SFO: School Fitness Online as a Monitoring Web-Based System for Physical Education in Tagum National Trade School

A **Research** Presented to
The Senior High School Department
Tagum National Trade School
Apokon, Tagum City

In Partial Fulfillment of the Requirements
in Inquiries, Investigation, and Immersion,
Computer Programming, and Work Immersion Program

RENNIEL CODILLA LAYAOEN
AMELIZA ALBORES
IVAN LLOYD FEGURO
JHON RIC ENOC MORRE
KAYE KHARELLE A. RUIZ
JOSELLE I. ROSCA
JHON ROSE FIGURO
DAN STEVE BERMEJO

June 2021

APPROVAL SHEET

This research entitled "**SCHOOL FITNESS ONLINE"** by Renniel Codilla Layaoen, Ameliza Albores, Ivan Lloyd Feguro, Jhon Ric Enoc Morre, Kaye Kharelle A. Ruiz, Joselle I. Rosca, Jhon Rose Figuro and Dan Steve Bermejo of Tagum National Trade School, in partial fulfilment with the requirements in Practical Research 2 under the Senior High School Program is hereby accepted and approved.

Endorsed by:

ALLYN JOY D. CALCABEN
Inquiries, Investigation, and Immersion Adviser

PAULINO P. TADO, Ph.D.
Subject Group Head

Accepted and approved by:

ADELFA M. MIGUEL
Assistant School Principal II
Senior High School

June 2021

ACKNOWLEDGEMENT

First and foremost, praise and thanks to the God the Almighty , for his blessing throughout our research work to complete the research successfully. He gave us the strength, inspiration and clear minds to made our plans succeed.

Second, we would like to express our special thanks of gratitude to Ms. Allyn D. Calcaben who guide us and help us throughout our research paper and who gave us the golden opportunity to do this wonderful project which is the School Fitness Online, also helped us in doing a lot of research and we came out to know about so many new things.

Third, we would also like to thank our parents who helped us a lot in finishing this project within the limited time. We making this project not only for marks but to also increase our knowledge . Thanks again to all who helped us.

Lastly, we would like to thank ourselves for making these research project. A lot of time and efforts has been put for creating the research paper.

Renniel, Ameliza, Ivan, Jhon Rose, Jhon Ric, Kaye, Joselle, Dan

ABSTRACT

School Fitness Online is a website that can monitor, organize, and teach the students despite of the COVID-19 Pandemic. The main goal of the system is to make the students and teacher safe on their homes while they are physically fit. The system will also have the hope that all of the students in Tagum National Trade School will be physically fit and active by using the system. The website itself has a feature where you can learn the steps of the given tasks that the users will accomplish.

This project will also have the monitoring system for the teachers since the objective of this are to monitor the students even if they are in home.

Keywords: *School Fitness Online, system, website, users.*

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter 1

INTRODUCTION

Project Context

Due to the COVID-19 Pandemic that the Philippines experienced these past one year, many schools stop the face to face classes. The government created a new normal education which includes the blended learning system, modular learning system and the distance learning system (DepEd, 2020).

Since the the Philippines are currently experiencing the COVID-19 Pandemic, The face to face classes before are not allowed to apply in this current situation. Schools all over the country forced to switch to the new normal learning including Tagum National Trade School. When face to face classes are applied before, the students of Tagum National Trade School are monitored by their teachers. When pandemic has started, the students are on their homes, some of them took the modular mode of learning which is hard for the Physical Education teachers to organize and monitor physical activities of a students on time.

Pandemic are still in the country and people especially the students needs to be healthy and fit. Regular physical activity and exercise can help the body to stay healthy, energetic and independent as it get older. Exercise play a vital role in preventing health diseases like stroke. The health benefits of doing exercise have been shown in many

studies (Elmagd, M.A, 2016).

The researchers made a project where it can help the Tagum National Trade School teachers, admins and students to become the physical activities more easier to access because the users will use the internet connection and laptop or personal computers. School Fitness Online can monitor, organize and update the physical activities of the student. The students no longer go to school or to meet-up with others because it is made for COVID-19 Pandemic where everything can be done through Online.

School Fitness Online can help the students to do more physical activities because of its challenging tasks and will make the students to enjoy every tasks that will be given.

Purpose and Description

The purpose of this project is to monitor students daily exercise from a long distance, since they are currently experiencing pandemic that lock us down, constraining the teacher especially heath related teachers such P.E teacher from keeping check of the students well-being in the school. The proponents aim in this project is to help teachers to keep on track of students condition.

The program contains the following features:

1. Provides updates in physical activities of a student.

a. The system has a attendance-like tables to view if the students do the tasks.

b. Only teachers/admins have an access to the page.

2. Creating of sections functionality

a. Only teachers/admins can create a sections.

3. Provides tutorials

a. If a student doesn't know the steps, the program provides a tutorials.

4. Search Functionalities

a. Can search the sections, id and also the users.

Objectives of the Study

This section includes descriptions of the specific objectives for: (1) the study of fitness issue of the students, (2) organization of the activities, (3) the safety concerns of the project, and (4) the monitoring surveys and the overall impact of the project.

There were four primary objectives of this study:

1. Helps students to become physically active.

2. Make the activities more organized.

2.1. Monitor students in their daily physical exercises.

3. Make students to be safe of the COVID-19 virus.

3.1. Able to lessen the meet-ups and can be done online.

4. Guide students on the tasks that chosen by the teacher.

4.1. Tutorial of the designated activities are provided by the website.

Scope and Limitation of the Study

In Tagum National Trade School, various subjects are taught in every classrooms. One track, different specializations. One of the taught subject in the school are the Physical Education subject. This subject requires a daily or weekly update of the physical fitness of the students. The School Fitness Online are designed to update, teach, and reduce the pressure of the student in terms of physical activities because some of them are struggling in following the steps in daily exercises.

The scope of the study revolves around the Senior High School Students of Tagum National Trade School. The target user of the

School Fitness Online(SFO) are the Senior High School students of any specializations in Tagum National Trade School, admins of Tagum National Trade School and teachers of Tagum National Trade School only.

The said website can work when there is an internet connection to provide a real-time update of the monitoring of the physical activity of the students of Tagum National Trade School. In the current website, it can only accessible by a laptop or personal computer.

Significance of the Study

1. **Students**. To enjoy their physical activities and engage on more physical fitness activities to make their body healthy and strong. It is also reduce the laziness of the students on doing the daily physical activity.

2. **Teachers**. To help teachers especially the PE teachers of Tagum National Trade School to organize the physical activities of their students and monitors them if they execute the given activity.

3. **School**. To make every physical activities be organized and be recognized by other schools as the most organized daily physical activity monitoring website created in Tagum National Trade School.

4. **Parents.** To make their children safe from the COVID-19 virus.

Definition of Terms

School Fitness Online - a website that can monitor and teach the students to be physically active even if there is a COVID-19 Pandemic

System - a group of related hardware units or programs or both, especially when dedicated to a single application.

Website - a set of related web pages located under a single domain name, typically produced by a single person or organization.

Users - a person who will use the website.

Chapter 2

REVIEW OF RELATED LITERATURE

This chapter represent the related literature and studies which all have a direct bearing on this study. It has provided a discussion on the significance of this study to the existing literature. All of these have significant relation and contribution to the study.

Based on the study of Kaur, H., et.al., (2020), the fast-paced world has come to a halt due to the COVID-19 epidemic. The impact of this epidemic is enormous, and the only way to slow the disease's spread is to practice social distancing. The mandated lockdown has impacted many elements of people's lives, including everyday fitness activities of fitness freaks, resulting in severe psychological disorders and major fitness and health concerns. The authors of this article wanted to learn more about the unique experiences of fitness freaks during the COVID-19 lockdown. The goal of the study was to see how they dealt with psychological concerns and physical health difficulties at home by doing different exercises and fitness activities. 22 adults who were frequently working out in the gym prior to the COVID-19 epidemic but stayed at home during the statewide lockdown were interviewed over the phone in semi-structured interviews. The investigation found that the participants had a poor situational

impression and a lack of desire for fitness exercise during the initial period of lockdown. They also expressed concerns about their mental health and an excessive reliance on social media in their spare time. However, there was a progressive increase in positive self-perception and drive to break free from their reliance on gym and fitness equipment and continue their workout routines at home. Music was also commonly used as a tool by participants while exercising. During the lockdown, they were able to overcome psychological challenges and physical problems by doing regular fitness workouts at home.

