

# **CAT 4 RESOURCE DEVELOPMENT**

**Group 4-009**

## **PROJECT WWORKOUT**

**Done by:**

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## **ABSTRACT**

Project WWorkout aims to create a resource package to help all secondary 4 students that are re-taking NAPFA improve on their NAPFA grades by at least 2 levels. The resource package consists of an e-booklet which will be a consolidation of all our workouts and sciences behind these exercises, an Instagram page where we post infographics made by ourselves that contains instructions to guide students on how to do the exercises on a weekly basis. Lastly, we have our very own website which not only has short simple information for readers to understand each particular workout, it also has pictures that perfectly illustrate the muscles involved in each exercise. In addition, in all 13 exercises, we have our own videos such that students can watch and learn the proper form of the exercise. There is also a forum page for us to receive feedback from the students on how to improve our project. In addition, we added information on healthy diet and proper warm up aspects to better help our students in reaching their desired target.

## **1 INTRODUCTION**

### **1.1 Rationale**

Over the years, the school has faced an issue where the number of Secondary 4 students retaking NAPFA is increasing in number. According to the HCI PE department, around 20-30% of the cohort has to take a retest. As for this trend, we feel that it is because students tend to overlook their physical fitness and focus on their academic goals, taking NAPFA lightly. Most students are also unaware of the proper techniques and ways to train for Napfa. In our school, students are only exposed to 1hr of PE every week and that is clearly not sufficient.

## 1.2 Objectives

The objectives of Project WWorkout are to

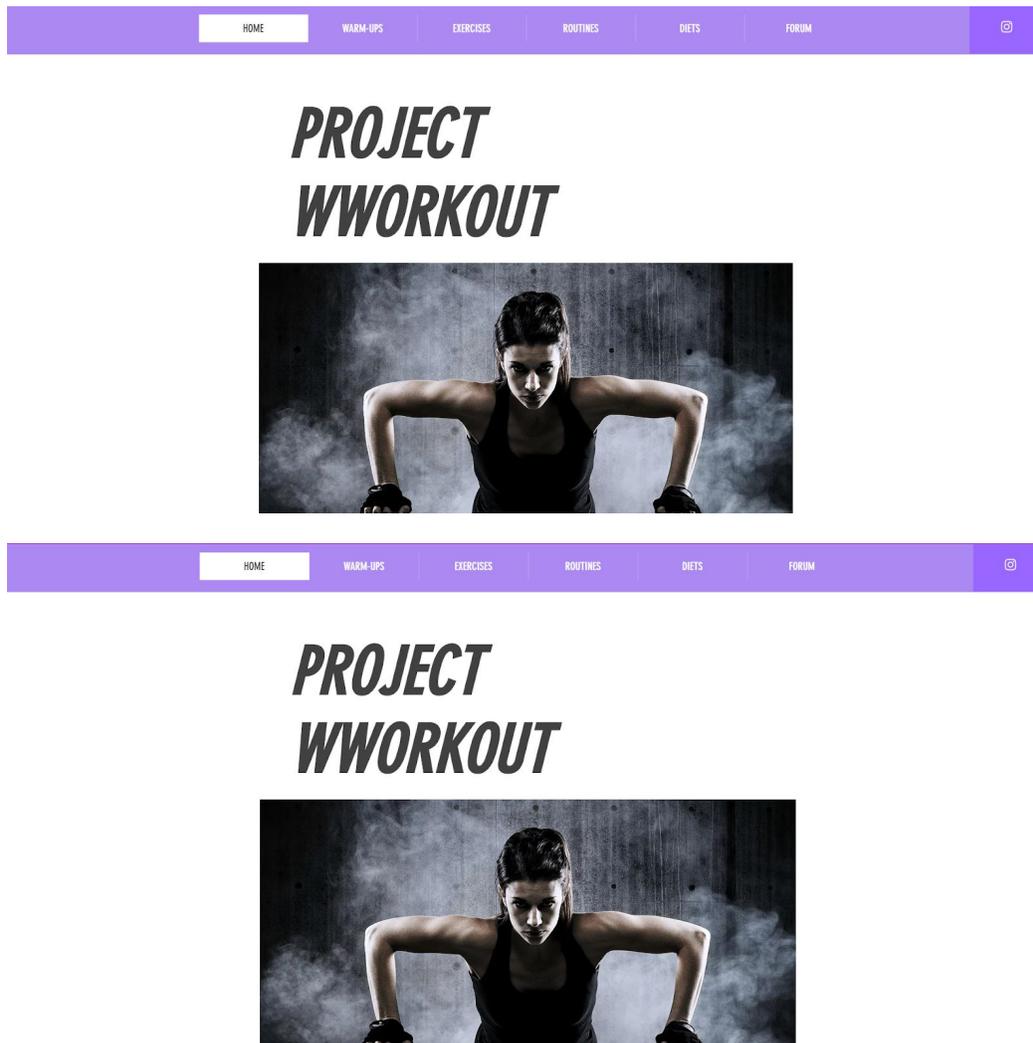
- improve the Health and Fitness of retakers of NAPFA
- have participants make an improvement of at least two grades

## 1.3 Target Audience

The targeted audience was Secondary 4 NAPFA retakers.

