

# CAT 4 RESOURCE DEVELOPMENT

Grp4-40

## PROJECT ATHLETIC

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## **Abstract:**

Project Athletic is an integrated and user-friendly website which focused mainly on athletic injuries. The website was designed for the athletes to seek help from when they are injured. The website contains a comprehensive overview of the different kinds of injuries that may be sustained during athletic activities. The symptoms of different injuries are also stated in the website to allow easy identification of the injuries. The athletes may consult the website on what they are unsure of and they can also find the detailed explanation and the measures they can take to recuperate from injury and not to aggravate it. Furthermore, this website is primarily targeted for the athletes that might not have the knowledge about sport injuries as it might be their first few times encountering it. Hence, we hope that after consulting our website, the athletes will have a more in-depth understanding about their injuries and use the best approach to treat their injuries. In conclusion, this website is meant to be user-friendly and convenient for the athletes to use anytime anywhere..

## **1 Introduction**

### **1.1 Rational**

During sports activities, most athletes encounter injuries at different parts of the body. However, these athletes mostly do not know how to treat their own injuries due to their lack of knowledge of types and symptoms of injuries. Furthermore, without basic knowledge of injuries, these athletes may not know how to treat the injury to prevent swelling and reduce the severity of it. Therefore, most injuries sustained by athletes become chronic injuries. However with a interactive website athletes will be able to identify and start basic treatment of the injury upon its onset to prevent the injury from becoming aggravated and serious.

## **1.2 Objectives**

The objectives of project athletics are

- To give athletes detailed information on injuries
- Allow athletes to accurately identify their injuries
- To allow athletes to treat themselves safely at home
- Help the athletes to save the extravagant cost of consulting a specialised sports doctor because of a self-treatable injury.

## **1.3 Target audience**

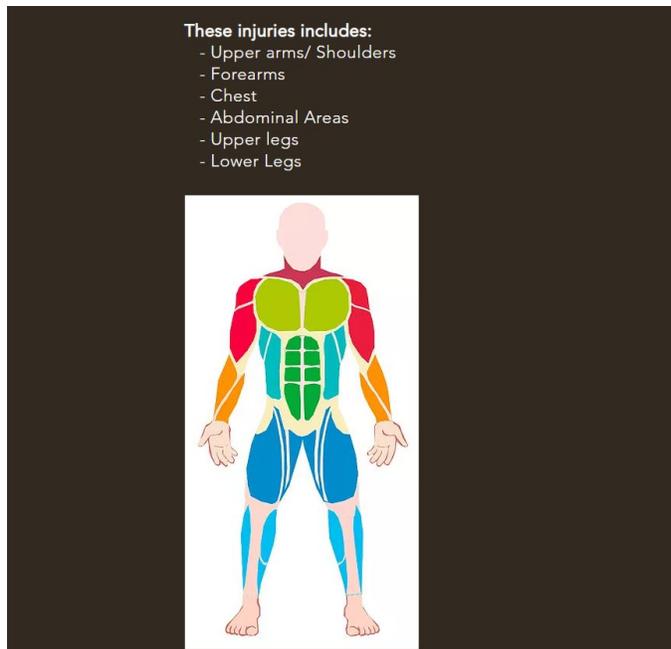
The targeted audience will be mainly on the athletes from sports CCA that Hwa Chong Institution has, and this includes:

- Basketball
- Volleyball
- Judo
- Fencing
- Badminton
- Track and field
- Other sports CCAs

## **1.4 Resources**

The resources created for this project is an integrated online website that has an interactive design allowing athletes to select which body part is injured. Upon selection, the user can view the different injuries associated to the particular body part. From each

injury description, the user can thus narrow down to one particular injury from his/her description of the injury and the reliable information on our website.



Here's the interactive part of the website. By clicking onto different body parts, it will be linked to different injuries.

## 2 Review

There are currently many websites on sports injuries, however, these websites are not concisely phrased and many of the websites are content heavy. Furthermore, these websites contain medical terms which can result in the user being unable to understand the information provided or even misunderstood the informations. Also, some of the websites do not provide adequate information for the reader to diagnose their injury accurately and instead have many advertisements recommending the user to buy products for sports injuries.

### **3 Methodology**

#### **3.1 Needs analysis**

A needs analysis was conducted to ascertain the relevance of such a project. We researched on the number of injuries sustained by athletes each year. Through 2004, there were 200,000 injury reports -- filed when an athlete misses a day or more of practice or competition -- which works out to about 12,500 injuries per year.( Thomas, J. (2017, September 11). That number has been relatively consistent over the years. This piece of data has shown the fact that sports injuries have been very prevalent amongst the athletes and is has indeed stress the importance of having a website that can help so many athletes. Especially those from the not so well-off families, as they cannot afford the extravagant cost of consulting a sports specialist.