According to the study of Botagariyev, T.A., et.al., (2017), the goal of the study was to see how effective the current paradigm of teaching physical education in secondary schools was, as well as to evaluate a game-like strategy that was introduced to help pupils improve their physical fitness. The authors supported the use of a game-like method in physical training sessions, claiming that its implementation would generate the conditions necessary for the student's physical development, physical preparation, and functional state to be optimized. The difference in physical training levels between the control and experimental groups was used to conduct empirical study. The control group's students were taught according to the school's existing curriculum. The experimental group received

instruction utilizing a modified program, which included the use of a game-like manner and a higher number of training hours. There were three stages to the pedagogical experiment. Two-factor variance analysis was used to process quantitative indicators. A total of 1350 high school students participated in the study. The use of two-factor variance analysis allowed researchers to discover that curriculum-based physical training was better for developing endurance, while the game-like strategy was better for developing speed, strength, and endurance. The study's practical value stems from the fact that the authors' statistical data processing will assist coaches in verifying the effectiveness of existing curriculum in real time and improving student sports achievements.

Based on the study of Jacob, L., et.al., (2020), the goal of this study was to look at the cross-sectional relationship between physical activity levels and depressive symptoms, anxiety symptoms, and positive mental well-being in a sample of COVID-19-affected people in the UK. The results of pre-planned interim analysis of data from a cross-sectional epidemiological study are presented in this work. Physical activity levels were self-reported during COVID-I9 social distancing. The Beck Anxiety and Depression Inventory was used to assess mental wellness. The Short Warwick-Edinburgh Mental Well-being Scale was used to assess mental health. Participants also

provided information on their sociodemographic and clinical backgrounds. Regression models were used to investigate the link between physical activity and mental health. This study comprised 902 persons, with 63.8 percent of women and 50.1 percent of those aged 35 to 64 years old. There was a negative relation between moderate-to-vigorous physical activity per day in hours and poor mental health after controlling for variables (OR = 0.88, 95 percent CI = 0.80–0.97). Moderate-to-severe anxiety symptoms,moderate-to-severe depression symptoms, and low mental health all yielded similar results. Those who were physically active had improved overall mental health in the current sample of UK individuals who were socially isolated due to COVID-19. The direction of the link cannot be deduced due to the cross-sectional nature of the current investigation.

According to the claims of Woods, J.A, et.al. (2020), the COVID-19 pandemic induced by SARS-CoV-2 has posed a serious threat to human society's health, economy, and way of life. Although the virus normally infects and infects lung and respiratory track tissue first, in severe situations, nearly all major organs in the body are now known to be negatively impacted, leading to catastrophic systemic failure in certain persons. Unfortunately, there is no effective treatment for this ailment at the moment. Pre-existing pathological disorders or comorbidities, such as advanced age, are a primary cause

of early death and increased morbidity and mortality. Immobilization from hospitalization and bed rest, as well as physical inactivity from prolonged quarantine and social isolation, can reduce organ systems' ability to resist viral infection and increase the risk of damage to the immune, respiratory, cardiovascular, musculoskeletal, and nervous systems. This article examines the molecular mechanics and dangers of COVID-19's "second wave" influence on the human body, as well as the impacts of aging, good nutrition, and regular physical activity.

Based on the study of Pagnano, K., & Langley, D.J., (2020), the viewpoints of two experienced female high school teachers on the use of exercise as a management tool were investigated in this study. The participants were chosen to represent one of two points of view: exercise was either a good and frequently utilized method for dealing with student misconduct, or it was an inappropriate and rarely utilized method. Multiple types of data were acquired and thematically examined using a qualitative methodology. Teachers' perceptions on the use of exercise to manage student misbehavior were framed by two conceptions about the nature of the sport participation experience. Both individuals may have combined their earlier sporting experiences into a growing life structure and then developed a managerial style that was congruent with that structure. Previous experiences with

high-intensity sports served to justify the use of exercise to regulate student misbehavior. Prior experiences with joy and engagement in sports, on the other hand, influenced the perception that exercise was an improper technique for dealing with student misconduct.

Related Systems

System for Workout Information Management

Power racks are a type of weight equipment that swimmers use to produce resistance when they swim away from a wall and toward the pool's center. The goal of this project is to provide a modular data system that can be installed on these devices to record and log quantitative data while they are in use. This data will be saved on a web server and made available to the user via a web application for analysis and visualization. Workout data can also be downloaded and interpreted offline, without having to use the online program. The data system should be waterproof, low-cost, scalable for a large number of users, and need minimal configuration and use. The system will be created for the women's swim team at the University of Akron (Archual, M., & Schweinsberg, E.E., 2017).

Android Mobile Application For Healthy Fitness

The application of optimal technology as a solution to human life problems has become the definition of creativity, and technology has

been available and developed to meet human requirements in recent years; this has not slowed down. People are continuously looking for methods to improve their physical fitness, and they need to be motivated to do so. As a result, we believe that our application will help Android device users handle this problem by assisting them in managing their health life system in terms of exercise and nutrition. The project offers videos for exercise and healthy meal preparation, uses Google Maps to find nearby sports clubs and health eateries, and calculates calories consumed or burned. It also offers a scale for the shape of the user's body. Prototyping model and Spiral are two approaches used in the development of this project. The project made use of the Android operating system to rapidly spread over the world, giving it access to a vast number of individuals. The majority of folks accepted the questionnaire application after providing a hundred persons (Saidam, A.Y., & AbuKwiak, Y.T., 2016).

GYMKit

The app's goal is to create a training model for people who need to practice workouts in a consistent manner. GYMKit is a smartphone application built on the Android platform. Regular exercise has numerous health and physical benefits that are difficult to overlook. The Application's primary goals are to promote health and physical

fitness. GYMKit is designed in such a way that the collection of implicit routines and those recommended to trainees by their instructors are combined into a single component. GYMKit is a type of hub or component for pre-built and customized fitness regimens (Abdulrahamon, M.T., 2016).

	FEATURES					
NAME OF SYSTEMS	Updates on Physical Activity	Provides Tutorial	Log-in Features	View Feature	Organized Activity Features	Web-Based System
System for Workout Information Management	√	**X**	√	√	√	√
Android Mobile Application For Healthy Fitness	√	**X**	**X**	√	√	**X**
GYMKit	√	√	√	√	√	**X**
School Fitness Online	√	√	√	√	√	√

TABLE 1. Related Systems

Synthesis

The School Fitness Online(SFO) is a website where the students of Tagum National Trade School can access the website. The program has a Log-in features that may help to filter the students if they are a true student of Tagum National Trade School. The system can monitor them on time since it can be accessed online. The system will also give a daily activity for those students who are user of the system to maintain the balance of their physical activities and make them healthy physically, mentally and emotionally. The website will also provide the tutorials of every steps or exercises that the system will

give to the students. It has a timer to test the capabilities of the students body and mentality. The teachers/admins web page are totally different from the students web page because the teacher will only monitor the daily physical activity of every students. The system have the sorting feature where the students of a same section will be grouped as one section and it will appear on the teachers web page.

The System for Workout Information Management or SWIM is a web-based system where the users can download the workout data offline. The SWIM and the SFO are different in terms of the features. The SWIM does not provide tutorial features since it was made to view workout data of the swimmers from University of Akron. Since it is also a web-based application, it has a log-in features because many users can access a website and the users needs a privacy of their data of their workout. It has almost the same features but different in objectives.

The Android Mobile Application For Healthy Fitness is an app that are managing the health life system of the user. It is totally different to the School Fitness Online because the goal of the SFO is to monitor, organize and to update the teachers about their students. The Android Mobile Application is different, its goal is to monitor the health of the possible user. It is also a mobile application while the SFO is a web-based system meaning it is only be accessed in browser of the laptops

or personal computers. The Android Mobile Application For Healthy Fitness does not have a feature that provides tutorial because the function of the application is only to monitor the health life system of the user. Since it is also a mobile application, it doesn't provide a Log-in or Sign-Up Feature.

