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HOLISTIC FIT (Designing an Integrated Framework for Sustainable Fitness and Health)

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Abstract: ***The The digital revolution has now made fitness and health necessary for anyone looking to live a healthy, active lifestyle. With the advancement of fitness trackers and tech-savvy solutions, people now have serious tools to manage their health. This research paper presents a developed fitness tracker site created using HTML, CSS, JavaScript, React, and database management systems. This is an innovative site built for the user, allowing individuals to create their own fitness goals, and have increased access to personalized exercises, supporting materials, and recommendations. With interactive interfaces and real time data input capabilities, the site provides users an effective way track their achievements, engage professionals and keep motivation throughout their fitness journey. The main features of the site consist of user registration, user goal creation, exercise recommendations, and the main home page containing fitness material. This paper presents the frontend and backend technology and highlights key issues with user experience design, data integrity and data dynamicity within the site. It discusses a practical way for users to utilize the fitness tracker in daily life, while highlighting the ability to enhance user engagement through providing accurate fitness information and personalized options for healthier lifestyles. Overall, our findings showed how fitness tracking has launched users to stimulate self motivation towards their fitness goals. This site uses state-of-the-art technology along with personalized fitness options, signifying a milestone towards step change in***

Keywords: Introduction, Literature Review, Methodology, System Overview, Analysis, Conclusion, Acknowledgements, References.

I. INTRODUCTION

In the past, a large part of the Indian population did not place an emphasis on fitness. Historically it has been only people of wealth, celebrities and athletes, who took fitness seriously. However, this public interest in fitness has grown considerably over time, with people now putting overall fitness activities ahead of many other things in their lives. The rise of the internet has allowed for a rapid increase in the spread of fitness education. People are now starting to realize the importance of fitness in their lives and are more aware of their physical fitness. This is evidenced by the increase in the number of health and fitness websites. A lot of people, especially individuals that are new to fitness, are looking for one place where they can learn about working out, nutrition and fitness education. There are loads of sites that supply needed information; however, users find it challenging to use. The majority of the sites focus on only one topic or aspect of fitness; some sites focus on calculations or nutrition alone; other sites focus on workouts solely. Therefore users often migrate from one site to another to meet their needs. In addition, most of these sites are specifically designed for western people. The aim is to create a single comprehensive website covering all fitness aspects, with workouts, yoga, cardio, fitness tools, information for muscles and body.

A. Exercise

Until recently, a large portion of the Indian population did not have fitness as a high priority. Historically, only the wealthy, celebrities, and athletes had any inclination to take fitness seriously. Over the past decade or so, the public response to fitness has been mounting. Individuals are starting to place fitness above many other areas of their lives. The in-depth educational resources provided by the internet have accelerated growth in the direction of fitness. People are beginning to understand fitness as an essential part their lives, consequently leading to a sharp increase in health and fitness websites. Many people, and especially newcomers to fitness, are looking for a website that can help them learn about workouts, nutrition, fitness, etc. Many websites do provide this information, but they are challenging to navigate. Most websites historically have focused on particular topic areas; many have only calculations or reliable nutritional information, while others focus only on workouts. Therefore, people often need to change sites to accommodate their needs based on all the diverse requirements. Most of the websites out there are primarily set up for a Western audience. The goal is to create a name that encompasses all aspects of fitness including: workouts, yoga, cardio, fitness tools, muscle/body information; looking forward to working with others who would like to feedback about requiring a service that helps aggregating such fitness information in a culturally relevant website!

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B. Food/Nutrition

Nutrition is a field with a huge gap in skills with respect to knowledge. According to a 2017 Indian Market Research Office survey, 84% and 65%, respectively, were protein deficient and therefore did not meet the recommended protein requirements (those are for Indian nonvegetarians). It indicates a huge segment of the population is not aware of nutritional knowledge at all, creating future, continuing health challenges in the future. Almost 73% of Indian women believe protein comes from fruits while about 70% of urban Indians believe protein comes from green vegetables. Knowing how to design a good diet is and a skill and reduces nearly 50% of health issues. Therefore, it is a service if your website could provide many meals for many types of situations (i.e., muscle, fat loss, sports goals, etc.). It is also a database that enables people to search through very useful food information as well. Furthermore, a lot of people are looking for no-fuss, healthy recipes and products.

