium

Logo   Wellness Promotions   *Social Media*

Home   About Us   Contact Us   Logout

Year Plan   Premium Plan   Admin

List of PREMIUM gym promotion copy . Enjoy!

Hyperlinks to download PDF docs.

If you have any feedback so we can improve the product for you, please Contact Us.

Admin

Accessible by: Account Type - admin

Logo   Wellness Promotions   *Social Media*

Home   About Us   Contact Us   Logout

Year Plan   Premium Plan   Admin

NEW CLIENT
Gym Name: Member Since:
Contact Name: Account Type (admin or client):
Email: Membership Plan (Year or Premium):
Password: Username:
SUBMIT
RESET PASSWORD (don't forget to email new password)
Username: New Password:
SUBMIT
DELETE USER
Username:
SUBMIT
CHANGE MEMBERSHIP PLAN
Username: Membership Plan (year or Premium)
SUBMIT
LIST OF ALL USERS WITH THEIR DATA
AS A FILE   ON SCREEN

Notes:
1. Social Media will not be active yet. Included to save the space.
2. Underlined text indicates a link.
3. *Italics* indicates a description of what will be added.
4. Plain text is what will be shown on page.
5. The top four pages, anyone from the public will be able to enter.
6. The bottom three pages, youmus log in. The Year Plan / Premium Plan / Admin plan navigation bar will be adjusted depending on Account Type and Membership Plan.

Revised: 5 Apr 2025

Figure 1: Wireframe Diagram for my project.

Annex B: Final Wire Frame Diagram

Fitness Freelancer Webpage
FINAL Wire Frame Diagram

Must be logged in to access these two pages.

Home Services Book a Call — Fitness Freelancer — Login

Home

*Video (not yet made) and
Basic Information about Company*

Fitness Freelancer
About Us Contact Us

Home Services Book a Call — Fitness Freelancer — Login

About Us

*Who we are?
What we do?
Why we do it?
FAQ*

Fitness Freelancer
About Us Contact Us

Home Services Book a Call — Fitness Freelancer — Login

Login

*User enters Email and Password to login.

Also link to Contact Us (lost password) and
Book a Call (need an account)*

Fitness Freelancer
About Us Contact Us

Content Survey — Fitness Freelancer — Logout

[User's Name] Fitness Content

*List of paid content.
Hyperlinks link to PDF's stored in Google drive.*

Fitness Freelancer
About Us Contact Us

Home Services Book a Call — Fitness Freelancer — Login

Contact Us

*Send your Request:
Name, Email, Phone Number, Subject, Message

Reach Us:
Our email and phone #.*

Fitness Freelancer
About Us Contact Us

Home Services Book a Call — Fitness Freelancer — Login

Services

*Type of Memberships.
Will be completed (including adding hyperlinks) after
Business plan completed.*

Fitness Freelancer
About Us Contact Us

Home Services Book a Call — Fitness Freelancer — Login

Book A Call

*User Enters:
-First Name
-Last Name
-Email
-Organization

Then use Calendy to book a time/date.*

Fitness Freelancer
About Us Contact Us

Content Survey — Fitness Freelancer — Logout

How are we Doing?

*User Enters:
-rating of service using drop down menu
-extra comments*

Fitness Freelancer
About Us Contact Us

Notes:
1. Underlined text indicates a link.
2. *Italics* indicates a description of what will be added.
3. Plain text is what will be shown on page.
4. The Home, About Us, Login, Contact Us, Services and Book A Call - anyone from the public will be able to enter.
5. The How are we Doing? and [user's Name] Fitness Content pages - you must log in.

Annex C: Project Plan

Order	Component	Component Sub Tasks	Acceptance Criteria
1	Website Wire Diagaram	-Create Website Wire Diagaram (initial one contained in Annex A) -Work with partner to envison what functions the website should have and how each page should look -submit Website Wire Diagaram to course instructor to get approval to start custom project (see Annex A)	-Approval from instructor -Agreement from partner
2	Setup MySQL Database	-Create all tables -Create a list of all mysql commands used to set up database	-able to manually enter all required date into database
3	Create Home Page	-create the .css file for the website -create the basic headers and footers for website -add basic information into page	-can use Ampps to successfully run the .php and .hml docs to bring up the home page
4	Create Services & About Us Pages	-create Services webpage -create About Us webpage	-can use Ampps to successfully run the .php and .hml docs to bring up the two webpages
5	Create the Book A Call Page & Contact Us Page	-create the connect.php program to be able to pass information between mysql and html -create the two webpages	-can use Ampps to successfully enter informaton on the page and have it stored in the mysql database while ensuring security is maintained and the user is prompted if bad data is entered
6	Create Login page	-develop a method to have the user's login credentials checked -create the webpage	-can use Ampps to successfully log in to the website -prevent unauthorized use and enforce security of data being entered -user is promoted when bad data is entered
7	Create Content page	-create the basic Google Drive documents and hyperlinks -create the special header when users are logged in	-ensure only individuals logged in can access this page -use Ampps to successfully display page when user is logged in
8	Create How are we Doing page	-ensure the connect.php program works on this page to pass information between mysqp and html -create the webpage	-can use Ampps to successfully enter informaton on the page and have it stored in the mysql database while ensuring security is maintained and the user is prompted if bad data is entered
9	Logout Button	-create the button on the header -once button is clicked, log user out and return them to the home page	-the button does as planned and the session is ended (unable to access protected pages)

Acceptance Criteria for the Project:

For the entire project, I used a person that was not involved in the testing of the components. I then had them interact with the website as I gave them tasks to complete. This tasks were derived from the Acceptance Criteria for each componenet (see above) and from the "Goals" of the project outlined in the project report.

How this Acceptance Criteria for each component will be tested:

See "Testing Methods" in the project report.