GYMKit is a smartphone application built on the Android platform. It has almost the same features of the School Fitness Online but the difference is the SFO is a web-based system.

Chapter 3

METHODOLOGY, RESULTS AND DISCUSSION

Software Development Method Used

This project used a Lean Software Development Methodology. This software methodology has its continuous improvements, improves efficiency, reduces waste, and flexibility. This method is very compatible or appropriate for this project since the primary goal of this project are continues development/update, decrease coding/programming effort, reduce poor review/rates and defects (Majewski,2019).

Lean Development Methodology this Software Development model is more strategically focused than any other type of agile methodology.The early elimination of the overall efficiency of the development process certainly helps to speeds up the process of entire software development which surely reduces the cost of the project.

Figure 1. Lean Software Development Methodology

In concept stage, the researchers will brainstorm about the concept of the website, how they going to conceptualize the design and the code itself. The second stage is the discussing. Discussing takes place where the proponents and the panels discuss about the website, the functionality, and the output/result. Afterwards, the development stage of the website will be the next objective. In the development stage the programmers starts to implement the conceptualized idea, fixing the errors and finish the program before the deadline. And for the final stage, it will be the feedback of the website where the panels and the proponents discuss the result of the website. It can be good, bad(needs improvement), or perfect.

Systems Planning

The researchers discussed the problem with other members. It needed to brainstorm ideas to solve the chosen problem and make a plan on how to build a successful system. The researchers done their meeting on a Facebook group chat because of the COVID-19 Pandemic.

TABLE 2. Gantt Chart

Task Name	May 21	May 22	May 23	May 24	May 25	May 26	Jun 13	Jun 14	Jun 19	Jun 21
Planning										
Brainstorming										

Scheduling										
Proposing										
Coding										
Testing										
Presenting										

Table 2 shows the breakdown or timeline of work phases that needs to be accomplished by the researchers. On May 21, the researchers planned everything that they will do in the given time. On May 22 and 23, they started to discuss on how they will going to address the chosen problem and the strategies on doing the project. May 24, they scheduled the tasks that everyone will going to do. On May 25, they present the proposal on the assigned teacher and discuss what they brainstormed ideas in the last few days. May 26 up to June 13, the group started to code their presented structure of their website. June 14 up to June 19, the group tested their output if there is an error or a bug and they debug the errors on the program. On June 21, the group will present their final output.

System Analysis

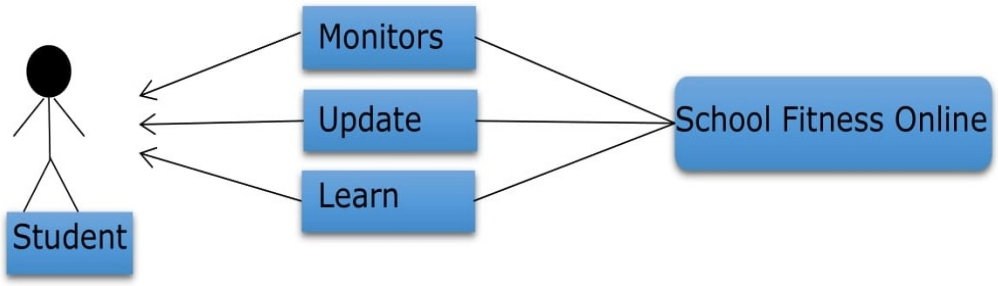


Figure 2. Case Diagram

Figure 2 explains on how the system will be useful to the students. The School Fitness Online can monitor the students, updates the current activities that they did and they will learn some steps on the physical activity that will be given by the system.

Systems Design

In making the system, the researchers used the following:

- Sublime Text - This is used to code HTML, CSS and JavaScript that has been used in creating the system.
- Xampp Control Panel - The Xampp Control Panel helps to program effectively the system because of its function that it should be used in connecting to the database that the researchers used.
- MyPhpAdmin - This is a website that can store the data that the system get from the sign-up page.

System Implementation

Once the system is up and running, the system should be installed in the computer with suitable software and hardware requirements. The installation duration will take not more than 5 hours. After installation, user training will follow that take up four (4) days

and it will be conducted at the Tagum National Trade School's Fitness Online involving the teachers that will be assigned to handle the fitness online system. The system has been set and finalize and there are some requirements that need to approve.

Hardware Minimum Requirements

1. Processor – Intel Core i3 7th Gen
2. RAM – Minimum of 4GB
3. Hard Disk – Approximately 500GB of hard disk space or bigger

Software Minimum Requirements

- Operating System (OS) – Windows 10 Pro 64-bit or newer is recommended.

Systems Security and Support

When the system is operational, there are some instances that an unexpected error or bugs might occur. When this happens, the researchers will address the problem based on the schedule in the table below.

Here are some of the unexpected errors that may encountered while using the School Fitness Online:

TABLE 3. System Security and Support

BUGS, ERRORS AND DEVELOPERS ISSUE	**WAYS TO CONTACT THE RESEARCHERS**
Unexpected interruption	On call or message on Facebook/ as needed
Updates	On call or message on Facebook/ as needed
Unexpected behavior of the system	On call or message on Facebook/ as needed

When one of the possible errors may occur, the team will always be approachable by messaging on Facebook or calling them on their cellphones or meet them personally. If unexpected interruption may occur, the researchers provide the contact details on the website. If there is an update, the team will announce it as early as possible to reduce inconvenience. And if the system did not behave well, you can contact the team via Facebook or text and call.

Requirement Analysis

Diagram 1 shows the traditional face to face classes system when it comes to physical activities in the Physical Education subject. Before when face to face classes are the mode of learning in every school, Tagum National Trade School also follows the traditional process of physical activity in Physical Education subject. Mostly in

Senior High School Department, they will bring index cards and then they will write their names and the activities of the the day. After they write the activities, they must do the activities within the short period of time. After they did the activities, they will be scored by their leaders but sometimes they will just fabricate their scores especially when the leader of a group and the member are friends. After the scoring of the index cards, the teacher will collect it and will be graded individually. It will take time to check all the index cards of every students especially when the teacher have many sections that he/she handled.

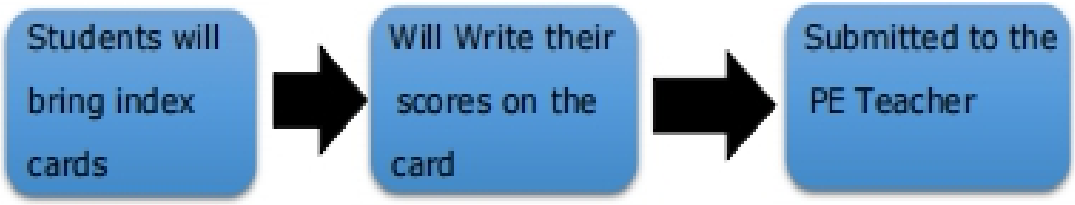


Diagram 1. Face to face Physical Activity Process

Diagram 2 shows on how the process looks like when you are using the School Fitness Online system. This is an web-based activities where the students will not require to gather on the school and it will be done online only. The purpose of this system is to be safe from the COVID- 19 Pandemic. In the diagram shows below the sign-up and log-in online where the students need to sign in or to register their name into the system to add it into the database of the School Fitness

Online. After they create their account, they can log-in into the web-based system to start their daily physical activities. After they do the daily physical activities, it will update to the teachers/admins tabled monitoring view where the numbers of the activities that the user will do is updated and will appear in the table. It is more easier for the teachers/admins to monitor their students, it is not time consuming compared to the traditional face to face system.

