# NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY

**An Autonomous Institution under VTU, Belagavi**

A report on

## "Physiotherapy Centre Application"

Submitted for the course

**"Creating Interactive and Responsive Webpages"-17IS1362**

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## Certificate

Certified that the project work entitled "**Physiotherapy Centre Application**" has been successfully presented at **Nagarjuna College of Engineering and Technology** presented by **Shivani Singh S** bearing  USN 1NC17IS041**, Shri Vidya Bhatt** bearing  USN  1NC17IS042, **Shubha G** bearing USN 1NC17IS043,**S Lokeswara**  bearing USN 1NC17IS044,**Suman S** bearing USN 1NC17IS049   as the record of the project work carried out by us for the course "Creating Interactive and Responsive Webpages" during the III semester, is satisfactory and accepted.

**Signature of the Branch Co-ordinator**          **Signature of Course Co-ordinator**

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# CONTENTS

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**INTRODUCTION TO PHYSIOTHERAPY:**

"Physiotherapy is a dynamic profession, which uses a range of treatment techniques to restore movement and function within the body."

The aim of physiotherapy is to optimize someone's range of movement and function whilst at the same time reducing pain and preventing recurrence.



Some people may require one or two treatments; others may require longer term rehabilitation.

Physiotherapy is the assessment and treatment of physical health, and aims to correct disorders of the musculoskeletal system such as:

- Joint Pain
- Joint Stiffness
- Postural problems
- Back and neck pain
- Sports injuries
- Ligament sprains
- Arthritis
- Nerve injury
- Whiplash
- Post-operative problems
- Muscle weakness

Using diagnostic skills Physiotherapist provide advice and promote healing by applying techniques such as:

- Joint Manipulation / Mobilization
- Exercise
- Acupuncture
- Postural correction
- Massage
- Electrotherapeutic modalities

The purpose of treatment is to restore normal levels of activity and balance within the musculoskeletal System using rehabilitation rather than medication.

# PHYSIOTHERAPY TECHNIQUES

Your physiotherapist may be trained in hands-on physiotherapy techniques such as:

- Joint  mobilisation (gentle gliding) techniques
- Joint manipulation,
- Physiotherapy Instrument Mobilisation (PIM)
- Minimal Energy Techniques (METs)
- Muscle stretching,
- Neurodynamics
- Massage and soft tissue techniques

In fact, your physiotherapist has training that includes techniques used by most hands-on professions such as chiropractors, osteopaths, massage therapists, and kinesiologists.

## Physiotherapy Taping:

Your physiotherapist is a highly skilled professional who utilises strapping and taping techniques to prevent injuries.
Some physiotherapists are also skilled in the use of kinesiology taping.

## Acupuncture and Dry Needling:

Many physiotherapists have acquired additional training in the field of acupuncture and dry needling to assist pain relief and muscle function.

## Physiotherapy Exercises:

Physiotherapists have been trained in the use of exercise therapy to strengthen your muscles and improve your function. Physiotherapy exercises have been scientifically proven to be one of the most effective ways that you can solve or prevent pain and injury.

Your physiotherapist is an expert in the prescription of the "best exercises" for you and the most appropriate "exercise dose" for you depending on your rehabilitation status. Your physiotherapist will incorporate essential components of pilates, yoga and exercise physiology to provide you with the best result.

They may even use Real-Time Ultrasound Physiotherapy so that you can watch your muscles contract on a screen as you correctly retrain them.

## Biomechanical Analysis:

Biomechanical assessment, observation and diagnostic skills are paramount to the best treatment.

Your physiotherapist is a highly skilled health professional with superb diagnostic skills to detect and ultimately avoid musculoskeletal and sports injuries. Poor technique or posture is one of the most common sources of repeat injury.

## Sports Physiotherapy:

Sports physio requires an extra level of knowledge and physiotherapy skill to assist injury recovery, prevent injury and improve performance. For the best advice, consult a Sports Physiotherapist.

## Workplace Physiotherapy:

Not only can your physiotherapist assist you at sport, they can also assist you at work. Ergonomics looks at the best postures and workstation set up for your body at work. Whether it be lifting technique improvement, education programs or workstation setups, your physiotherapist can help you.

### Plus Much More..

Your physiotherapist is a highly skilled body mechanic. Every physiotherapist has expertise in certain injuries or condition. For advice regarding your specific problem, please contact your physiotherapist.