Statistic	Percentage
Indians missing protein (general)	84%
Indian non-vegetarians with protein deficiency	65%
Women who think fruit is a protein source	73%
Urban Indians who think green vegetables are a protein source	70%



Here is the bar graph that visualizes the protein deficiency and nutrition awareness data in India. The graph shows the percentage of people in each category based on the data provided.

C. Development of Web Pages

It is very important to create web pages that enhance the experience for users since they receive their first impression from the user interface. Despite utilizing static pages and simple data displays in many places on a website, the overall design still matters. When choosing a good technology for the frontend, we have a great advantage of ease-of-use, speed, and flexibility. For our project we use the ReactJS front-end library that JavaScript created. ReactJS speeds up development by allowing the use of components, which are simple reusable blocks of code, and makes it easier to develop responsive and dynamic user interfaces. React allows updates to show on the page without refreshing the whole page, improving user experience and performance.

II. LITERATURE REVIEW

A. Evaluation of the choose health: food, fun, and fitness 3rd- to 6th-grade curriculum: changes in obesity-related behaviors

In In 2021, Wendy S. Wolfe conducted a term paper on the case of "Select Wellbeing: Nourishment, Fun, and Fitness" project targeting third through sixth grade students, using experiential learning modalities and meal planning to explore obesity behaviours in youth. A quasi-experimental design with a delayed intervention was used. The final analysis resulted in 561 youth participants, 58% Caucasian, 25% African American, and the other 17% were of other ethnic backgrounds. All four diet intake scores improved with CHFFF when compared to that same group's control time. Furthermore, multi-item diet scores improved significantly when those same participants received the CHFFF intervention. The study has provided information on youth obesity behaviors.

B. Fitness Applications for Home-based Training

Iman In 2016, Iman Khaghani Far, Svetlana Nikitina, and Macros Baez conducted a review of home-based training fitness apps. The review examined the plethora of fitness apps in many app stores. The review found ample opportunities for the development of apps that include features supporting home-based training. They noted that the use of virtual coaching in lieu of human trainers was used only by a minority of apps.

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The review also indicated that most apps were specific to home fitness training. Their findings noted that home fitness space consisted of a variety of new concepts and apps offering a variety of different techniques and methods. Generally, the solutions available tend to be more for the masses, while apps are few and far between for expert practitioners. Advanced fitness solutions are to be found by a limited number of apps. Advanced fitness solutions are offered by a limited number of apps.

C. Digital Health Technologies and Behavior Change

Personalized fitness apps have recently become extremely important tools for developing and maintaining healthy habits, as Johnson et al. (2021) eloquently state. Their article details the significant potential of personalized and real-time feedback, personalized suggestions, and intuitive features toward moving users toward long-lasting engagement and commitment to wellness. Smith et al. (2019) also conducted an extensive review of gamification, specifically indicating that aspects like points, leaderboards, and competitions can increase user motivation and engagement in a health app. The intersection of technology and health is clearly enhancing a more healthy lifestyle for many people.

D. User Experience and Engagement

The usability studies from Lee et al. (2020) and Garcia et al. (2018) indicate that appropriate user interface design, accessibility, and visual progress tracking significantly engage user interest on online platforms. Effective user interface design creates a compelling avenue to engage with content for users, making their overall experience better. Accessibility allows all users, including people with disabilities, access to the platform thereby extending reach and impact.

Visual progress tracking is another relevant component; the awareness of the amount of progress that has taken place toward their path encourages users to continue the action. By presenting a visual representation of progress (which is easy to read), not only does a user see their accomplishment, but this can also encourage persistence and goal accomplishment. User experience is more than look and feel, it includes usability, emotional connection, personalization and motivation. By providing web-based physical activity trackers that engage these areas, the likelihood of user retention and long-term behavior change for health is enhanced.

III. METHODOLOGY

This report outlines the development of fitness trackers with defined methodology with aspects such as the data processing, validation testing, ethical issues and overall development process. Here we discuss the process of developing fitness trackers with a systematic methodology. Each of these aspects is critical in developing a fitness tracker that is robust and useful.