## 1.4 Resources

The resources created for this project was an integrated online platform comprising Workout Exercises, Warm up and Warm Down, Routine, Diet and a Discussion Forum.



# The Routine Page

## Basic Routines

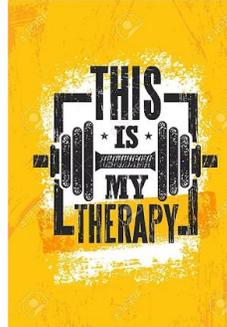
### Routine #1

#### List of Exercises:

1. Plank
2. Jumping jacks
3. Push ups
4. Squats
5. Sit ups
6. Mountain climbers

#### Steps:

1. Start with 20 jumping jacks to get your body warmed up
2. Change to push up position and do a total of 10 push ups
3. Switch and remain in planking position for 30 seconds
4. Do 15 squats
5. Do 15 sit ups
6. Immediately change to mountain climbers to effectively train your core. Do 15 mountain climbers
7. Repeat the whole cycle one more time and you have



# The Exercise Page

## Push-Ups

NAPFA Exercise this trains: Pull-ups

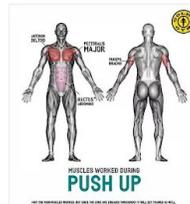
#### How to do?

1. Set your hands and feet a shoulder width apart.
2. Weight should be supported by your hands and your feet.
3. Steadily lower yourself until your elbows are at a 90 degree angle or smaller.
4. Then, pause slightly and then come back up until you are back in the same position.