# Common Physiotherapy Treatment Options:

- Early Injury Treatment
- Sub-Acute Soft Tissue Injury Treatment
- Gait Analysis
- Biomechanical Analysis
- Proprioception & Balance Exercises
- Real Time Ultrasound Physiotherapy
- Soft Tissue Massage
- Brace or Support
- Electrotherapy & Local Modalities
- Joint Mobilisation Techniques
- Kinesiology Tape
- Prehabilitation
- Strength Exercises
- Stretching Exercises
- Supportive Taping & Strapping
- TENS Machine
- Video Analysis

# PROJECT SPECIFICATIONS

## 1.Add Physiotherapist information:

The details about the therapists who provide the various medical services to the patients need to be stored. This information includes the following: physiotherapist ID, therapist name, specialization, phone number, and rate.

## 2.Add Patient details:

The details of the patients who need to visit the physiotherapist should be stored. This information includes the following : patient phone number, patient name, problem description, and patient age.

## 3.Book Physiotherapist sessions:

Sessions should be booked for patients with specific physiotherapist. Note that on a given date and time, a physiotherapist can be treating only one patient. On the same lines, a patient can have only one physiotherapist session per day. The session booking information includes the following: session date, session start time, session end time, patient phone number, and physiotherapist ID.

## 4.Reporting-Patient-wise:

For the entered patient phone number and date(report date),display the details of the physiotherapy session taken by the patient-physiotherapist name, start time, end time and session cost(rate multiplied by the duration of session). If no date is entered, display the details of all the physiotherapy sessions the patient has had till date. The date, if entered cant be future date.

## 5.Reporting-Physiotherapist-wise:

For the entered physiotherapist ID and date(report date), display the details of the physiotherapy sessions conducted by the physiotherapist. The information to be displayed includes patient name, patient ID, start time, end time, and session cost. If no date is entered, display the details of all the physiotherapy sessions the patient has had till date. The date, if entered cant be future date.

# PHYSIOTHERAPY CENTRE APPLICATION DETAILS:

**1.Physiotherapist ID:** ID of the physiotherapist(Mandatory)

**2.Physiotherapist Name:** Name of the physiotherapist(Mandatory)

**3.Specialization:** Field of specialization of the physiotherapist(Optional)

**4.Therapist Phone Number:** Phone number of the physiotherapist(Mandatory) if the number of digits entered are not 10, display an appropriate error message and promote the user to re-enter the data for this field.

**5.rate:** The hourly cost of a session with the physiotherapist. It should be a positive integer value.

**6.Patient Phone Number:** Phone number of the patient(Mandatory). If the number of digits entered are not 10, display an appropriate error message and promote the user to re-enter the data for this field.

**7.Patient Name:** Name of the Patient(Mandatory)

**8.Problem Description:** Description of the patients problem for which the session is being booked(Mandatory)

**9.Patient Age:** The age of the patient(Mandatory)
 This must be positive integer value greater than 2

**10.session Date:** The date when the session is held(Mandatory)
  This date can be in the past, present or future.

**11.Session Start Time:** The time when the physiotherapy session starts for the patient(Mandatory) It should be in HH:MM format.

**12.Session End Time:** The time when the physiotherapy session ends for the patient(Mandatory) It should be in the HH:MM format. It should be greater than the corresponding session start time.

**13.Session Cost:** This is calculated value and is arrived by multiplying the rate of the session and the duration of the session. The duration of the session is obtained as the difference between the Session end time and Session start time.

**Generic Error Message:**

1. If a mandatory field is left blank r has only spaces, display the error message **"This field cannot be left blank".**

2. If an alphabet is entered in a number only field(like item quantity, telephone number), display the error message **"Please enter only numerals".**

# PART-B

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Project starts with the **HTML5** doctype at the beginning of the page, along with the lang attribute and the character set, title **"Application form"** and the body part of the code starts with heading1="Physiotherapist application form" with a paragraph **"Get back your active life"**. Both the paragraph and heading is applied with background-color: blue and text color: white, **<div class="jumbotron text-center">, <div class="jumbotron fluid">.** heading 2 with "Fill in application form" is applied with text color: black, placed in center.<div class="container-fluid"> for full width container, spanning the entire width of the viewport And separated by a thematic break **hr**.

