



# FLEXIFIT

**ESHA ARANKALLE<sup>1</sup>, HARSHADA MORE<sup>2</sup>, SIDDHARTH BAGAL<sup>3</sup>, TUSHAR RAVAL<sup>4</sup>,  
PROF. DR. MORESH MUKHEDKAR<sup>5</sup>**

Under-Graduate Student, Department of Information Technology, D Y PATIL INSTITUTE OF ENGINEERING AND  
TECHNOLOGY, Ambi, Pune<sup>1-4</sup>

Assistant Professor, Department of Information Technology, D Y PATIL INSTITUTE OF ENGINEERING AND  
TECHNOLOGY, Ambi, Pune<sup>5</sup>

**Abstract**— The stated fitness software is made to offer users tailored workout recommendations based on their Body Mass Index (BMI). PHP, HTML, CSS, and SQL are all used in the application's development to administer the database. The application starts by gathering user information, such as weight and height, which are utilised to determine BMI. The BMI scale uses a person's height and weight to calculate their body fat percentage. The application computes the BMI using a formula and classifies the user as underweight, normal weight, overweight, or obese, among other categories. The application uses SQL queries to retrieve workout recommendations from the database after determining the BMI category. The database includes a selection of exercises that have been grouped depending on how well they work for various BMI categories. Users in the underweight category, for example, would be urged to engage in activities that emphasise muscle mass development, whilst users in the overweight or obese categories might be instructed to do cardio workouts to encourage weight loss. Using HTML and CSS, the programme uses an organised and user-friendly presentation to give the user exercise suggestions. The user can browse the suggested exercises as well as pertinent information like the exercise's length and intensity. The database interaction and backend functionality are handled via the PHP programming language. It takes user input, determines the user's BMI category, pulls workout recommendations from the database, and dynamically generates the user's web pages. Overall, this fitness software gives users an easy and personalised approach to monitor their BMI and get workout recommendations that are catered to their particular requirements and objectives. The programme offers a powerful platform for encouraging health and fitness by fusing PHP, HTML, CSS, and SQL.

**Keywords**— Fitness application, HTML design, CSS style, BMI calculation, Exercise suggestion, Personalized recommendation

## I. INTRODUCTION

The current fitness application is an all-inclusive solution made to help people reach their fitness objectives by offering tailored workout recommendations based on their Body Mass Index (BMI). This programme, which was created using a mix of PHP, HTML, CSS, and SQL for database management, intends to encourage a healthy way of life and make training regimens easier. The application starts by gathering user data, such as weight and height, which are used to determine BMI. The application classifies users into certain BMI categories, such as underweight, normal weight, overweight, or obese, by applying a formula that takes into consideration these factors. Customised workout recommendations are based on this categorisation. The application uses SQL queries to retrieve a database that has a wide variety of exercises that are divided into groups based on how well they work for certain BMI ranges. For instance, users who are underweight would get advice on gaining muscle, whilst those who are overweight or obese might be told to do cardio workouts to help them lose weight. HTML and CSS were used to design the application's user interface, making it aesthetically pleasing and easy to use. The backend programming language, PHP, is in charge of handling user input, computing BMI, locating pertinent exercise advice in the database, and dynamically creating web pages based on the user's BMI category.

## II. LITERATURE REVIEW

IN THIS A RFID-ENABLED GYM MANAGEMENT SYSTEM W. L. WANG, K. J. LIN, C. T. HUANG AND C. H. CHIU SAYS[1]“DAIRY SAW THE UNIQUE DEPLOYMENT OF RFID. WE SUGGEST AN RFID-ENABLED GYM MANAGEMENT SYSTEM IN THE STUDY. THE SYSTEM ALLOWS THE GYM MANAGER TO MONITOR AND TRACE EACH MEMBER'S EXERCISE PROGRESS. WHEN A MEMBER CHECKS IN FOR FITNESS, THE GYM CAN APPLY AN ACTIVITY PRESCRIPTION FOR EACH OF THEM. THE



METHOD CAN IMPROVE MANAGEMENT LEVEL EFFICIENCY AND REDUCE THE WASTAGE OF HUMAN RESOURCES WHILE ALSO IMPROVING THE WELFARE OF GYM PATRONS.

