# FAKULTI SAINS KESIHATAN UNIVERSITI TEKNOLOGI MARA



# NAME OF PROGRAM

## HS 244 - BACHELOR (HONS) OF PHYSIOTHERAPY

SUBJECT

ENT 600 - TECHNOLOGY ENTREPRENEURSHIP

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TOPIC OF ASSIGNMENT

TECHNOLOGY-BASED BUSINESS IDEA BLUEPRINT (MUL-EX)

DATE OF SUBMISSION 14<sup>th</sup> DECEMBER 2016



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#### **CHAPTER 1**

#### **1.0 EXECUTIVE SUMMARY**

Currently available exercise modalities for upper limbs weakness covering from shoulder joints to the fingers joints come with only one function in every modality. Furthermore all the modalities are in big size; need to be imported and expensive. With these limited function, as the therapist we need to cater a huge amount of patients with upper limb weakness' complications. All of these distractions contribute to the chief complaints in the workplace. One of the complaints is about the waiting time that patients have to bear to use every modality. After suffering the waiting time, all of these patients tend to drag their appointments and their healing process will be affected. However, all the strengthening treatments of the upper limbs weakness should be continued. Therefore, our team have innovatively designed a new product that integrates a multifunction exercise modality that concentrate more to the rehabilitation of the upper limb weakness. MULex, a multi upper limb exercises with multipurpose usages which can help to improve the strength of the upper limbs. With the MUL-ex presence, all the problems related with patients can be overcome. The unique features of MUL-ex are multifunction, portable, easy to handle, adjustable, small in size and comes with NMES (Neuromusculoskeletal Electrical Stimulation) to add value of strengthening the weakness area which focusing on the specific muscle of the upper limbs. Moreover, MUL-ex also comes with its own LCD monitoring screen in order to guide the patients on how to use it.

MUL-ex portrays the combination for rehabilitation of upper limb weakness which comprises the shoulder ladder and overhead pulley for shoulder joints strengthening, wrist and fingers exerciser. With the functions mentioned above, all the components in MUL-ex are created and resemble the existing modalities in the rehabilitation department. For example, the first component of MUL-ex the overhead pulley is taken from the remaining overhead pulley in the rehabilitation department which need to be fixed on the wall. Next, the ladders on the shoulder ladder are following the actual sum of thesteps in the presence shoulder ladder. Same goes to the wrists and fingers exerciser.MUL-ex can be used and operated in various positions. Because of its small size and lightweight, all the patients with upper limb weakness can buy and bring it home and continues their treatment at home without need to bare and suffer the long waiting turn time.

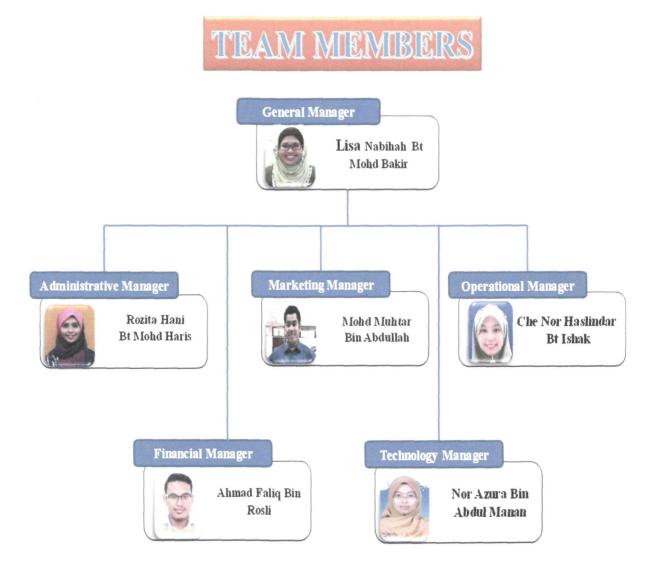
We target to sell MUL-ex utterly to the hospital in all over Malaysia. Our aim populations for marketing MUL-ex are upper limbs weakness patients mostly, health practitioners, clinicians, sports physicians, recreational and elite athletes, physiotherapists, rehabilitation specialists, occupational therapists, students and lecturing staff of physiotherapy and rehabilitation schools, and recreational outdoor enthusiasts. When MUL-ex has been widely accepted as part of main treatment modality in upper limb weakness rehabilitation, we estimate that MUL-ex will have a



high potential not only to be further marketed and commercialized in Malaysia, but also overseas, preferably starting with the Southeast Asia region withfocusing to the hospitals.

MUL-ex possesses few competitive advantages compared to other competitors' products. First, it is multifunction, portable and convenient to use compared to other pre-existing products that require patients to experienced long waiting time. Secondly, MUL-ex is sold with an affordable price because it is local made and not imported. The adjustable features contribute to the third competitive advantages of MUL-ex which it can be adjusted according to the patient's range of motions, height and conditions.

For efficient order and management of our company, we have already organized our team members as follows:





These are the positions considered to be integral as part of our management team:

- 1) General Manager
  - Setting objectives and determining in advance exactly how the objectives of the product will be met.
  - Organizing Delegating, coordinating tasks and allocating resources to make sure every task are divided to the person incharge according to their position.
  - Control the interchange and developing of data of the product between the team members.
  - Influencing the team members to work toward achieving objectives.
  - Reviews financial statement, sales and activity report and other data performances.
- 2) Administrative Manager
  - Responsible of the overall management organization in administration, planning, coordination, and control of manufacturing processes.
  - Ensures that products are produced efficiently at the right cost, time, and quality.
- 3) Marketing Manager
  - Responsible for overseeing the planning, development and execution of an organization's marketing and advertising initiatives.
  - Study the competitor strategy and provide a planning strategy to compete them.
- 4) Financial Manager
  - Evaluate financial reporting systems accounting and collection procedures, and investment activities, and make recommendations for changes to procedures, operating systems, budgets, and other financial control functions.
  - Deals with company's asset.
- 5) Operational Manager
  - Manage the production of product and services according to the quantity, quality, specification and time to the customer's requirement at the lowest.
  - Check the stock quantity and record in and out stock.
- 6) Technology Manager
  - Generate clear ideas and concepts in tendem with the copywriter.
  - Produce stretches, storyboards, roughs to visualize ideas