The methodology starts in the main aspect of the project, which is data processing. This consists of the systematic processing of data from the user's input- geometric shapes- to its storage and financial analysis later to extract useful fitness data that the user can use in their personal wellness journey. With an analysis of the data and data analytics, we can identify patterns and trends so users can make choices that manage their health and fitness better.

However, the validation testing is one of the important aspects of the development process. It is intended to demonstrate that the website is functional and user friendly under a range of conditions. The validation testing relates to three main components, they are functionality, performance and usability/learning. Validation testing is a key step in the development process as this is the stage that is used to finalize functionality and to review the performance and the user experience to ensure users have a coherent and natural experience. Our aim is to address any issues before launch and provide users with as much confidence as to the pathway they are on to explore and see if the functions are seamless..

Ethical considerations underlie the entire development framework. User data protection is a legal obligation as well as a basic element of trust between users and the platform. And while our definition of ethical practices includes transparency, informed consent, clear definition of data usage, and information practices. By setting these clear ethical standards, we are able to assure users that their personal data is used carefully and respectfully.

We implemented a Firebase backend architecture that utilizes data-storage capabilities and capabilities for sharing (on-cloud) that allows the user data to be available any time and any place, to offer an added utility to the platform for all users of the fitness tracker. Moreover, once we have everything set up in the Firebase database architecture, the users will always have a up-to-date view of their fitness status, whatever they might be doing, and live shared messages can be published through a Firebase implementation if they choose. In addition, the aesthetic and usability experience of our user interface is developed around beautiful simplicity. Our intention is to build a product that the end user will love to be loyal and to be satisfied with, by paying careful attention to the beauty of the aesthetic and simplicity of navigation; and, hopefully, to develop it in the iterative process of continually acquiring regular feedback from files users.

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We design our developments with the mindset that understanding the actual experiences and preferences of the users will help us to understand better the potential to satisfy their ongoing needs, while being cognizant to assess the potential utility of the features to our audience going forward.

This complete and systematic process will make the development of fitness tracker websites a holistic task that has development methodologies that value usability, privacy, and intervention methodologies. Ultimately, we want to make a product that will empower users to start on their fitness journey knowing they are doing so in an efficient and accountable manner. In doing so, we provide users with resources to become accountable for their health and well-being while on a supportive and trusted platform.

A. Data Preprocessing

Data processing is at the heart of this research as it allows tracking and assessment of user fitness efforts. The data is collected in the first instance by the user by entering inputs (workout types, length of workout, intensity of workout and daily activity history) using engaging and simple forms in the website. After collecting the inputs, various formats of data are stored in a safe and reliable Database Management System (DBMS) like Firebase or MongoDB, where immediate updates, safe storage and retrieval of data is done in real-time.

The information is then evaluated with the application of advanced algorithms and some basics of statistical analysis to monitor the users progress, identify patterns and provide them with useful feedback. The data processing system has integrated communication with the users to ensure accurate data collection, to improve user engagement, and to provide useful feedback, while user progress and activity is monitored at different times. Validation checks are regularly done to confirm that the data produced is correct and equals the input supplied or the data is encrypted for privacy purposes.

B. Development of the Fitness Tracker

The development of the fitness tracker website will be based on well-structured, staged processes that leverage modern web technologies and common development practices. The goal is to build a functionally and aesthetically pleasing site that is easy to use and responsive.

- Designing the front-end of the project will include using HTML5, CSS3, JavaScript, and the React framework to provide a visually appealing and interactive interface. Using modern web standard technologies allows users to easily navigate the site to set fitness goals, get recommendations for their workouts and track their fitness in real time. The design prioritizes clarity, responsiveness, and accessibility to enhance the overall user experience.
- Developing the back-end of the site uses powerful Database Management Systems (DBMS) like Firebase and MongoDB that streamline the storage, retrieval and synchronization of data simultaneously while allowing users of all fitness levels to exercise in a secure and scalable manner. Additionally, real-time data movement between the website and database will allow the user to see configurations to their fitness logs, goals and other related information in real-time.

A User Centered Design approach is implemented with constant feedback loops from users, constant testing and revising features based on usability and performance of the site, as it is developed. The User Centered Design process combines design thinking with agile methodology allowing for feedback from users to improve the project over features that are developed. This approach will comprehensively monitor each phase and the decisions that arise from user conversations, consultations and user testing. This approach enables flexibility to improve and iterate throughout the development cycle with a variety of user types from novice users to experienced fitness users. This method not only enhances the website's functionality but also ensures long-term reliability, flexibility, and user satisfaction.