IN THIS DESIGN AND IMPLEMENTATION OF FITNESS MANAGEMENT WEBSITE . A. SHARMA AND Y. PANDEY SAYS[2] FOR A STRESS-FREE LIFE IN TODAY'S BUSY WORLD, PEOPLE MUST BE IN GOOD PHYSICAL AND MENTAL HEALTH. FITNESS IS FREQUENTLY REFERRED TO BE A STATE THAT ENABLES US TO LOOK, FEEL, AND PERFORM AT OUR MOST BEST. AS YOU ARE AWARE, THE CORONAVIRUS EPIDEMIC HAS HAD A SIGNIFICANT IMPACT ON EVERYONE'S LIVES AND OUR HEALTH. AS A RESULT, THE FITNESS IS SIGNIFICANTLY IMPACTED. AS A RESULT, WE ARE PLANNING TO CREATE A DYNAMIC, END-TO-END SINGLE PAGE APPLICATION (SPA) ENABLED FITNESS FOR THOSE WHO ARE READY TO TAKE ACTION AND ENROL ON OUR WEBSITE IN ORDER TO SELECT A HEALTHY LIFESTYLE. ENERGYM PLANET WILL CONSIST OF THREE DIFFERENT ENTITIES: AN ADMINISTRATOR, A MEMBER, AND A TRAINER. ADMINISTRATIVE OPERATIONS INCLUDING ADDING, REMOVING, AND UPDATING WILL BE PERFORMED BY ADMIN.

IN THIS E-COMMERCE SYSTEM FOR ANYWHERE FITNESS PH WITH SENTIMENT ANALYSIS . E. M. ESCALA *ET AL* "SAYS[3] MORE AND MORE INDIVIDUALS ARE TURNING TO THE INTERNET AND SOCIAL MEDIA EVERY DAY FOR ASSISTANCE, SOLACE, POSSIBILITIES, AND ACCESS TO KNOWLEDGE AS THEY REMAIN COOPED UP IN THEIR HOUSES. THIS GIVES COMPANIES AND E-COMMERCE PLATFORMS THE CHANCE TO USE THEIR OWN DATA AND CONNECT WITH LARGE AUDIENCES ON SOCIAL MEDIA. ANYWHERE FITNESS PH, AN ONLINE RETAILER, SEIZED THE CHANCE PRESENTED BY THE LAUNCH TO DELIVER EXERCISE EQUIPMENT TO CUSTOMERS' HOMES, WHERE THEY COULD USE IT IN SAFETY AND COMFORT. THE CLIENT, ANYWHERE FITNESS PH, HAD ISSUES WITH ITS CURRENT E-COMMERCE PLATFORMS AND RECEIVED POOR CONSUMER RATINGS. THE RESEARCHERS SUGGESTED A WEB APPLICATION SYSTEM TO GIVE THEIR BUSINESS AN E-COMMERCE PLATFORM THAT WILL USE DATA ANALYTICS AND SENTIMENT ANALYSIS FOR ITS CUSTOMER EVALUATIONS AND MAKE ADDITIONAL IMPROVEMENTS FOR THE WHOLE SYSTEM.

IN THIS WEB-BASED DESIGN AND DEVELOPMENT OF UNDERGRADUATE PHYSICAL FITNESS DETECTION SYSTEM HAITAO HAO SAYS[4] IN ORDER TO MAKE PHYSICAL FITNESS DETECTION AND HEALTH INQUIRY MORE PERTINENT, EFFECTIVE, AND THE MANAGEMENT WORK MORE HUMANE, STANDARDISED, AND SYSTEMATIC, A KIND OF COMPUTER-NETWORK-ENVIRONMENT-BASED PHYSICAL FITNESS DETECTION & COMPREHENSIVE ANALYSIS SYSTEM HAS BEEN DEVELOPED IN LIGHT OF THE SHORTCOMINGS EXISTING IN THE PHYSICAL FITNESS DETECTION SYSTEMS AT HOME AND ABROAD.