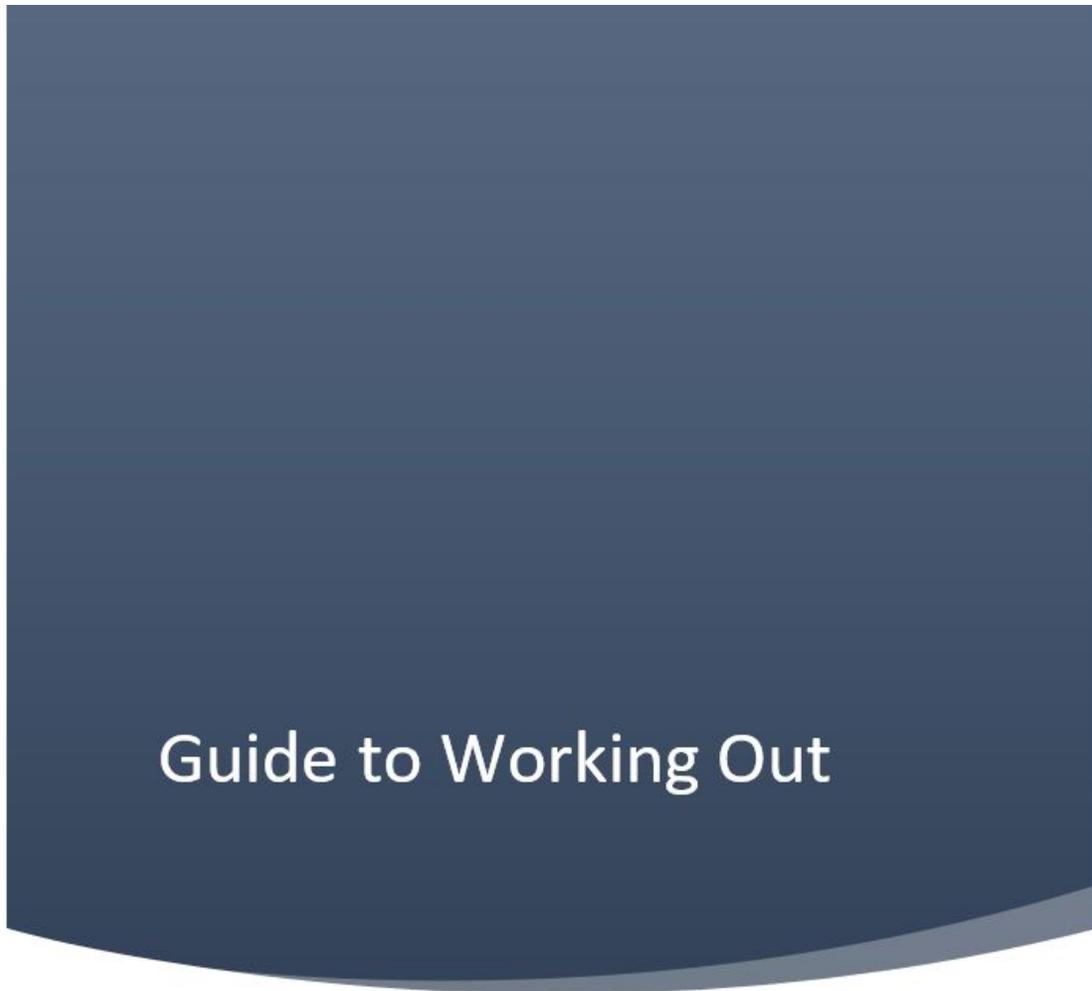
#### Benefits

Strengthens the upper body (primarily the chest, shoulders, and triceps, as well as the core and back muscles.)



### Video

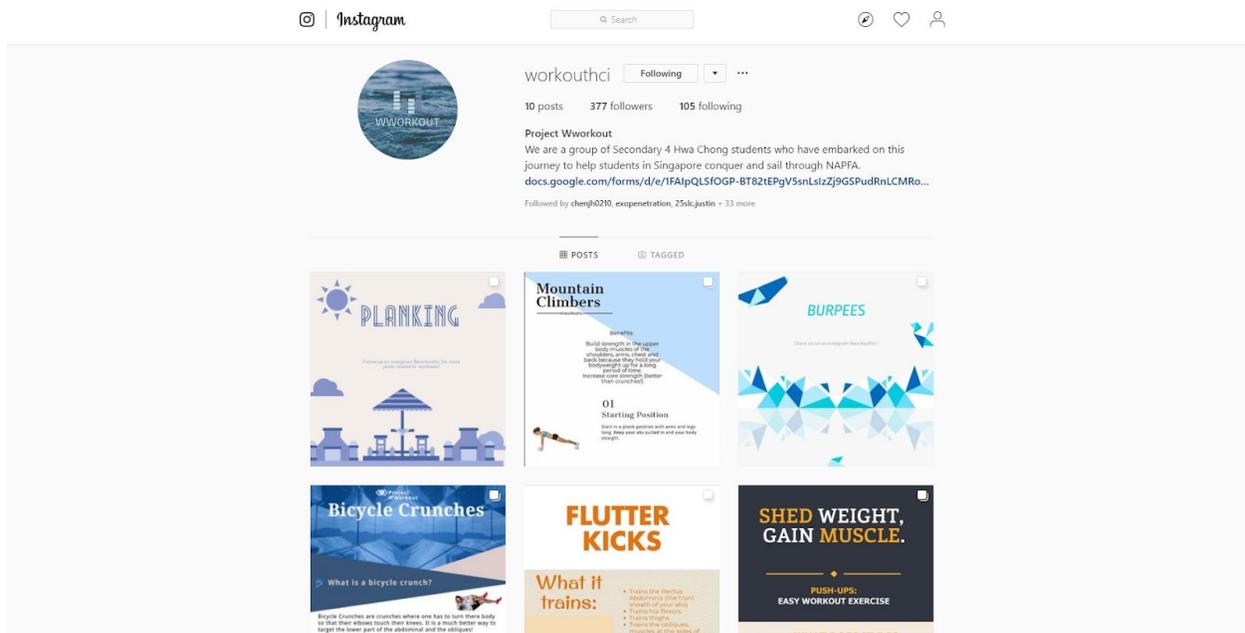
To add on, our resource package also consists of an E-booklet, a downloadable file that cover all the benefits and the science behind all the exercises that our project has introduced.



COMPLETE IN-DEPTH GUIDE TO WORKING OUT  
PROJECT WWORKOUT

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An Instagram Page that helps us to raise awareness on our project as well as provide participants with weekly informational post about different workout exercises.



## 2 REVIEW

Although some online websites were informational, there was just too much information for the viewers to absorb. Furthermore, there were almost no pictures on the website, making it look unappealing and gave a wordy impression to viewers. On the other hand, some websites were really concise and detailed in their information, but there was little coverage as they only focused on a few specific workout exercises. Last but not least, none of these websites specifically help students pass physical activity tests, unlike ours, making our project unique.