#### **3.2 Development of resources**

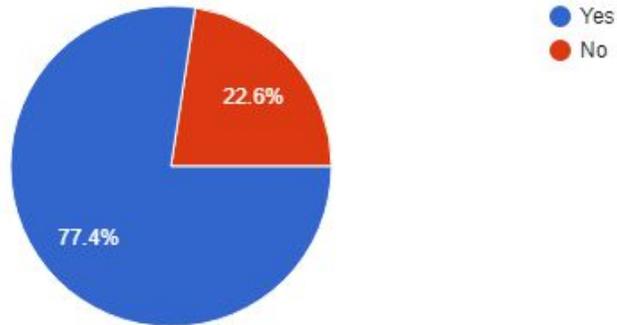
We consulted doctors from the Singapore Sports Medical Centre and sourced reliable and accurate information from sports and medical journals published in collaboration with sport doctors. We also sourced out information from reliable sports injury websites such as Harvard Medical Website, Healthline and many more.

#### **3.3 Pilot test**

A pilot test was carried out and administered to 30 students across the board. Its was carried out to acquire the reviews and opinions on our website ways to improve it.

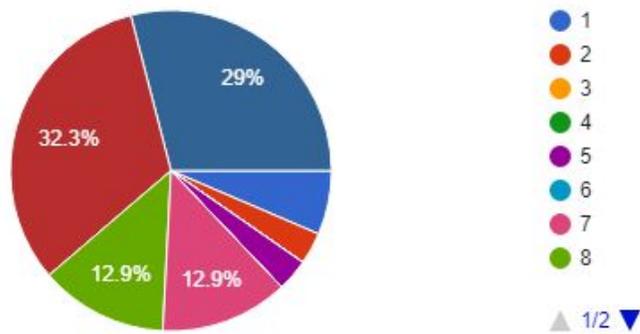
## Are you from a sports CCA or play sports

31 responses



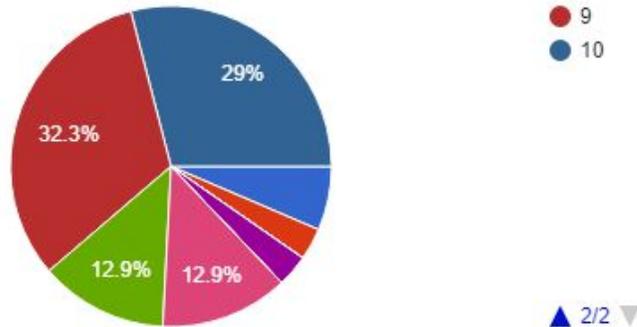
## how useful was the website on a scale of 1-10

31 responses



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31 responses



From the above pie charts, it was seen that the project was indeed found to be useful by majority of the students. However, some comments for improvement given by the respondents were:

- The website is too wordy
- The font of the website is hard to read
- The design could be improve

#### 4 Final outcomes and decisions

Based on the feedback, we went over and shorten the lengthy description of the injuries without compromising the accuracy and reliability of the information. Unnecessary information were removed and the information was classified into short, accurate and concise paragraphs. Videos and pictures were also added so the athlete can access more information at his/her fingertips.

## Hip Flexor Strain

### Overview:

A hip flexor strain represents a tearing in the muscles.

Grade I tear: a minor tear, in which only a few fibers are damaged. Grade II tear: a significant number of muscle fibers are damaged and you have a moderate loss of hip flexor function. Grade III tear: the muscle is completely ruptured or torn, and you usually can't walk without a limp

### Symptoms:

- Pain that seems to come on suddenly
- Increasing pain when you lift your thigh toward your chest
- Pain when stretching your hip muscles
- Muscle spasms at your hip or thigh
- Tenderness to the touch at the front of your hip
- Swelling or bruising at your hip or thigh area



### Treatment:

1. Rest the injury as it will have prevent discomfort
2. Ice the injury
3. After 72 hours from the injury use heat treatment
4. Take over the counter pain reliever like ibuprofen ( unless directed by doctor )

For more information watch the videos below:

<https://youtu.be/CXIf4TR2OKQ>

## 5 Conclusion

Project Athletic a rather complicated project that required hours of designing, research and consultation to ensure that the information provided is accurate and reliable yet concise. It was especially challenging to design and create an interactive webpage and also to come up with over 100 injuries given many commitments the group members faced. Despite that, the group still came together and helped out in making the website or collating the injuries. This project also honed the group's creativity and critical thinking skills especially during the initial stages of the project where we thought up the idea of an interactive website for the user to have an ease of access to the information. Perseverance and commitment was needed in the final stages of the project as had a limited amount of time to fine tune our description of the injuries and complete the website.

## **6 Acknowledgements**

We would like to thank the following people for their guidance, without whose help our project will not be a success

- Dr Chia Kok Pin for guiding and giving us invaluable advice
- Mr Yong Jong Shyan for guiding us through the designing and creation of the website and interactive components.
- All the respondents to our feedback forms and for the invaluable feedback provided

## **7 References**

Thomas, J. (2017, September 11). Frequency of Injury Among College Athletes.

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