IN THIS HEALTH PROMOTION WITH A WEB APPLICATION OF 100 DAYS 100 KM, T. SOOKHANAPHIBARN AND E. SURIYACHAY SAYS[5] THIS STUDY INTRODUCED A WEBSITE APPLICATION THAT ENCOURAGES USERS TO RUN 100 KM IN 100 DAYS AS A WAY OF PROMOTING THEIR HEALTH. THIS HEALTH PROMOTION ACTIVITY WAS PART OF A BACHELOR PROGRAM'S PE CURRICULUM. TO ACCOMPLISH THIS, A WEB APPLICATION WAS CREATED TO GATHER EACH USER'S RUNNING DISTANCE DATA AND TRANSLATE IT INTO A PERFORMANCE REPORT. TWENTY STUDENTS PARTICIPATED IN A HEALTH PROMOTION EXERCISE CALLED 100 DAYS 100 KM WHILE THIS PROGRAMME WAS INSTALLED IN A PE LESSON OVER THE COURSE OF ONE SEMESTER. BY COMPARING THE RESULTS OF THE EXERCISE BEFORE AND AFTER, 90% OF THE PARTICIPANTS HAD IMPROVED SCORES ON HEALTH-RELATED PHYSICAL FITNESS.

IN THIS HEALTH MONITORING WEB PLATFORM FOR REAL-TIME EXPERT-USER INTERACTION," 2017 8TH INTERNATIONAL CONFERENCE ON INFORMATION, INTELLIGENCE, SYSTEMS & APPLICATIONS (IISA) A. ACHILLEOS, A. YERATZIOS, C. METTOURIS, K. EVRIPIDOU, P. HADJINIKOLAOU AND G. A. PAPADOPOULOS SAYS[6] OVER THE PAST FEW YEARS, THERE HAS BEEN A PROLIFERATION OF MOBILE HEALTH TRACKING APPS, INCLUDING THOSE FOR TRACKING FOOD, TRACKING WEIGHT REDUCTION WITH PHOTOS, AND TRACKING PHYSICAL ACTIVITY. THE DATA FROM THESE APPLICATIONS CAN BE USEFUL FOR SPECIALISTS IN COUNSELLING THEIR CLIENTS, ACCORDING TO SOME MORE RECENT RESEARCH. THESE APPLICATIONS ARE UTILISED FOR SELF-ASSESSMENT, DYNAMIC FEEDBACK, AND INCENTIVE OF THE USERS. IN ORDER TO CREATE A MORE COMPREHENSIVE PICTURE OF CLIENTS' SUCCESS, A REAL-TIME NUTRITION AND FITNESS TRACKING WEB PLATFORM IS PRESENTED IN THIS STUDY. IT ENABLES SPECIALISTS TO MONITOR THE PROGRESS OF THEIR CUSTOMERS (EVEN) IN REAL-TIME OR BASED ON THEIR WORK SCHEDULE. THE PLATFORM INTENDS TO ASSIST PROFESSIONALS IN OFFERING THE BEST DIRECTION AND ADVISE ON A DIET AND EXERCISE

IN THIS DEVELOPING A SECURE, PRODUCTION-GRADE CMS FOR A FITNESS CENTRIC STARTUP A. ADARSH, E. SARAN KARTHIK, S. ASWATH, A. SAMPATH, S. A. PASUPATHY AND S. UMAMAHESHWARI SAYS[7] TODAY'S WORLD IS MOVING AWAY FROM SOCIAL ENGAGEMENT AND TOWARDS ONLINE RELATIONSHIPS. THEREFORE, FIRMS IN THE PRESENT DAY HAVE A PRESSING NEED TO MODERNISE AND ESTABLISH THEIR BRANDS GLOBALLY. ONE OF THE MOST WELL-LIKED AND WELL-KNOWN STRATEGIES IS TO CREATE A WEB APPLICATION THAT SERVES AS THEIR BUSINESS' ONLINE PERSONA. THIS ARTICLE DESCRIBES THE CREATION OF A CONTENT MANAGEMENT SYSTEM FOR A START-UP THAT OFFERS FITNESS CLASSES TO CLIENTS WORLDWIDE. THE CMS INCLUDES A NUMBER OF MODULES, SUCH AS THOSE FOR MANAGING USERS, INDIVIDUAL



SESSIONS, GROUP SESSIONS, AND COURSES, AS WELL AS FEATURES FOR SUPPORTING SEVERAL CURRENCIES AND TIME ZONES, COMMUNICATIONS INTERFACES, NOTIFICATION SYSTEMS, AND PAYMENT GATEWAY INTEGRATION. THE MECHANISMS FOR SECURITY AND CACHING ARE ALSO COVERED IN THIS ESSAY.

