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Fitness Bros: Exercise, Nutrition, and Lifestyle

Website Link and Usage:

Link: <http://csci491-01.cs.montana.edu/~w17m848/fitnessWebsite/>

Usage Instructions: To visit our website at this link you must either be on MSU secure or use the MSU VPN.

Objective:

The overall goal of this project was to learn new languages, frameworks, and a new stack. What gave us the incentive was our determination to implement these tools with something we are passionate about which is maintaining a healthy lifestyle with relative ease. The problem with most websites and applications is that it is hard to utilize and maneuver for the users own personal use. Whether it be ads, information being too abstract, or the website itself being too misleading. We were able to overcome this by implementing an easy on the eyes website with simple access by creating a username, password, and some personal attributes to help get a better scope on what the user is actually looking for. Although the ultimate problem has not been fully developed we are continually putting in continuous integration and in the near future have the option to create your own workouts that can be downloaded as a pdf at your disposal.

Summary:

The way this website works has been stated in the objective a little bit, but here we will go more into depth on what makes this website/full-stack so unique. At a high level we are using the LAMP stack which stands for Linux, Ajax, MySQL, and Php. We

decided to use this stack due to the exposure we had in class and it was something none of us have ever used and felt like it was a great starting point to learn a complete stack. On top of this we also have HTML, CSS (Bootstrap implementation), and Javascript to make the User Interface more appealing to the eyes while having a sense of professionalism. When initially going to our website you will be sent to our index page that explains at a high-level what we offer to the consumer with a sleek slideshow. From here you can maneuver to a multitude of links that can help you get a better understanding of what the website is all about and even a page called “Meet the Developers” to get to know a little bit about us and why we are doing this. From here you can also signup and login. To have access to the bulk of what the website offers you must be signed up and logged in. Some of the options entail creating your own personal workouts and blogs that pertain specifically to you as the user.

Member Pages

- **Christian:**
 - Christian’s contribution was getting the website started with Trello and setting up certain goals that the group needed to meet so the website deadlines could be met. On top of this he also implemented bootstrap into the website so make it more seamless and appealing. He worked primarily on the index.php and signup.php. With the singup.php file he has been working on adding more forms that the user must enter to get a better understanding of who they are and what their goals are. For example, what type of exercise is the user looking for, weight, height, and whether they are looking for a nutritional option such as understanding certain diets and proper foods to eat. An ongoing issue that he has been working on is implementing different attributes in the table such as INTEGER without any errors popping up. What he will be working before the end of the semester is created a layered permission option where you have regular users and system administrators. The system administrators will be the ones to have the option to add a blog and additional permissions to the website itself.
- **Zac:**
 - Zac’s main contribution was the Developers page. The page consists of pictures of all the members and a description about each member. The developers page was a fun addition to the page giving credit to our team. The page uses a majority of bootstrap with this helps with the formatting while the web page is shrinking and stretching. With these functions it allows the web page

to be more mobile friendly. As well as working on this page Zac also worked on random small additions to the website to help it become more of a well rounded one. One fun feature with the developers page was the link through the footer and also the slideshow on the index.php page. These were set up with the help of Nayte.

- **Michael:**

- Michael's contribution was mainly to create a multiple layered security blog forums page. The page consists of linked attributes to your personal account. Functions included on the page are for the user to create their own blog post, edit, delete as well as comment on other users blog posts. The forum also consists of an admin panel for specific users to be able to modify the blog with special admin commands that allow them to delete users posts and ban them if necessary. He also put in a banned words implementation that would not allow people to use vulgar language included in their posts. What he will be working on till the end of the semester will be making sure that the website is fully secured in the sense that people will not be able to commit malicious activity towards other users, finishing/polishing the forums, and etc.

- **Nayte:**

- Nayte's main task was the About page. He was tasked with making an inspirational and accurate page that showed off our utilization of bootstrap. The about page showcases the mobile first programming with dynamic shrinking and growing of elements with the page. Nayte decided to work with Bootstrap's dynamic image classes to make the page more user/mobile friendly. The pages content was also managed by Nayte. He went out and found fake before and after pictures for each group member. He also came up with motivational and inspirational filler that represented our goal. The CSS for classes and ids also had to be managed by Nayte while he built his page. He also embedded the logo and developers images with links that would take you to their respective pages. Nayte's other task was to maintain the hosting of the website. He decided to host the website on his student server that was originally set up for the LAMP stack project.

Conclusion:

One of the most useful takeaways we got from this project was the idea of the “mobile-first” web programming strategy. We utilized the bootstrap library in our html to make our website look good on both desktops and mobile devices. With the rise of mobile web programming we decided that it was of utmost importance that a fitness website be easily accessible on mobile devices. Programming our website to work on mobile was not only increased accessibility but also taught us valuable skills.

Another important takeaway we learned through the programming of our website was how to integrate the task management system, “Trello” into our design process. As task management systems such as Trello and Kanbanize are becoming almost an industry standard we felt it was important to utilize one ourselves. Our utilization of Trello should proved to be useful for holding each other accountable and making sure deadlines were meant.

Our initial plan was to learn and use react to make our website user friendly and interactive. We quickly learned that it wasn't as simple as just learning an extension of a language. In order to fully utilize react we would all need to learn and use a completely new stack. We all spent a week trying to incorporate react into our website and after a lot of issues we decided, in order to reach our goal we needed to turn back the page. We then went back to the LAMP stack and determined that learning the more lightweight library, Bootstrap, could accomplish our goal with ease.

If we were to do this project again something we would do differently would be, use react with AWS for cloud services. With the knowledge we all now have on react if the time was reset we are confident we could utilize it. Although our Bootstrap implementation worked well we believe React could have done the job smoother and cleaner. Along with AWS it is a great tool for hosting and scaling. Many companies use AWS for a lot of their functionality and it would have been a good opportunity to learn AWS if we were permitted with more time to complete this project.

References

Otto, Mark, and Jacob Thornton. "Bootstrap." · *The Most Popular HTML, CSS, and JS Library in the World.*, getbootstrap.com/.

Potter, J. "What Is a LAMP Stack?" *Liquid Web*, 30 Jan. 2019, www.liquidweb.com/kb/what-is-a-lamp-stack/.

Schwarz Müller, Maximilian. "React 16: The Complete Course (Incl. React Router 4 & Redux)." *Udemy*, Udemy, 5 Nov. 2019, www.udemy.com/course/react-the-complete-guide-incl-redux/.

Siteground. "What Is MySQL Tutorial." *Website Tutorials - Find Out How to Use the Most Popular Web Apps*, www.siteground.com/tutorials/php-mysql/mysql/.

Spolsky, Joel. "Trello." *Trello*, trello.com/.