- **Your Fitness FAQ** <http://www.yourfitnessfaq.com/>
  - Informational, wide range of coverage
  - No pictures, wordy, does not provide any workout or warm up routine

- Interface is boring, too much information
- **Muscle and Fitness** <https://www.muscleanfitness.com/>
  - Too much information, difficult for users to understand
  - Wordy description of workouts
  - Pictures and videos are used as guidance, with detailed steps for each WorkoutToo much information, difficult for users to understand
- **Nerd Fitness**
  - Informational
  - Workouts are not detailed enough, requires a subscription fee
  - Too wordy and not visually appealing

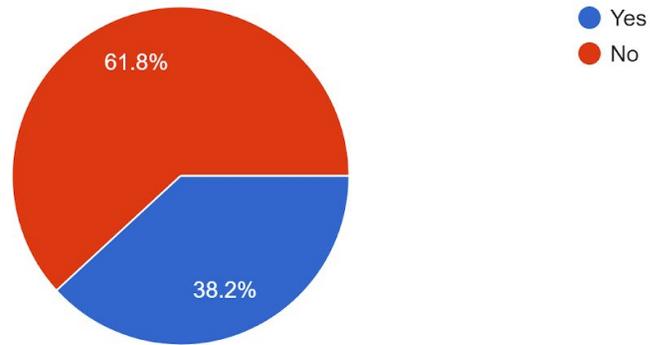
### **3 METHODOLOGY**

#### **3.1 Needs Analysis**

A needs analysis was conducted to ascertain the relevance of such a project. Firstly, a questionnaire was constructed to establish the respondents' position on NAPFA. Indeed, about two thirds of the 133 respondents who were secondary four students indicated that they faced problems when achieving their desired grades for NAPFA. They also showed interest in our resource package, confirming the feasibility of the project. Furthermore, we also asked for their preference towards the exercises that we will be including in our routines and as seen in the chart, most of them prefer sit ups pull ups and jumping jacks so our routines will focus more on these aspects to cater to their needs. Secondly, an interview was conducted with Ms Nim K. Sandhu, the zonal lead for the west from the Health Promotion Board to discuss the feasibility of the project. She confirmed that the project would be useful resources to help our target audience and gave valuable input on what to include and how to make it better.

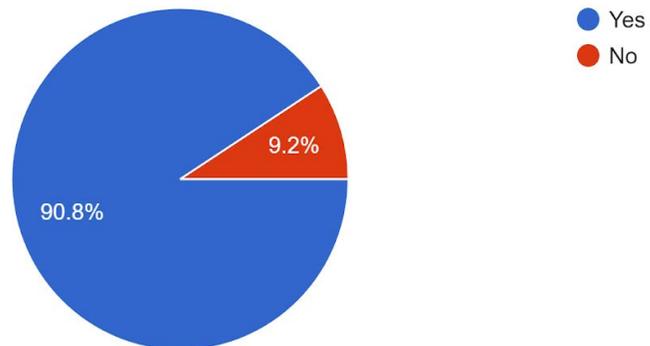
## Are you confident of attaining the grade you chose?

131 responses



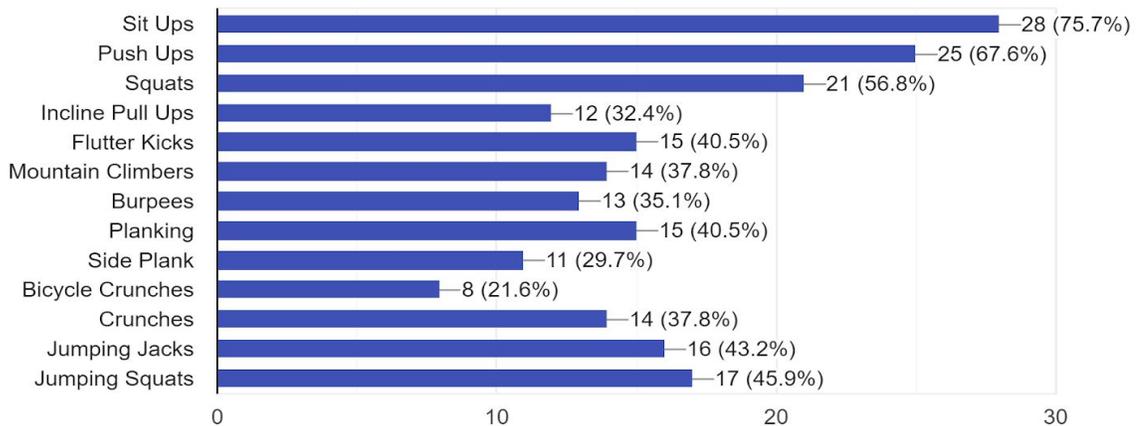
## Will you be interested in our project if we promise to give you a better workout routine exercise such that you...reach your desired grade more easily?