IN THIS "THE FITNESS EVALUATION MODEL OF SAAS FOR ENTERPRISE INFORMATION SYSTEM," Y. LU AND B. SUN SAYS[8] IN THIS ESSAY, THE RELATIVE MERITS OF SAAS ARE COMPARED IN TERMS OF PRICING, SOLUTION, SOFTWARE UPKEEP, NETWORK APPLICATION, AND SECURITY. SAAS HAS SEVERAL BENEFITS, SUCH AS MINIMAL INITIAL OUTLAY, FLEXIBLE CUSTOMISATION, QUICK IMPLEMENTATION, AND PROFESSIONAL SERVICES, BUT IT ALSO HAS SOME DRAWBACKS, INCLUDING INCREASED LONG-TERM RENT, A DEARTH OF INDIVIDUALISED SOLUTIONS, UNSTABLE NETWORKS, AND DATA SECURITY. IT SUMMARISES ALL TYPES OF RESTRICTIONS, INCLUDING INDUSTRY STANDARDISATION, BUSINESS COMPLEXITY, SYSTEM PERFORMANCE, AND SECURITY REQUIREMENTS, WHICH ENTERPRISE INFORMATION SYSTEMS APPROPRIATE FOR SAAS SHOULD ADHERE TO. A MODEL FOR EVALUATING FITNESS IS THEN DEVELOPED. THE MODEL ASSESSES ENTERPRISE INFORMATION SYSTEMS BASED ON THREE CRITERIA: SAAS SERVICE, SYSTEM FEATURES, AND ENTERPRISE RESOURCE. THE STUDY CONCLUDES BY OFFERING SOME COMMENTARY ON THE EVALUATION FINDINGS

IN THIS "UNDERSTANDING THE POTENTIAL RISKS OF SHARING ELEVATION INFORMATION ON FITNESS APPLICATIONS," Ü. METERIZ, N. FAZIL YILDIRAN, J. KIM AND D. MOHAISEN SAYS[9] NUMEROUS HELPFUL APPLICATIONS HAVE BEEN MADE POSSIBLE BY THE WIDESPREAD USE OF SMARTPHONES AND WEARABLE TECHNOLOGY. FOR INSTANCE, NUMEROUS APPLICATIONS CAN CAPTURE, ANALYSE, AND COMMUNICATE RICH METADATA, SUCH AS GEOLOCATION, TRAJECTORIES, ELEVATION, AND TIME, WITH THE HELP OF SMART AND WEARABLE DEVICES THAT ARE GPS-ENABLED. FOR INSTANCE, FITNESS APPS LIKE RUNKEEPER AND STRAVA, WHICH USE DATA FOR ACTIVITY TRACKING, HAVE RECENTLY EXPERIENCED A SURGE IN POPULARITY. THESE FITNESS TRACKER APPS HAVE THEIR OWN WEBSITES AND LET USERS POST THEIR ACTIVITY THERE OR EVEN ON OTHER SOCIAL NETWORKING SITES. IN ORDER TO PROTECT USER PRIVACY WHILE ENABLING SHARING, SOME OF THOSE PLATFORMS MIGHT PERMIT USERS TO REVEAL ONLY SOME INFORMATION, INCLUDING THE ELEVATION PROFILE FOR AN ACTIVITY, WHICH IS SAID TO PREVENT USER LOCATION FROM BEING REVEALED.

IN THIS DESIGN OF A PERSONALIZED HEALTH RECORD APPLICATION TO SUPPORT FOOD AND EXERCISE COUNSELING FOR OVERWEIGHT AND OBESE CHILDREN," R. ECKARDT *ET AL* " SAYS[10] THE CHILDREN'S FITNESS CLINIC AT THE UNIVERSITY OF VIRGINIA CREATED AN INTERACTIVE ACTIVITY AND FOOD LOGGING WEBSITE THAT PATIENTS (OBESE KIDS AND TEENS) AND THEIR COUNSELLORS CAN USE. THIS ARTICLE OUTLINES THE DESIGN AND IMPLEMENTATION OF THIS WEBSITE. GETFIT WAS CREATED TO SOLVE ISSUES WITH PATIENT RETENTION, INCOMPLETE PAPER RECORDS, A LACK OF COMMUNICATION BETWEEN PATIENTS AND COUNSELLORS IN BETWEEN SESSIONS, AND PATIENTS' GENERAL LACK OF INTEREST IN PARTICIPATING IN THEIR OWN CARE. IN ORDER TO CREATE GETFIT, WE USED A METHODOICAL APPROACH. PROBLEM ANALYSIS, SYSTEM DESIGN, DEVELOPMENT, TESTING, AND MAINTENANCE MADE UP ITS LIFESPAN. USABILITY TESTING AND OPEN CONTACT WITH CLIENTS (CFC PATIENTS AND COUNSELLORS) WERE PRIORITISED THROUGHOUT THE DESIGN PHASE TO ENSURE THAT THEIR NEEDS WERE MET.

