

Methodology : We have shoulder dislocation rehabilitation system by doing certain exercises to avoid complication and allow faster healing.– Then send it to the mobile app if the device is close to 20 degrees of before limited safe range the device will make a buzzer sound for warning and if the device is close to 10 degrees of the safe available range will make another buzzer sound and the same at the limited range.The mobile app will start with a splash screen to show the app logo and load some data, and then the user will be navigated to a home screen with all levels to start with and connect to the device The IOT device will be powered by a chargeable LI-PO battery and a charging circuit.– The mobile app will show him his progress in the training, and the last status of his arm, and the warning will be shown as a notification in the ap [Image 623.jpg] ?The Architecture of system : For IOT system control, the software will be created by esp32, firebase services will handle the server side, and flutter will create the mobile application.Hard Ware of system components : – Gyroscope sensor (mpu6050): can sense change in the orientation of device in 3 d space and determine the angular velocity.–Instead of using WiFi to transfer data from hardware to a mobile app, we can save money by utilizing alternate techniques like Bluetooth and local networking.– Controller (mini esp32) and WiFi module : small computer (microcontroller) to control electronic devices.Finally, the controller on the hardware side obtains data from the magnetometer sensor mpu6050 to determine whether or not motion is within a predetermined safe range. ?The disadvantages of Hard Ware: – Hardware can be made smaller by placing a sensor on the wrist like a watch, placing other parts in a pocket, and connecting them with ?. (wires.The system Consists of Hard Ware (device) and Soft Ware (mobile application