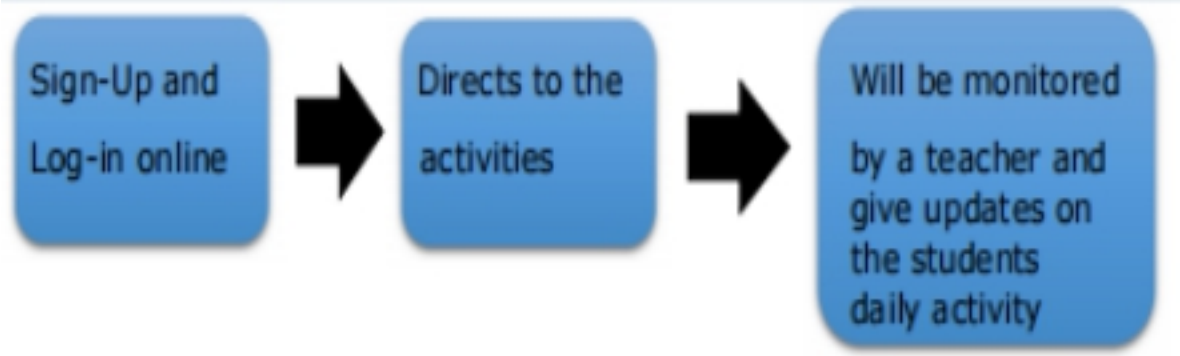


Diagram 2. School Fitness Online System Process

Requirement Documentation

The researchers and the teacher discussed the function of the system. The agreed functionality are the Log-in/Sign-up functionality, updates on students physical activity feature(this feature can only be accessed by a teacher or an admin), tutorial functionality, view feature and lastly the organization feature.

The Log-in/ Sign-up functionality can be accessed by both student, teachers and admins of Tagum National Trade School.

The update feature can only be accessed by the teachers and admins of Tagum National Trade School. The reason why only teachers and admins can accessed it is because the main goal of the School Fitness Online is to monitor, update and organize the physical activity of the students in Tagum National Trade School.

The tutorial functionality can be accessed by the students. The researchers add this functionality because there are some students that is not familiar with the exercise that might be given by the system.

The last feature that the teacher suggested is the organization feature, where the teacher will create their section and add their students on the list. The teacher also suggested that the researcher will also put a table where it can be updated when the students are done on the tasks and it will appear to that table the number of days that they finished the tasks.

The proponents are still open for suggestion and recommendations for the system.

Flow of the Software

As you can see in the figure 3, the flow of the system are stated. After the student logs in into the website, it will automatically direct to the webpage of the student which is their daily activities schedule and the progress page of their physical fitness. Their dta can be seen by

the teacher and it will update to the teachers webpage to monitor their daily physical activities. It also monitor the given tasks if they do it on-time. The teachers flow are different from the students flow since the goal of the system is to monitor the physical fitness activity of the student. Only teachers can see the tables of records of the students while the students will only do the given tasks.

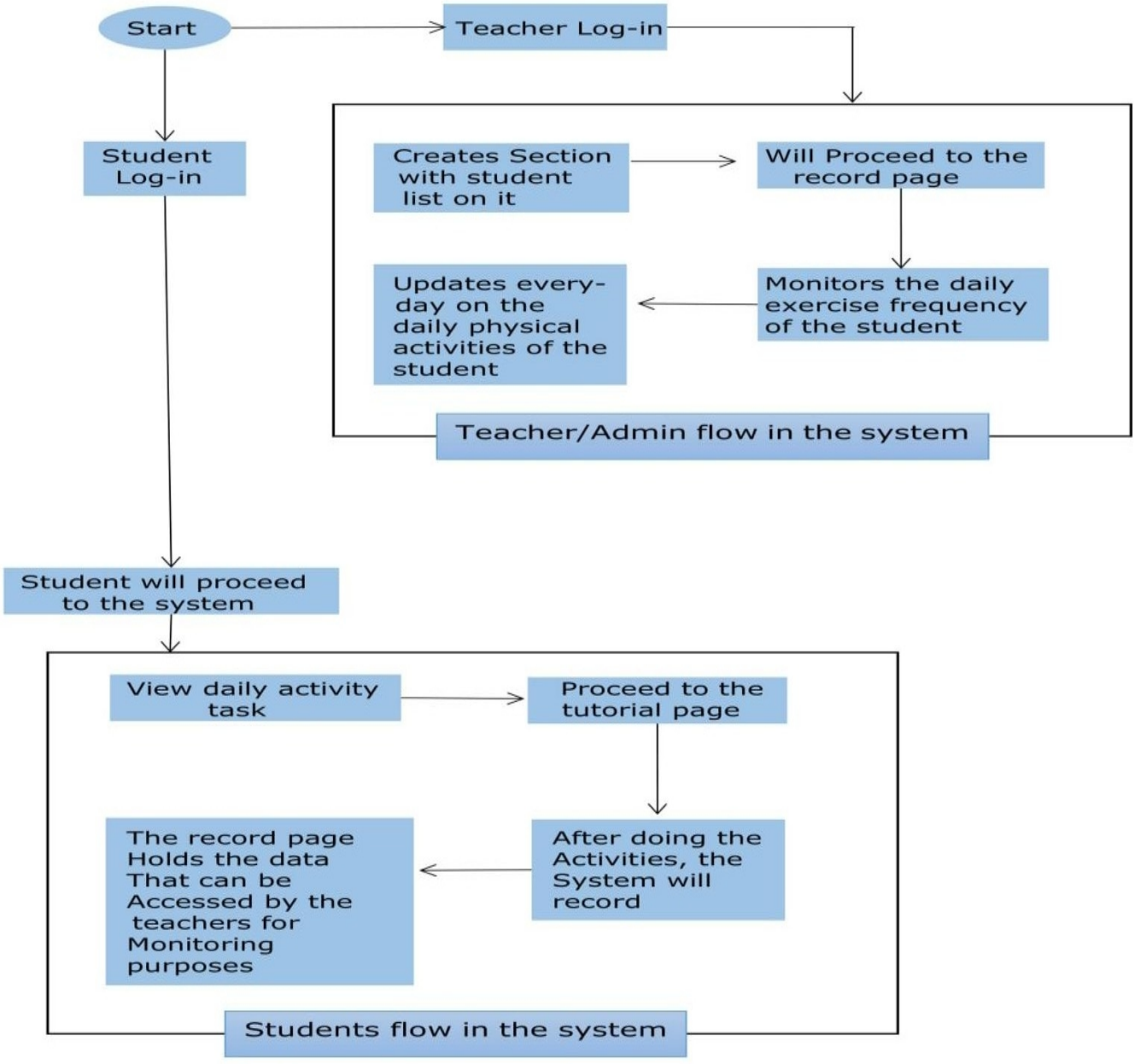


Figure 3. Flow of the Software

Implementation Plan

Table 4. Implementation Plan

Strategy	**Activities**	**Person Involved**	**Duration**
Approval from the principal office	Interview the Students, Teachers	Researchers, Teachers	1 day
System pilot testing	Dry-run for the system	Students, Teachers	1 week
System's installation	Installation of the system and required software and hardware	Researchers	5 hours
Information distribution	User manual	Teachers, Admins	2 hours
User training	Hands-on and lectures	Students, Teachers, Admins	3 days

The Table 4 show the implementation plan of the project. First, getting the approval from the students and the teacher while interviewed by the researcher in one day. The pilot testing will run the system where required the software and hardware, and then, distributing the information for the user manual. Lastly, user training for hands-on and lecture to make sure that the result of the School Online Fitness System.

Chapter 4

RECOMMENDATIONS

Not all website is perfect. Even the most expensive and the most popular software and websites are also lacks a features in their system. The system of School Fitness Online have also lacks of features. At some point, the researchers will also accept some suggestions and recommendations of every user that will use the website.

In the sign-up feature, everyone can sign up on the website as long as they have the link, it lacks of confirming stage. In the confirming stage, the admin or the teacher will confirm if that is a certified Senior High School student of Tagum National Trade School. These feature are important especially in the privacy of our school and and the privacy of anyone who are a user of the website.

In the list of exercise tasks feature, the system fixed the tasks and it lacks on the choosing the task feature instead of fixed tasks. The importance of choosing the task feature is to make the teacher choose what they want to give exercise tasks to their students.

Moreover, the recommendations to add on the system will be updated by the researchers and will update the system as soon as it will be implemented or coded as soon as possible.