IN THIS "SAAS-PLATFORM FOR MOBILE HEALTH APPLICATIONS," R. -D. BERNDT, M. C. TAKENGA, S. KUEHN, P. PREIK, G. SOMMER AND S. BERNDT[11] SAYS IT HAS BEEN DEMONSTRATED THAT INCORPORATING INFORMATION AND COMMUNICATION TECHNOLOGY INTO HEALTHCARE SOLUTIONS INCREASES PATIENT AND HEALTHCARE PROVIDER SATISFACTION. SINCE IT SEEMS TO BE THE BEST WAY TO FIND AN ECONOMICALLY AND SOCIALLY SUSTAINABLE ANSWER TO THE RISING NUMBER OF CHRONICALLY ILL PATIENTS WHO ARE NOW STRAINING THE HEALTHCARE SYSTEMS, SEVERAL RESEARCH EFFORTS HAVE BEEN FOCUSING ON THIS SUBJECT. SOFTWARE AS A SERVICE (SAAS), A CONCEPT IN WHICH SOFTWARE AND ITS RELATED DATA ARE CENTRALLY HOSTED AND ARE OFTEN ACCESSED BY USERS UTILISING CLIENT INTERFACES, HAS EMERGED AS A POPULAR DELIVERY STRATEGY FOR MANY APPLICATIONS IN THE CURRENT ENVIRONMENT. HOWEVER, THE MAJORITY OF THESE IMPLEMENTATION ENVIRONMENTS NEED TO PAY MORE ATTENTION TO SECURITY AND PRIVACY CONCERNS. AN NOVEL SAAS-PLATFORM SUITABLE FOR THE DEPLOYMENT IS INTRODUCED IN THIS STUDY.

IN THIS "WEB -BASED DESIGN AND DEVELOPMENT OF COMMUNITY SPORTS SERVICE PLATFORM," SHI QING SAYS[12] IN ORDER TO PERFECT COMMUNITY SPORTS SERVICES AND MANAGEMENT SYSTEMS, TO INCREASE THE EFFECTIVENESS OF COMMUNITY WORK AND SPORTS SERVICE LEVELS, AND TO PROVIDE USEFUL AND CONVENIENT SERVICE SYSTEMS FOR THE COUNTRY'S FITNESS PROGRAMMES, COMPUTER AND NETWORK TECHNOLOGY SHOULD BE APPLIED AND WEB-BASED COMMUNITY SPORTS SERVICE PLATFORMS WELL DESIGNED AND DEVELOPED.

### III. FORMULATION OF THE PROBLEM

The fitness application's articulation of the issue centres on the requirement for tailored exercise advice based on a user's Body Mass Index (BMI). The objective is to create a programme that uses the user's height and weight to compute BMI and then offers activities based on the user's BMI category. PHP, HTML, CSS, and SQL are all used in the application's



development to administer the database. The issue is the absence of an easy-to-use tool that allows people to monitor their BMI and get exercise advice tailored to their own fitness objectives. Users may find it difficult to select workouts that are appropriate for their body type and fitness level without individualised advice.

The fitness programme tries to close this gap by utilising the BMI as a metric and employing PHP, HTML, CSS, and SQL technologies. The difficulty is in reliably measuring BMI, classifying individuals into BMI ranges, pulling pertinent exercise advice from the database, and presenting it to the user in a clear and user-friendly way. By creating this fitness application, the issue of giving BMI-based personalised exercise suggestions would be resolved, enabling users to choose their workout plans wisely and encouraging a better way of life

#### IV. THE AIM OF STUDY

THE OBJECTIVE OF THIS STUDY IS TO CREATE A FITNESS APP THAT MEASURES A USER'S BODY MASS INDEX (BMI) AND OFFERS PERSONALISED WORKOUT RECOMMENDATIONS DEPENDING ON THEIR BMI CATEGORY. BY GIVING USERS INDIVIDUALISED WORKOUT RECOMMENDATIONS, THE APPLICATION—WHICH WAS CREATED USING PHP, HTML, CSS, AND SQL FOR THE DATABASE—AIMS TO ENCOURAGE A HEALTHY LIFESTYLE.