131 responses



Please select the exercises that you will like to see in the workout routines that we will be providing for you (Please select more than 3 exercises)

37 responses



### 3.3 Development of Resources

A review was carried on various workout exercises websites and information was collected from online resources, various PE teachers through consultations and was verified by Mr Tok Aik Lin, the Principal Consultant for PE/CCA. The information was then collated into Workout Exercises as well as Workout Routines. The routines (Basic, Intermediate, Advanced) are all authentic and we designed our own infographics and videos to allow the students to better understand the science behind the workouts. As stated in the Needs Analysis section earlier on, Ms Nim K. Sandhu gave us advice on ways to provide participants with an inclusive package that suited them, mainly splitting our routine into 3 levels. She was also kind enough to help us raise awareness of our project and was willing to provide mini incentives for participants who managed to improve their NAPFA scores after going through our programme.

### 3.4 Pilot Test

A pilot test was administered to 30 secondary four students. A product demo was conducted where the online platform was shown and their views were sought. In addition, three teachers from the PE/CCA department were also asked to evaluate the online platform. Recommendations from the two groups of people were incorporated into the fine-tuning of the online platform. Generally the feedback was positive and they all said that it would be useful to the target audience. This was especially crucial since our target audience had a limited time to try our resource package before retaking their NAPFA test. After finishing up the final touch-ups for our website, we proceeded on to work with 20 students, where they agreed to try our workout routines during the June Holiday and most of them chose to workout at home during their own free time.

## Post Survey Done



"Been trying out these routines during the june hols at home and it was really effective in strengthening my body,core especially.Really **appreciate their effort in categorising the workout difficulties** such that i am able to do at my own pace and ability.There were **many routines to choose from** and the routine targeting the core that i chose was proven effective and and the pain from the muscle aches after working out was real"~Joshua Tan 4h1

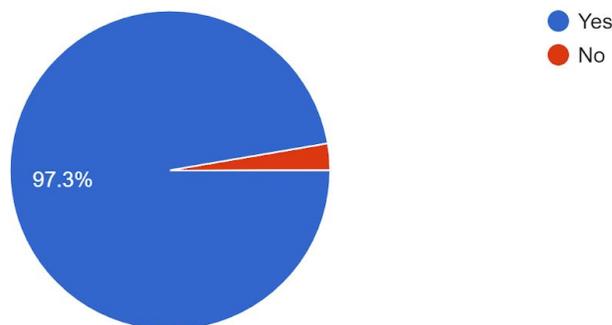
"I have been doing the workouts after every wushu training so as to improve my arm strength more effectively.Up till this point although it has only been a few weeks since i started trying the routines,I **have successfully managed to do one pull up** which i never thought i will be able to do! Also i can feel the increase in strength in my arm strength and I am really looking forward to progress from the basic to the intermediate routine!"~Dominic Toh 4A1

#### 4 OUTCOME & DISCUSSION

Although we have received many positive feedbacks from our respondents, a decision was made to create an offline platform (E-Booklet) which consisted of a consolidation of all our workouts and sciences behind the exercises such that it served as a more convenient and accessible guide for students to access any time they want. Also, the Health Promotion Board has showed interest in our project and was willing to help expand our target audience out of Hwa Chong if granted permission.

Will you be interested if we are going to create a booklet inclusive of all the workout routines catered for you?

37 responses



#### 5 CONCLUSION

Project WWorkout had been a challenging project to undertake as it required many hours of rigorous work to design the platform, capture the photos, collate the information as well as take the videos. Also, we had to constantly meet up with participants to ensure that our resource package really helped them to improve their fitness level. The talk with the representative of HPB was really beneficial as they provided many valuable advice on how we can improve our project and even offered incentives like notebooks and bookmarks. Lastly, the whole project journey had enabled

the group to develop many skills. Critical thinking, creativity were crucial during the initial stages of the project, especially during the designing stage as we had to design a resource package that was unique since there are hundreds of websites out there with similar contents. Persuasive skills were required especially in trying to get retakers for NAPFA to follow our workout routines. Perseverance, patience and determination were the key elements that enabled the completion of the project as these motivated the project group to believe that they had made the correct choice, tackle problems such as having insufficient time during the exam period. Nonetheless, the group managed to pull it off as a team and complete all the end products that we promised to show in the proposal evaluation round.

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