REFERENCES

Abdulrahamon, M.T. (2016). *Development of a Mobile Workout Application.* Retrieved from https://www.theseus.fi/bitstream/handle/10024/118402/Abdulrahamon_Muftau.pdf;jsessionid=4FDB205F3BF03E97E1F6134335F3411E?sequence=1

Archual, M., & Schweinsberg, E.E. (2017). *System for Workout Information Management.* Retrieved from https://core.ac.uk/download/pdf/232681225.pdf

Botagariyev, T.A., et.al. (2017). *Studying the Effectiveness of Physical Education in the Secondary School .* International Journal of Environmental & Science Education 2017, Vol. 11, No. 10, 3575-3594. Aktobe, Kazakhstan.

Department of Education (2020). Official Statement. Retrieved from https://www.deped.gov.ph/2020/05/06/official-statement-2/

Elmagd, M.A. (2016). *Benefits, Needs and Importance of Daily Exercise.* International Journal of Physical Education, Sports and Health 2016. Vol. 3. Issue 5. Pages 22-27.

Jacob, L., et.al. (2020). *The Relationship Between Physical Activity and Mental Health in a Sample of the UK Public: A Cross-Sectional Study During the Implementation of COVID-19 Social Distancing Measures.* Mental Health and Physical Activity 2020, Vol. 19.

Kaur, H., Singh, T., Arya, Y.K., & Mittal, S. (2020). *Physical Fitness and Exercise During the COVID-19 Pandemic: A Qualitative Inquiry.* India. https://www.frontiersin.org/articles/10.3389/fpsyg.2020.590172/full

Majewski, M. (2019). Top 6 Software Development Methodologies.Planview.com

Pagnano, K., & Langley, D.J., (2020). *Teacher Perspectives on th Role of Exercise as a Management Tool in Physical Education.* Journal of Teaching in Physical Education. Vol. 21. Issue 1. Pages 54-75.

Saidam, A.Y., & AbuKwiak, Y.T. (2016). *Android Mobile Application For Healthy Fitness(AMAHF).* Retrieved from http://dspace.up.edu.ps/jspui/bitstream/123456789/62/1/Android%20Mobile%20Application%20For%20Healthy%20Fitness.pdf

Woods, J.A, et.al. (2020). *The COVID-19 Pandemic and Physical Activity.* Sports Medicine and Health Science 2020. Vol. 2. Issue 2. Pages 55-64

APPENDICES

APPENDIX A

LETTER OF PERMISSION TO CONDUCT THE STUDY

May 25, 2021

DR. MARIO S. GREGORIO
Principal IV
Tagum National Trade School
Apokon Road, Tagum City

THRU: **MS. ADELFA M. MIGUEL**
HT III, OIC-Assistant Principal
Senior High School Department
Tagum National Trade School
Apokon Road, Tagum City

Dear Dr. Gregorio,

Greetings!

We, the researchers are respectfully asking permission from your good office to allow us to administer you and present a program that is needed to the School Administration Office on May 25, 2021 under the selected School Administration personnel, primarily Ms. Adelfa M. Miguel. This is in line with out research paper entitled: School Fitness Online(SFO). The main objective of this project is to develop a school physical fitness system that may help the teachers especially those PE teachers to monitor the students online.

This humble endeavor is in partial fulfillment of the requirements for the subject Practical Research II in Tagum National Trade School.

Hoping for your approval for the success of this understanding. Very

Truly yours,

Layaoen, Renniel C.
Albores, Ameliza
Feguro, Ivan Lloyd
Figuro, Jhon Rose
Morre, Jhon Ric E.
Ruiz, Kaye Kharelle
Rosca, Joselle I.
Bermejo, Dan Steve

The Researchers

Noted by:

ALLYN JOY D. CALCABEN
Research Adviser

Approved by:

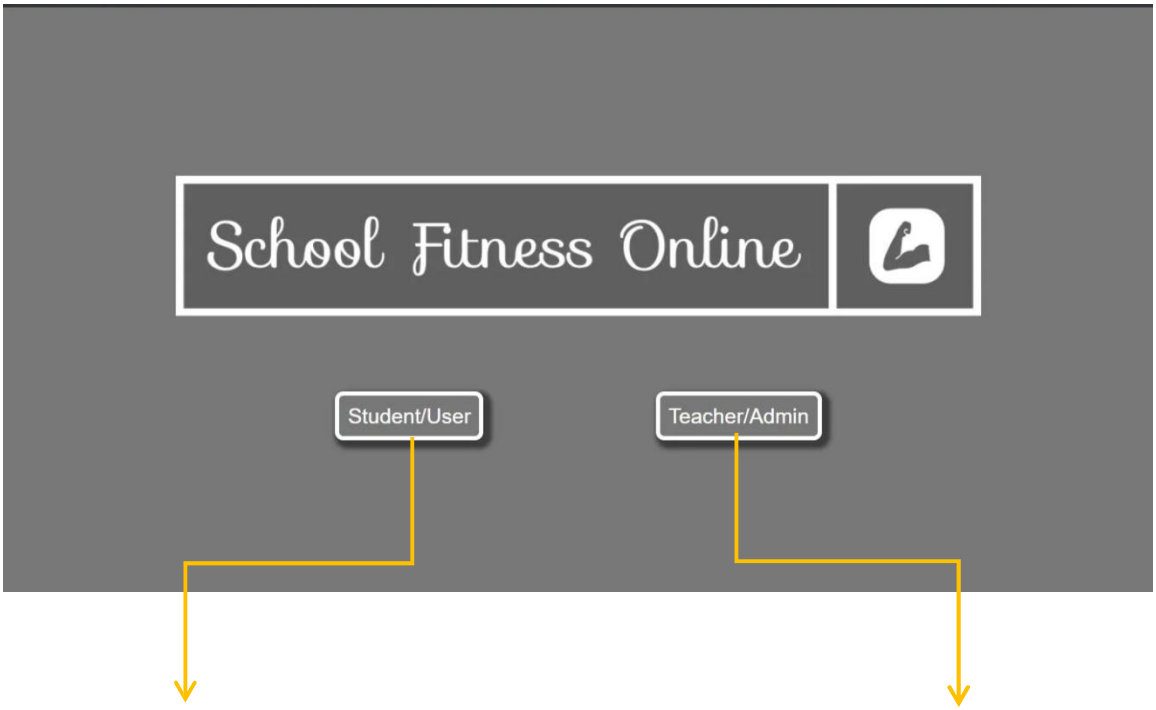
MS. ADELFA M. MIGUEL
HT III, OIC-Assistant Principal SHS. Dept.