THE PROJECT INTENDS TO OFFER CONSUMERS WORKOUT RECOMMENDATIONS THAT ARE APPROPRIATE FOR THEIR BODY TYPE AND FITNESS GOALS BY PRECISELY MEASURING THE BMI AND CLASSIFYING USERS INTO SPECIFIC BMI GROUPS. THE PURPOSE OF THE APPLICATION IS TO EQUIP USERS WITH THE KNOWLEDGE THEY NEED TO CHOOSE WORKOUT REGIMENS THAT WILL HELP THEM REACH THEIR FITNESS GOALS QUICKLY AND EFFECTIVELY.

#### V. RESEARCH RESULTS

##### 1. Requirement Gathering:

Gathering requirements from potential users or other stakeholders is the first step in creating the fitness application. Understanding the application's desired features, functionality, and user experience is necessary for this. The computation of BMI, the advice of exercise based on BMI, user input for height and weight, database management, and a user-friendly interface are essential.

##### 2. Design and Architecture:

The design and architecture of the application are then planned. This comprises laying out the general system architecture, developing the database structure, and producing wireframes or mockups for the user interface using HTML and CSS. Tables are created as part of the database design to store user data, workout information, and BMI categories.

##### 3. BMI Calculation:

The user's height and weight must be gathered in order to compute the BMI. The user will be prompted by the programme to fill out a form with their height and weight. The programme will validate and sanitise the input values using PHP. A formula, such as  $BMI = \text{weight (kg)} / (\text{height (m)})^2$ , will then be used to determine the BMI. For later processing, the determined BMI value will be kept.

##### 4. BMI Categorization:

The user will be classified into distinct BMI ranges (such as underweight, normal weight, overweight, and obese) based on the determined BMI result. There will be exercise suggestions for each BMI range. According to the application's definition of each category's cutoff points, the user's BMI range will be established.

##### 5. Database Management:

Exercise data and BMI categories will be kept in a SQL database. Tables in the database will be used to hold information about the exercises, such as their name, description, length, and intensity. The BMI ranges and the corresponding exercise advice will be kept in another table. Based on the user's BMI category, SQL queries will be utilised to generate exercise recommendations.

##### 6. Exercise Recommendation:

The application will retrieve workout recommendations from the database after classifying the user based on BMI. Exercises suitable for the user's BMI range will be retrieved using SQL queries. The programme will display the suggested workouts along with pertinent information like the workout's duration and intensity. HTML and CSS will be used to design the user interface, which will present the recommendations in an orderly and approachable way.





### 7. User Interaction:

Users of the application can enter their height and weight, examine their BMI, and access workout recommendations through an interactive user interface. PHP will take care of processing and validating user input. Users can browse through the suggested exercises, choose exercises, and view more information. Users will be able to create fitness objectives, record completed activities, and monitor their progress using the programme.

### 8. Dynamic Web Page Generation:

PHP will be essential for creating web pages dynamically based on the user's BMI category and suggested exercises. The user's BMI will be processed, pertinent exercise data will be retrieved from the database, and dynamic HTML pages with the necessary content will be generated. The web pages will be styled with CSS to improve user experience.

### 9. Testing and Quality Assurance:

Thorough testing will be done at every stage of development to make sure the application is reliable and functional. To find and fix any problems or errors, unit testing, integration testing, and user acceptance testing will be carried out. To guarantee a flawless experience, the application will be rigorously tested across a range of platforms, browsers, and user scenarios.

### 10. Deployment and Maintenance:

The application will be published on a web server for public access after it has been fully developed and tested. To fix any potential faults, improve performance, and introduce new features in response to user input and shifting requirements, routine maintenance and updates will be carried out.

## VI. CONCLUSIONS

In conclusion, PHP, HTML, CSS, and SQL have been successfully used to construct a fitness application that measures BMI and offers individualised exercise advice. The programme offers individualised workout recommendations depending on a user's BMI category, serving as a comprehensive solution for people wishing to increase their level of fitness. The application divides people into distinct BMI groups, such as underweight, normal weight, overweight, or obese, based on the user's stated height and weight. The application collects workout recommendations from a database that contains a large variety of activities organised according to BMI appropriateness by utilising the power of SQL. Users may enter their information, examine their BMI, and receive workout recommendations using the user-friendly interface, which was created using HTML and CSS. With the help of the dynamic web page generating capability, individuals can improve their fitness journey by receiving tailored activity recommendations based on their unique BMI category. Overall, the fitness app gives users an easy way to monitor their BMI and get personalised exercise advice based on their needs and objectives. The programme offers a simple and effective approach for people to start living a better and more active lifestyle by utilising PHP, HTML, CSS, and SQL.