C. Validation and Testing

Validation testing is essential for verifying the accuracy, reliability and effectiveness of the fitness tracker website. Various testing procedures are employed to validate different aspects of the system. Functional Testing is used to verify each aspect of the website experience: user authentication; selection of goals; exercise recommendations; submission of data. Performance Testing is used to check how well the website performs from the users perspective: responsiveness and loading times, with consideration of multiple users.

Security Testing uses the appropriate security methods to explore weakness or things that could go wrong that could affect user data, safety and privacy.

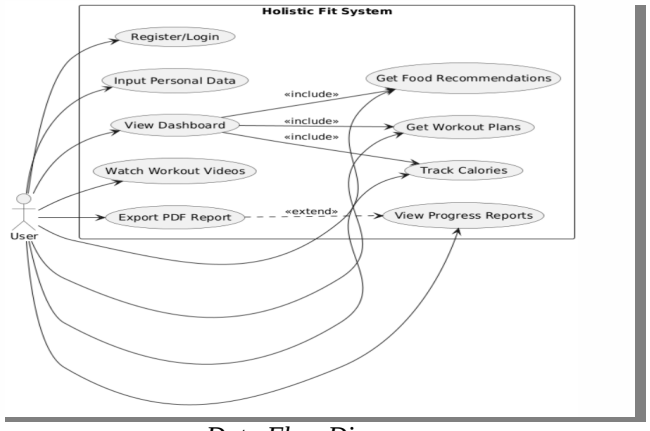
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D. Ethical Considerations

The ethical management of user information is an important consideration in the design of a fitness tracker website. Secure data protection and privacy measures are in place to protect any personal or activity-related information that is received from users. Any data that might identify users is anonymized wherever possible. Safe storage methods, including encryption and authenticated access controls, are followed to protect user confidentiality and data integrity.

In the case of data sharing (i.e., Disclose unless), the site adheres to data protection laws that apply to the data that is being exchanged, for example, the General Data Protection Regulation (GDPR), or other local laws, and an explicit process is used to inform when, what is being collected, how the data will be used, and who will have access. Consent is given through the transparent opt-in process prior to data collection and/or data processing.

The site adheres to principles of ethical and fair use of data with information utilized strictly for the purposes of analytics, research, and feature improvement, and never for unauthorized, commercial, or malicious purposes. The site also puts measures in place to ensure access to users to review, update, or delete information whenever the user wishes, which encourages transparency and control of personal data. This ethical model not only protects users' privacy but also facilitates trust building, which is critical to the long-term success and integrity of digital health platforms.



Data Flow Diagram

E. Code Editor

Visual Studio Code is an IDE developed by Microsoft that runs on Windows, Linux, and macOS. Some of VS Code's features include debugging support, syntax highlighting, intelligent code completion, snippets, code refactoring, and built-in Git. We chose to use VS Code as a code editor to build and improve this website because it is user friendly and has many features and keyboard shortcuts. Many of those extensions helped to improve. Additionally to the features mentioned above, it supported multiple programming languages, which made the development process smoother. Also, the live server extension was very useful as it allowed real-time preview while developing..