MARIO S. GREGORIO
School Principal III

APPENDIX B

Manual

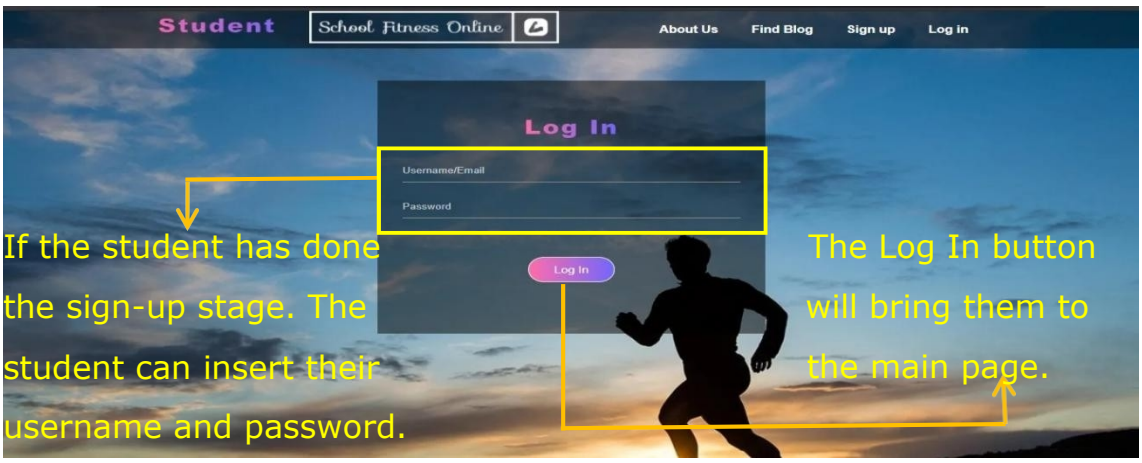
1. Start Up Page



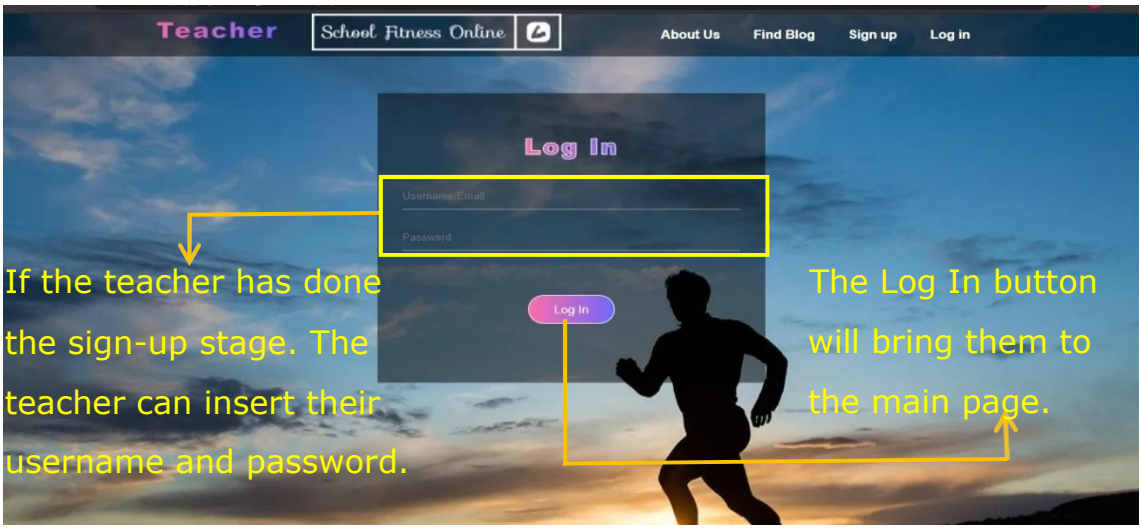
For students log-in or sign-up button

For Teacher/Admin button

2. Log-in Page

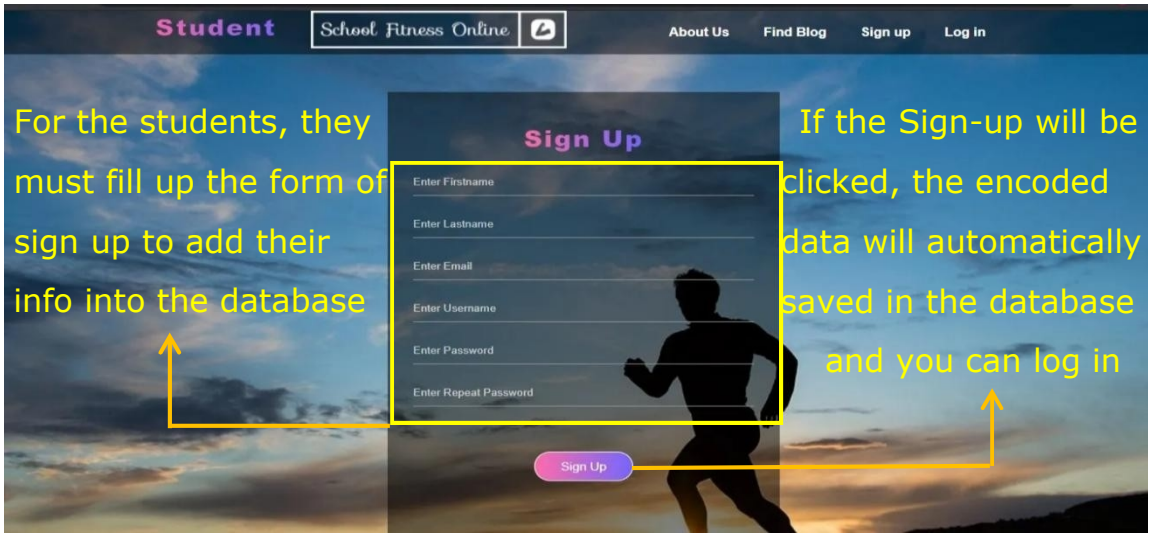


Students Log-in Page

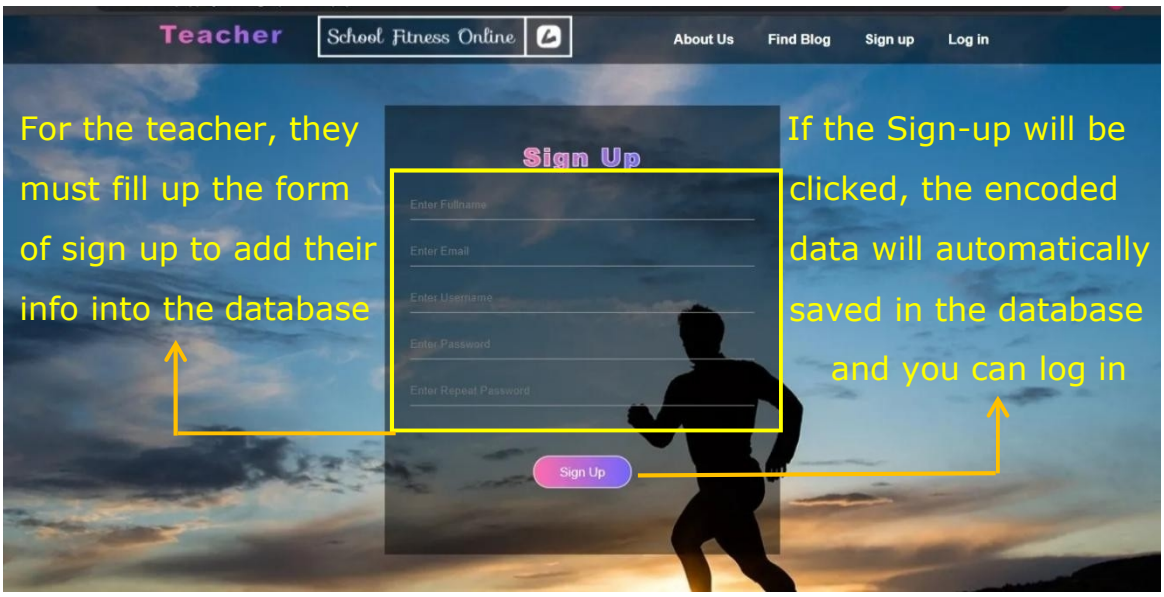


Teachers Log-in Page

3. Sign-Up Page

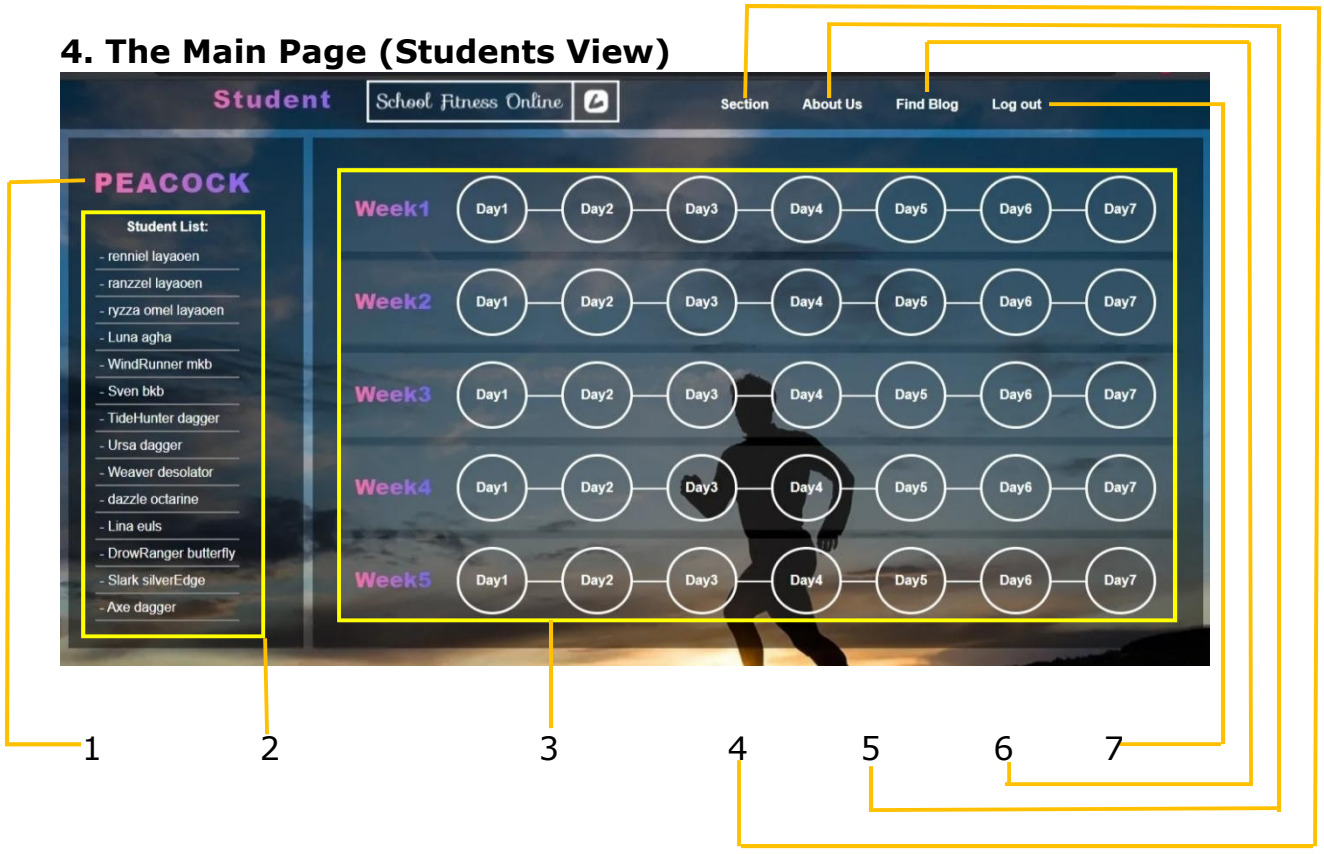


Students Sign-up Page



Teachers Sign-up Page

4. The Main Page (Students View)



1. The section for the student main page

2. The student list below the section
3. Weeks and days - If you clicked the Day 1, there will be a physical activity task that will be given to the user/student.

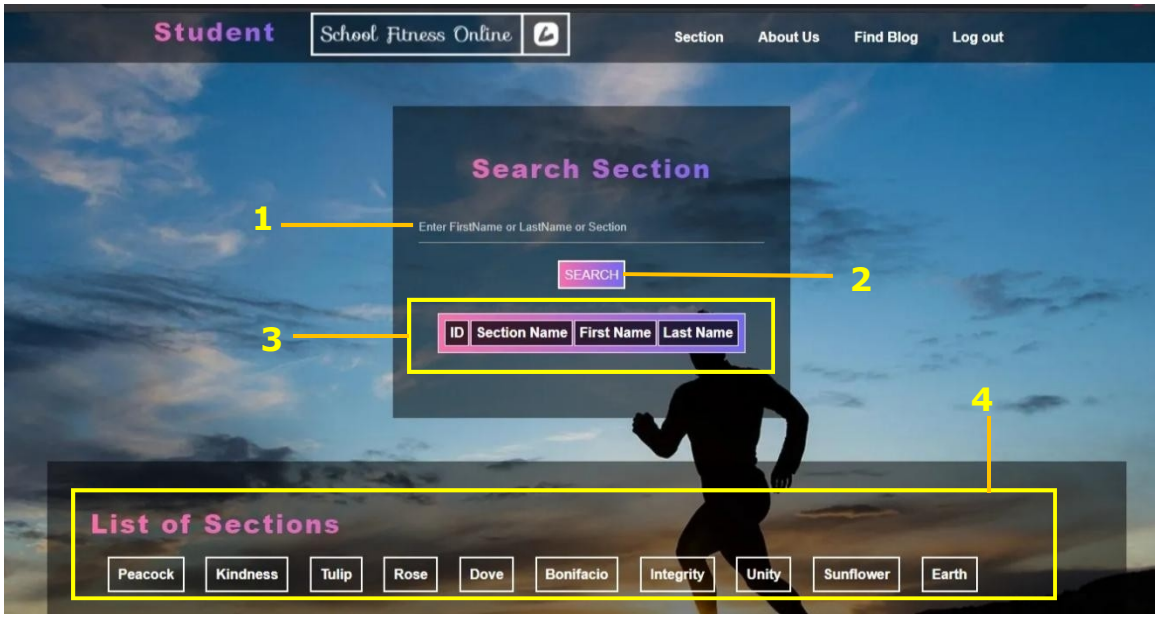
4. When the section are clicked, it will automatically display the search section page.

5. When the about us are clicked, it will pop-up the information of the developers and the researchers. Contact details are also be seen.

6. The Find Blog

