ABSTRACT

INDUCTION'22 – TEAM 2

THE ROBOTICS CLUB - SNIST

PROBLEM STATEMENT:

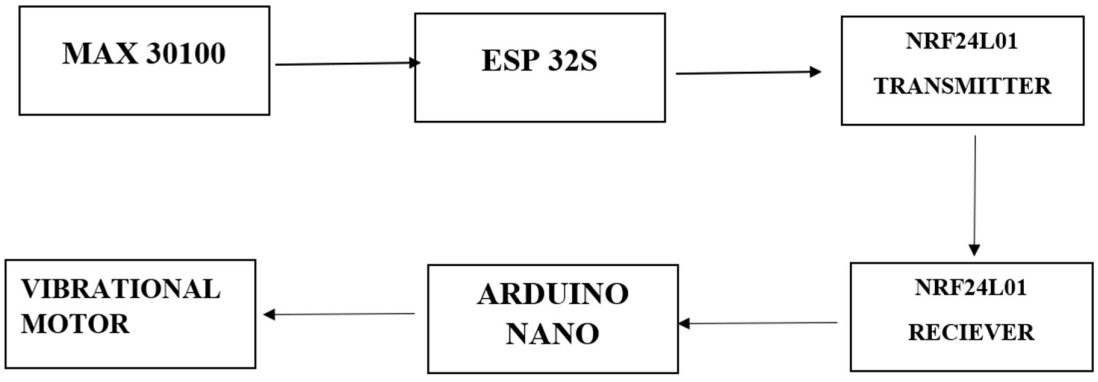
Now-a-days we all observe that most people fall unconscious due to improper oxygen supply and also prone to death if immediate care is not provided. Poor circulation happens when something interferes with your complex, far-reaching circulatory system that delivers blood, oxygen and nutrients to your entire body. It is difficult to provide proper care to a person when the affected person is alone or asleep.

THEME: Medical and Healthcare.

APPROACH:

To automate the process of boosting circulation and reducing human effort, the team propounds an automatic foot massager using a combination of sensors and IoT devices. A heart rate monitor will constantly read the patient's pulse. When the pulse drops below a certain threshold, the foot massager will activate and stimulate the arteries and veins in the patient's feet until the pulse rises to a safe level again. It activates when the oxygen level in blood drops below 80 percent and works until the normal oxygen percentage is restored.

BLOCK DIAGRAM:



TITLE OF THE PROJECT:

PRASAAR – Automatic foot massager for healthcare.

REFERENCES:

- Smart India Hackathon 2020.
- Effect of massage on blood flow and muscle fatigue following isometric lumbar exercise, June 2004, Medical Science Monitor: International Medical Journal of Experimental and Clinical Research 10(5):CR173-8
- Beider S., Moyer C.A. Randomized controlled trials of pediatric massage: A review. Evid. Based Complement. Alternat. Med. 2007;4:23–34. doi: 10.1093/ecam/nel068