IV. ANALYSIS

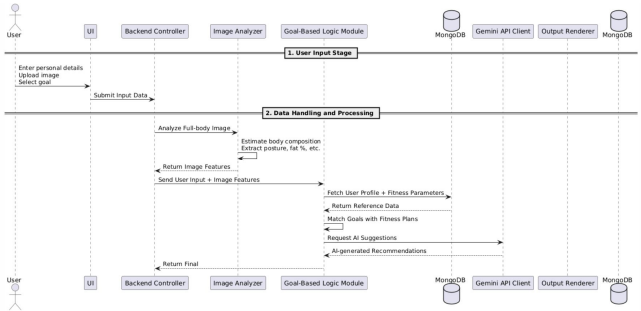
A significant barrier for individuals striving to improve their physical health and overall well-being is the lack of exercise resources and guidance. This study examines the challenge of restricted access to fitness materials, as well as the potential consequences it may have on people's ability to adopt and maintain a healthy lifestyle. The analysis aims to elucidate the ramifications of the absence of fitness systems and the challenges individuals face through a comprehensive review of the literature and discussion of relevant studies. The inquiry begins by investigating the impact of inadequate access to fitness resources. It assesses the repercussions on individuals' physical health, such as an increased likelihood of developing chronic diseases, a decline in fitness levels, and overall poor health. Furthermore, it delves into the psychological ramifications of exercise and fitness, including diminished self-efficacy, reduced motivation, and lower self-confidence. This investigation also considers the barriers and challenges faced by individuals in the absence of fitness programs. It takes into account factors such as the lack of tailored fitness routines, insufficient nutritional guidance, absence of accountability, and inadequate support systems. The research also addresses the challenges of maintaining self-motivation, adhering to fitness regimens, and tracking progress without the appropriate tools and guidance. This data further illustrates how different populations, including underserved communities, low-income individuals, and residents of rural areas, experience varying levels of access to fitness opportunities. It examines how these disparities exacerbate the issue and contribute to health inequalities.

After text editing is done, it is time to begin working with the template. To duplicate the template, use the Save As command, and name your paper using the convention prescribed by your conference. In the newly opened file, highlight all, and import all of your prepared text file. You are now ready to style, using the scroll down window on the left side of the MS Word Formatting toolbar.

V. CONCLUSION

This fitness system website reflects dedication to offering a holistic and effective platform for individuals wishing to enhance their fitness and quality of life. Through the integration of user-focused design, trackability mechanisms, social features, and protection of data, the site strives to offer an all-around and rewarding fitness experience The Overall, the fitness system website is a complete and readily available platform for users to set and obtain fitness objectives and commitments. The website has a variety of features and tools designed to enhance the experience of the user which will ultimately help them achieve successful fitness objectives.

During the development of the website, a variety of important components were considered for its success. First and foremost, the fitness system website put usability and ease of use at the top of their development list. The user interface is visually appealing, easily recognizable, and usable across several devices. Users can easily access numerous fitness-based tools, access their own profile, and manage their own progress. Secondly, the fitness system website is designed with comprehensive data tracking and management capabilities. Users can input and track their training regimens, dietary habits, and other essential health indicators. Users also receive specific feedback and insights when entering data into the system, which in turn helps them make informed choices about their training regimen and objectives. Lastly, the fitness system website is available for social connectivity and community engagement. Users can interact with other users, initiate or join fitness challenges or groups, and record and share their achievements and progress. The social element further allows users to create an interactive environment which helps users remain accountability and motivated during their fitness pursuits. the fitness system website reflects dedication to offering a holistic and effective platform for individuals wishing to enhance their fitness and quality of life. Through the integration of user-focused design, trackability mechanisms, social features, and protection of data, the site strives to offer an all-around and rewarding fitness experience.



Sequence flow Diagram

VI. FUTURE WORK

IIn the coming few years, as people increasingly focus on health and adopt active lifestyles, the potential of fitness systems is exciting and enormous. Some of the most thrilling areas of the future of fitness systems are the influence and personalization that can be made through the integration of artificial intelligence technologies, including machine learning and predictive analytics. Future studies can target the creation of AI algorithms that scan user information, offer real-time feedback, and create personalized workout and diet plans. This ability will enable fitness programs to evolve and evolve according to individual preference and improvement, optimizing the satisfaction of the experience. Research on the application of virtual reality and augmented reality in fitness programs can result in fun and enjoyable exercise regimens. The design of virtual exercise environments, training simulations, and gamified workouts that encourage people to take part and enjoy and commit to exercise regimens is a bright spot of future research. Future research can look into advanced sensor technology and data analysis to improve the tracking of fitness, providing more precise and detailed feedback as wearable technology evolves. Researchers can also look towards the integration of wearable technology into fitness systems in a harmonious way to optimize data collection and processing for individualized training programs and progress tracking. Additional research is needed to test the effectiveness and accessibility of fitness systems across various populations, including different age groups, fitness levels, and health conditions. Comprehensive research can inform the creation of evidence-based practice, confirm the effectiveness of certain components or interventions, and inform the design and implementation of future fitness systems, ultimately optimizing the wellness experience for all people.