7. When the Log out are clicked by the student or any user of the system pops out a clarification message if the user are sure to log-out. If yes, the data will be saved and it will go back to the start-up page.

5. Search Section Page



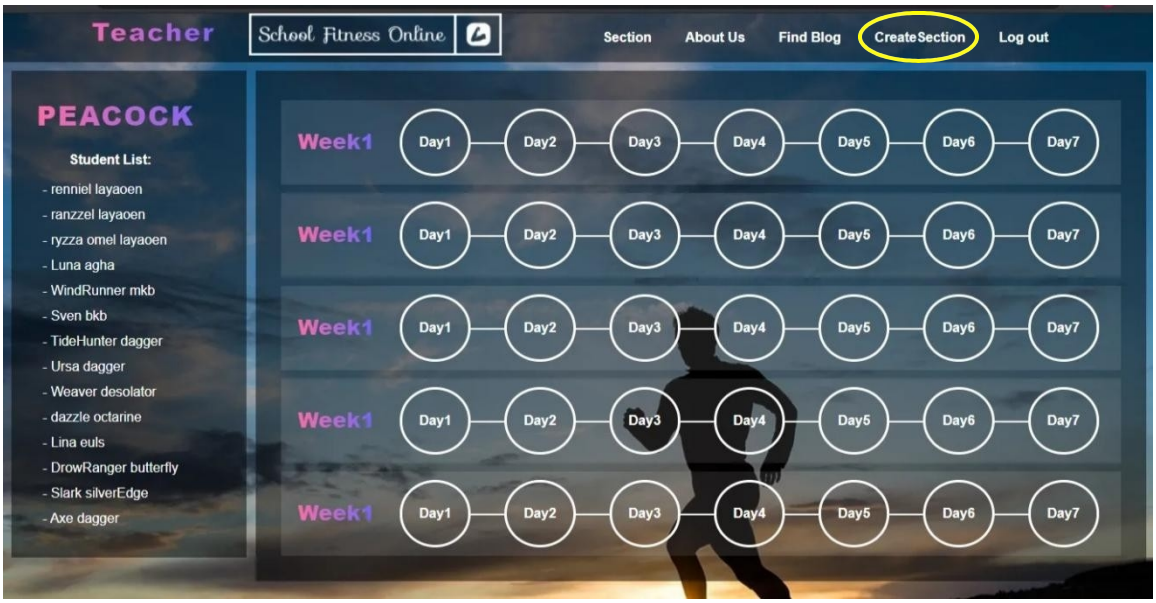
1. The user can type the section that he/she would like to search.
2. After the user type the section that he/she would like to search, the search button will search the section that the user put on the text area.

3. A table where the results will appear.

4. The website provides suggestions below the search box. The user can also click it and can view it.

Note: The teachers/admins search page and students search page are the same.

6. Main Page(Teachers/ Admins View)



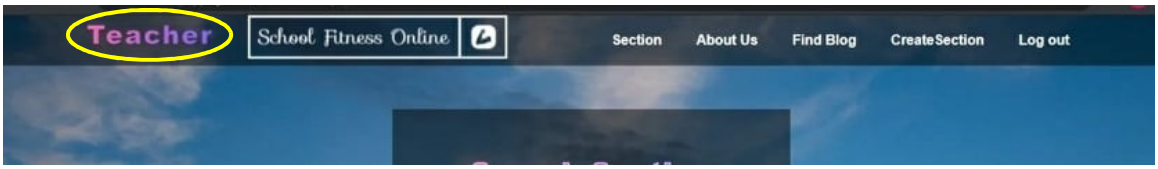
The students main page are similar to the teachers/ admins main page view. The function that only added is the Create Section. The Create Section will allow the teacher to create a section and also adds a students. Only teacher/admin can create a section. The purpose of the similarities of it is also to make the teachers physically fit and active.

