VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Belgaum-590018

Mini Project Report

on

"TELE REHABILITATION SYSTEM"

Submitted in partial fulfilment of the requirements for the
First Semester of the Bachelor of Engineering Degree, towards the completion of the **Mini Project** under the **Innovation & Design Thinking Laboratory**,
Department of Basic Sciences.

by

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CERTIFICATE

This is to certify that the File Structures mini project entitled "Collision Resolution Using the Quadratic Probing Method" has been successfully carried out by Darsh Kumar Choudhary (E-25), Dhanush Panta(E-26), and Dhruva Kantan N T (E-27), Bonafide students of **CMR Institute of Technology.**

The project is submitted in partial fulfilment of the requirements for the First Semester of the Bachelor of Engineering Degree, towards the completion of the Mini Project under the **Innovation & Design Thinking Laboratory, Department of Basic Sciences.**

It is further certified that all corrections and suggestions indicated during the Internal Assessment have been duly incorporated in the project report submitted to the departmental library. This File Structures mini project report has been reviewed and approved as it satisfies the academic requirements prescribed for the said degree.

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Signature of Guide   **Signature of HOD**

Dr. Harish sir   **Dr. Raveesha K H**

Asst. Professor   **HOD,**

Dept. of Basic Mechanical Engineering   **Dept. of Physics, CMRIT**

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Name of the examiners   Signature with date

1.

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Abstract

Concept: A tele rehabilitation system delivers therapy remotely, and when built in **Java**, it provides a robust, platform-independent framework for patient–physician interaction.

❖ Core Features:

- o **Direct physician interaction** via secure video conferencing modules coded in Java.
- o **AI assistance** integrated to analyze patient data, track progress, and suggest personalized exercise routines.
- o **Real-time monitoring** using sensors or wearable devices, with AI interpreting the data for physicians.
- o **Interactive dashboards** coded in Java for patients and doctors to visualize recovery progress.

❖ AI Role:

- o Automates routine assessments (e.g., posture detection, movement accuracy).
- o Provides intelligent feedback and reminders to patients.
- o Supports physicians by highlighting anomalies or predicting recovery timelines.

❖ Benefits:

- o Seamless communication between patient and physician.
- o Personalized rehabilitation plans through AI-driven insights.
- o Scalable and secure system thanks to Java's portability and reliability.