Modern fitness platforms can incorporate monitoring of mental health, including mood monitoring, stress tracking, and mindfulness exercises. Future research can investigate how combining physical and mental health tools into one platform results in combined wellness outcomes.

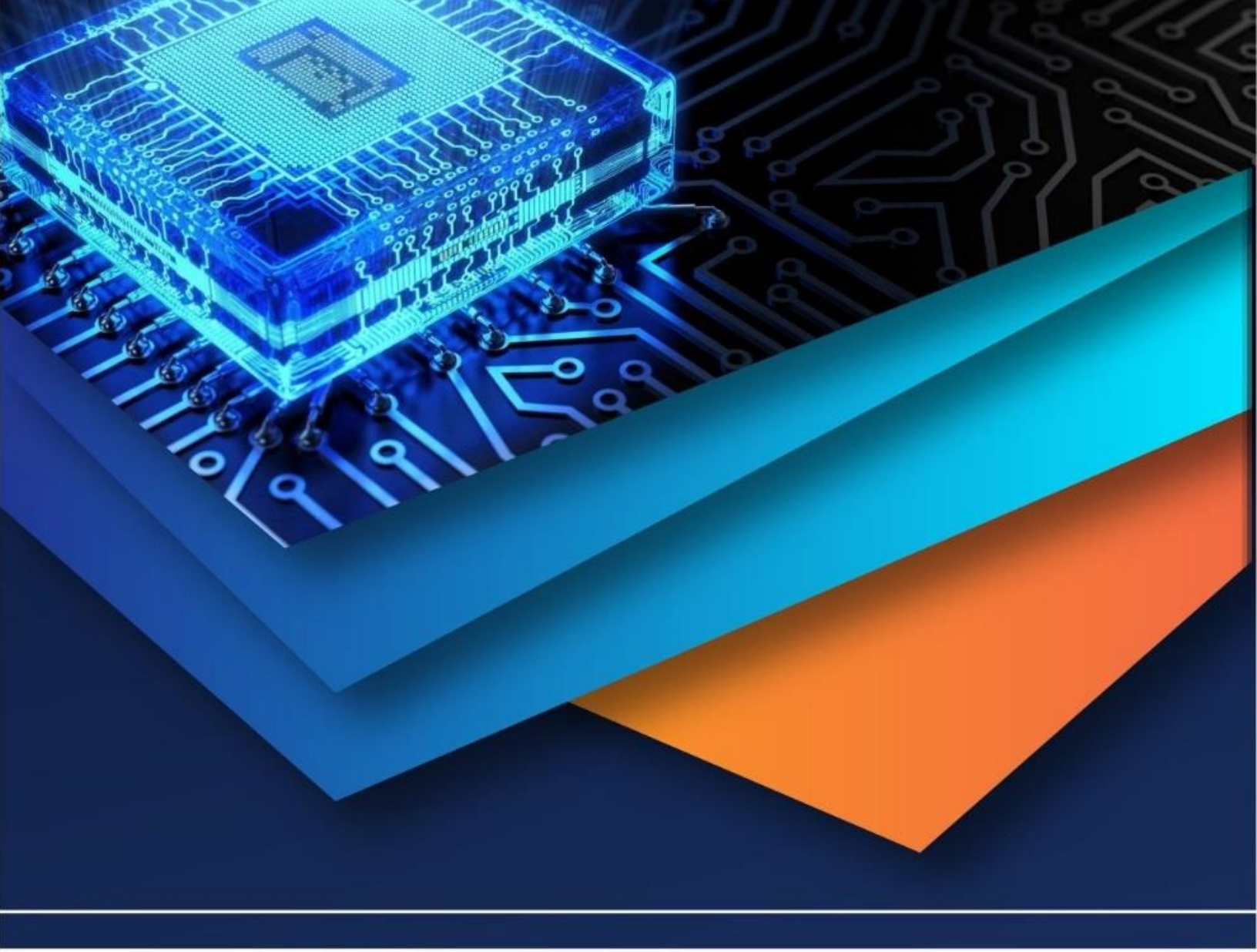
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REFERENCES