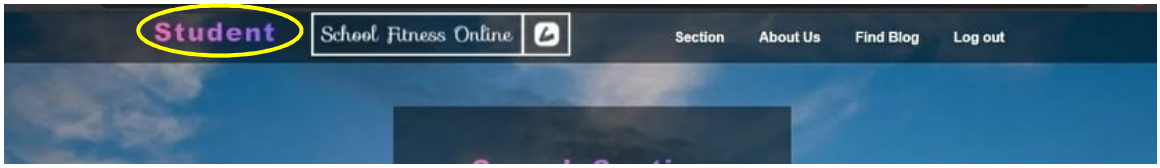
Note: There is a "View Progress" button below the student list to navigate the teacher to the Teachers Tabled Monitoring View.

7. Teachers Tabled Monitoring View

This is a tabled monitoring view that can be accessed only by the teacher or the admin. There are the names of the students at the left side of the table. And it will appear to the table if how many times in a week they done the given activity.

Note:





The encircled text will depend on the clicked button on the start up page. If the user will click the Student/User button, then the text will automatically appear "Student" and when the user chooses the Teacher/Admin button, it will appear "Teacher".

CURRICULUM VITAE

Renniel Codilla Layaoen

Prk.10 GreenVille Magdum, Tagum City

PERSONAL INFORMATION:

Date of Birth: October 16, 2003	Place of Birth: Tagum City
Age: 17 years old	Sex: Male
Religion: Roman Catholic	Citizenship: Filipino
Height: 5’5 ft.	Weight: 63 kls.
Father: Rommel C. Layaoen	Mother:Raquel C. Layaoen

EDUCATIONAL ATTAINMENT:

2019-2021	Tagum National Trade School Senior High School Apokon, Tagum City
2019	Magdum National High School Junior High School

	Magdum, Tagum City
2015	Mangga Elementary School
	Elementary School
	Visayan Village, Tagum City

ACHIEVEMENT:

Senior High School:	With Honors
Junior High School:	Completer
Elementary:	Elementary Graduate
SPECIAL SKILLS:	Computer Programming
	Web Designing
	Photo Editing

Ameliza Albores

Prk.8-Upper La Filipina Tagum City

PERSONAL INFORMATION:

Date of Birth: October 04, 2002	Place of Birth: Tagum City
Age: 18 years old	Sex: Female
Religion: Roman Catholic	Citizenship: Filipino
Height: 5’0 ft.	Weight: 45 kls.
Father: N/A	Mother: Amalia P. Albores

EDUCATIONAL ATTAINMENT:

2019-2021	Tagum National Trade School Senior High School Apokon, Tagum City
2015-2019	Liceo de Davao Agan Campus Junior High School Agan District, Tagum City
2009-2015	Liceo de Davao Agan Campus

Elementary

Agan District, Tagum City

ACHIEVEMENT:

Senior High School:

Junior High School: With Honors

Elementary: With Honors

SPECIAL SKILLS: Computer Programming

Web Designing

Joselle I. Rosca

Prk. 6-A Magdum, Tagum City

PERSONAL INFORMATION:

Date of Birth:June 8, 2003	Place of Birth: Agusan del Sur
Age: 18 years old	Sex: Female
Religion: Roman Catholic	Citizenship: Filipino
Height: 5’0 ft.	Weight: 50 kls.
Father: Eliezer M. Rosca	Mother: Rosie Rosca

EDUCATIONAL ATTAINMENT:

2019-2021	Tagum National Trade School Senior High School Apokon, Tagum City
2016-2019	Magdum National High School Junior High School

	Magdum, Tagum City
2015-2016	La Filipina National High School Junior High School La Filipina, Tagum City
2009-2015	Suaybaguio Riña Elementary School Elementary Suaybaguio, Tagum City

ACHIEVEMENT:

Senior High School:	
Junior High School:	Completer
Elementary:	Elementary Graduate
SPECIAL SKILLS:	Computer Programming Photo Editing Responder

Jhon Rose Figuro

Mesaoy, Davao del Norte

PERSONAL INFORMATION:

Date of Birth: July 31,2002	Place of Birth: Davao del Norte
Age: 18 years old	Sex: Female
Religion: Roman Catholic	Citizenship: Filipino
Height: 5’2 ft.	Weight: 40 kls.
Father: Zacharias Figuro Jr.	Mother: Rosalie J. Figuro

EDUCATIONAL ATTAINMENT:

2019-2021	Tagum National Trade School Senior High School Apokon, Tagum City
2015-2019	Mesaoy National High School Junior High School Mesaoy, New Corella Davao

	del Norte
2013-2014	Mesaoy Elementary School
	Elementary
	Mesaoy, New Corella Davao
	del Norte

ACHIEVEMENT:

Senior High School:	
Junior High School:	Completer
Elementary:	Elementary Graduate
SPECIAL SKILLS:	Computer Programming
	Web Designing
	Photo Editing

Ivan Lloyd Feguro

Mesaoy, New Corella Davao del Norte

PERSONAL INFORMATION:

Date of Birth: August 8,2002	Place of Birth: Davao del Norte
Age: 18 years old	Sex: Male
Religion: Roman Catholic	Citizenship: Filipino
Height: 5’8 ft.	Weight: 53 kls.
Father: Dionisio Feguro	Mother: Vivian Feguro

EDUCATIONAL ATTAINMENT:

2019-2021	Tagum National Trade School Senior High School Apokon, Tagum City
2019	Mesaoy National High School Junior High School Mesaoy, New Corella Davao

	del Norte
2015	Mesaoy Elementary School
	Elementary School
	Mesaoy, New Corella Davao
	del Norte

ACHIEVEMENT:

Senior High School:	
Junior High School:	Completer
Elementary:	Elementary Graduate
SPECIAL SKILLS:	Computer Programming
	Web Designing
	Photo Editing

Kaye Kharelle A. Ruiz

Curvada, Magdum, Tagum City

PERSONAL INFORMATION:

Date of Birth: February 27, 2003	Place of Birth: Davao City
Age: 18 years old	Sex: Female
Religion: Roman Catholic	Citizenship: Filipino
Height: 5’0 ft.	Weight: 59 kls.
Father: Ronald Matildo	Mother: Efamie Matildo

EDUCATIONAL ATTAINMENT:

2019-2021	Tagum National Trade School Senior High School Apokon, Tagum City
2016-2019	Magdum National High School Junior High School Agan District, Tagum City

2015-2016	La Filipina National High School Junior High School La Filipina, Tagum City
2009-2015	Suaybaguio Riña Elementary School Elementary Suaybaguio, Tagum City

ACHIEVEMENT:

Senior High School:	
Junior High School:	Completer
Elementary:	Elementary Graduate
SPECIAL SKILLS:	Computer Programming Web Designing Photo Editing Cooking

Jhon Ric E. Morre

Prk. Santo Niño Pagsabangan, Tagum City

PERSONAL INFORMATION:

Date of Birth: April 10, 2002	Place of Birth: Tagum City
Age: 18 years old	Sex: Male
Religion: Roman Catholic	Citizenship: Filipino
Height: 5’2 ft.	Weight: 39 kls.
Father: Ricardo E. Morre Jr.	Mother: Ruth E. Morre

EDUCATIONAL ATTAINMENT:

2019-2021	Tagum National Trade School Senior High School Apokon, Tagum City
2015-2019	Tagum City National Comprehensive High School Junior High School Mankilam, Tagum City

2009-2015	Pagsabangan Elementary School Elementary Pagsabangan, Tagum City

ACHIEVEMENT:

Senior High School:	
Junior High School:	Completer
Elementary:	Elementary Graduate
SPECIAL SKILLS:	Computer Programming Crafting Materials