A vertical form is created with 13 input fields and 1 submit button

1. First input field is applied with **<div class="form-group">,** container for input and label. Label "physiotherapist ID", Input **"type=number",** added **class="form-control", id="physiotherapist ID",** minimum 1 to maximum 25, **placeholder="Enter ID"** with required(Mandatory).if the field is left blank an appropriate message is shown to fill the field, and if entered number is not between 1 to 25 then appropriate error message is shown to enter the number between 1 to 25. break

2. Second input field is applied with **<div class="form-group">**, container for input and label. Label "Physiotherapist Name", Input **"type=text"**, added **class="form-control"**, **id="physiotherapist name",** with minimum length 2, **placeholder="Enter physiotherapist name"** with required(Mandatory). if the field is left blank an appropriate message is shown to fill the field, if the entered number is not of minimum length 2 then an error message is shown to re-enter the data. Break

3. Third input drop-down list is applied with **<div class="form-group">**, container for input and label. Label "Specialization" , Select added **class="form-control", id="specialization"**, In option
   - Spine and Joints Manipulation
   - Osteopathic/Chiropractic Manipulation
     Cardio-Respiratory Physiotherapy

- Paediotric and Gynae Physiotherapy
- Posture and Ergonomics Physiotherapy
- Sports physiotherapy
- Ortho physiotherapy
- Neuro physiotherapy
- Dry Needling Physiotherapy

It is with required field(Mandatory), if the field is left blank an appropriate message is shown to fill the field.

4. Fourth input field is applied with **<div class="form-group">**, container for input and label. Label "Therapist phone number", input **"type=number"**, added **class="form-control"**, **id="Therapist phone number",** minimum number of digits entered are 10, **placeholder="Therapist phone number"**, if entered number are not 10 then an appropriate error message is shown with 10 digits numbers for this field, if the field is left blank an appropriate message is shown to fill the field, It is required(Mandatory). Break

5. Fifth input field is applied with **<div class="form-group">,** container for input and label. Label "Rate", input **"type=number"**, added **class="form-control"**, **id="Rate"**, entered number should be positive integer value, this field is with required(Mandatory), if the field is left blank an appropriate message is shown to fill the field. break

6. Sixth input field is applied with **<div class="form-group">**, container for input and label. Label "Patient phone number", input **"type=number"**, added **class="form-control"**, **id="Patient phone number",** minimum number of digits entered are 10, **placeholder="Patient phone number"**, if entered number are not 10 then an appropriate error message is shown with 10 digits numbers for this field, if the field is left blank an appropriate message is shown to fill the field, It is required(Mandatory). Break

7. Seventh input field is applied with **<div class="form-group">**, container for input and label. Label "Patient Name", Input **"type=text"** added **class="form-control"**, **id="patient name"**, with minimum length 2, **placeholder="Enter patient name"** with required(Mandatory). if the field is left blank an appropriate message is shown to fill the field, if the entered number is not of minimum length 2 then an error message is shown to re-enter the data. Break

8. Eighth input field is applied with **<div class="form-group">**, container for input and label. Label "Problem description", Input **"type=text"**, added **class="form-control"**, **id="problem description"**, **placeholder="problem description"** with required(Mandatory).if the field is left blank an appropriate message is shown to fill the field. Break

9. Ninth input field is applied with **<div class="form-group">**, container for input and label. Label "Patient age", Input **"type=number"**, added **class="form-control"**, **id="patient age"**, minimum 2, **placeholder="patient age"** with required(Mandatory).if the field is left blank an appropriate message is shown to fill the field , if the entered age is not greater than 2 then a error message is shown to fill the field with greater than 2. Break

10. Tenth input field is applied with **<div class="form-group">**, container for input and label. Label "Session date", Input **"type=date"**, added **class="form-control"**, **id="Session date"**, **name="name", placeholder="Session date(dd/mm/yy)"** with required(Mandatory) field. if the field is left blank an appropriate message is shown to fill the field. Break

11. Eleventh input field is applied with **<div class="form-group">**, container for input and label ="Session start time", . Label "Session start time", Input **"type=time"**, added **class="form-control"**, **id name="name"**, **placeholder="Session start time"** with required(Mandatory) field. if the field is left blank an appropriate message is shown to fill the field. Break

12. Twelfth input is applied with **<div class="form-group">**, container for input and label. Label "Session end time", Input **"type=time"**, added **class="form-control"**, **id="Session end time"**, **name="name", placeholder="Session end time"** with required(Mandatory) field. if the field is left blank an appropriate message is shown to fill the field. Break

13. Thirteen input is applied with **<div class="form-group">**, container for input and label. Label "Session cost", Input **"type=number"**, added **class="form-control"**, **id= "Session cost"**, **name="name", placeholder ="Session cost"** with required(Mandatory) field. if the field is left blank an appropriate message is shown to fill the field. Session cost is obtained by calculated value and is arrived by multiplying the rate of the session and the duration of the session. The duration of the session is obtained as the difference between the session end time and session start time.

All label contains are of **color: black**, **font-family: sans-serif**, **font-size: 18px**, **font-size: bold**. And separated by a thematic break **hr**.

14. Fourteen Submit button is applied with **<div class="button">**, button **"type=submit"**, **class="btn btn-success", margin-left=150px**, with **color: green.**
Close of form, body and html.