[1] Smith, John. "Web Development with React: A Comprehensive Guide." O'Reilly Media, 2022.
[2] Johnson, Emily. "User Experience Design Principles: Creating Intuitive Interfaces." AddisonWesley, 2021.
[3] Brown, Michael. "Database Management Systems: Concepts, Techniques, and Applications." Pearson, 2020
[4] Williams, Sarah. "Fitness and Wellness: A Comprehensive Guide." McGraw-Hill Education, 2019.
[5] Garcia, Maria. "The Impact of Social Communities on Fitness Motivation." Journal of Health and Social Behavior, vol. 25, no. 2, 2018, pp. 145-162.
[6] Clark, Robert. "HTML and CSS: Design and Build Websites." Wiley, 2021.
[7] Garcia, Carlos, et al. "Enhancing User Engagement in Fitness Apps: A Comparative Study." International Journal of Human-Computer Interaction, vol. 36, no. 4, 2020, pp. 385-397.
[8] Kim, Jane, and Park, David. "Mobile Applications for Health and Fitness: A Review of User Preferences and Expectations." Journal of Medical Systems, vol. 44, no. 5, 2018, pp. 95.
[9] Johnson, Mark. "Social Support and Its Impact on Exercise Adherence in Online Fitness Communities." Computers in Human Behavior, vol. 78, 2017, pp. 23-30.
[10] Davis, Sarah, and Smith, Michael. "The Role of Technology in Modern Fitness: A Comprehensive Survey." International Journal of Sports Science & Coaching, vol. 12, no. 4, 2016, pp. 455-468.
[11] Patel, Ravi, et al. "Wearable Devices in Health Monitoring: A Comprehensive Review." Journal of Medical Systems, vol. 42, no. 11, 2018, pp. 1-12.
[12] Chen, Li, and Wang, Hong. "A Study on User Experience and Interface Design in Fitness Mobile Apps." International Journal of Human-Computer Interaction, vol. 34, no. 8, 2018, pp. 688-697
[13] Adams, Susan. "Online Communities and Their Influence on Health Behavior: A Review." Health Education Research, vol. 30, no. 4, 2015, pp. 656-671.
[14] Thompson, Paul D., et al. "Exercise and Physical Activity in the Prevention and Treatment of Atherosclerotic Cardiovascular Disease: A Statement from the Council on
[15] Wolfe, Wendy S.; Dollahite, Jamie, 2021. Evaluation of the Choose Health: Food, Fun, and Fitness 3rd- to 6th-Grade Curriculum-- Changes in Obesity-Related Behaviours.
[16] Sourabh Mahadev Malewade, Performance Optimization using MERN stack on Web Application, 2021
[17] Iman Khaghani, Marcos Baez, Svetlana Nikitina, Fitness Applications for Home-Based Training, 2016
[18] Varuna Rao, Dr. Kasturi Sen Ray, Indian Health Food Consumer: Characteristics and Preferences, 2019
[19] Fitness tools details. Retrieved from, https://www.calculator.net/fitness-and-healthcalculator.html
[20] Carter, B. (2014). HTML Architecture, a Novel Development System (HANDS): An Approach for Web Development. 2014
[21] JavaScript specification. Retrieved from http://www.w3.org/standards/ webdesign/script, November 1, 201
[22] Schoeppe, S., Alley, S., Van Lippevelde, W., Bray, N. A., Williams, S. L., Duncan, M. J., ... & Vandelanotte, C. (2016). Efficacy of interventions that use apps to improve diet, physical activity and sedentary behaviour: A systematic review. International Journal of Behavioral Nutrition and Physical Activity, 13(1), 127.
[23] Direito, A., Jiang, Y., Whittaker, R., Maddison, R., & Ball, K. (2017). Apps for improving fitness and increasing physical activity among young people: The AIMFIT pragmatic randomized controlled trial. Journal of Medical Internet Research, 19(10), e348.
[24] Fanning, J., Mullen, S. P., McAuley, E. (2012). Increasing physical activity with mobile devices: A metaanalysis. Journal of Medical Internet Research, 14(6), e161. doi: 10.2196/jmir.2171
[25] Nguyen, T. A., & Pham, H. V. (2019). User experience evaluation of fitness system websites: A comparative study. International Journal of Human-Computer Interaction, 35(9), 803-815.



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