## REFERENCES

- [1] W. L. Wang, K. J. Lin, C. T. Huang and C. H. Chiu, "A RFID-enabled gym management system," *2010 7th International Conference on Service Systems and Service Management*, Tokyo, Japan, 2010, pp. 1-4, doi: 10.1109/ICSSSM.2010.5530117.
- [2] A. Sharma and Y. Pandey, "Design and implementation of fitness management website," *2022 4th International Conference on Advances in Computing, Communication Control and Networking (ICAC3N)*, Greater Noida, India, 2022, pp. 2247-2252, doi: 10.1109/ICAC3N56670.2022.10074213.
- [3] E. M. Escala *et al.*, "E-Commerce System for Anywhere Fitness PH With Sentiment Analysis," *2021 IEEE 13th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment, and Management (HNICEM)*, Manila, Philippines, 2021, pp. 1-5, doi: 10.1109/HNICEM54116.2021.9732028.
- [4] Haitao Hao, "Web-based design and development of undergraduate physical fitness detection system," *2010 International Conference on Artificial Intelligence and Education (ICAIE)*, Hangzhou, China, 2010, pp. 765-767, doi: 10.1109/ICAIE.2010.5641442.
- [5] T. Sookhanaphibarn and E. Suriyachay, "Health Promotion with a Web Application of 100 Days 100 KM," *2021 IEEE 3rd Global Conference on Life Sciences and Technologies (LifeTech)*, Nara, Japan, 2021, pp. 198-199, doi: 10.1109/LifeTech52111.2021.9391869.
- [6] A. Achilleos, A. Yeratziotis, C. Mettouris, K. Evripidou, P. Hadjinikolaou and G. A. Papadopoulos, "Health monitoring web platform for real-time expert-user interaction," *2017 8th International Conference on Information, Intelligence, Systems & Applications (IISA)*, Larnaca, Cyprus, 2017, pp. 1-6, doi: 10.1109/IISA.2017.8316423.



- [7] A. Adarsh, E. Saran Karthik, S. Aswath, A. Sampath, S. A. Pasupathy and S. Umamaheshwari, "Developing a secure, production-grade CMS for a Fitness centric Startup," *2022 International Conference on Computer Communication and Informatics (ICCCI)*, Coimbatore, India, 2022, pp. 1-5, doi: 10.1109/ICCCI54379.2022.9740749.
- [8] Y. Lu and B. Sun, "The Fitness Evaluation Model of SAAS for Enterprise Information System," *2009 IEEE International Conference on e-Business Engineering*, Macau, China, 2009, pp. 507-511, doi: 10.1109/ICEBE.2009.81.
- [9] Ü. Meteriz, N. Fazıl Yılduran, J. Kim and D. Mohaisen, "Understanding the Potential Risks of Sharing Elevation Information on Fitness Applications," *2020 IEEE 40th International Conference on Distributed Computing Systems (ICDCS)*, Singapore, Singapore, 2020, pp. 464-473, doi: 10.1109/ICDCS47774.2020.00063.
- [10] R. Eckardt *et al.*, "Design of a personalized health record application to support food and exercise counseling for overweight and obese children," *2011 IEEE Systems and Information Engineering Design Symposium*, Charlottesville, VA, USA, 2011, pp. 1-5, doi: 10.1109/SIEDS.2011.5876841.
- [11] R. -D. Berndt, M. C. Takenga, S. Kuehn, P. Preik, G. Sommer and S. Berndt, "SaaS-platform for mobile health applications," *International Multi-Conference on Systems, Signals & Devices*, Chemnitz, Germany, 2012, pp. 1-4, doi: 10.1109/SSD.2012.6198120.
- [12] Shi Qing, "Web -based design and development of community sports service platform," *2010 3rd International Conference on Computer Science and Information Technology*, Chengdu, China, 2010, pp. 578-580, doi: 10.1109/ICCSIT.2010.5564020.