## SAATHI - Self Assessment & Alleviation by Technology & Healthcare Interface

## Team 17 - Silicon Labs Entreprenuership Challenge

Inter IIT Tech Meet 10.0

## **Description**

SAATHI is an end-to-end IoT-based solution to help patients with anxiety spectrum disorders, track their mental health status, manage their cognitive behavior, and help them mitigate their issues by using a Smart wearable wristband and a mobile-based application.

## **Directory Structure**

- End to end simulation files: Consists of simulation files, circuit diagrams, codes and the necessary libraries for the MCU. Also included is a demonstration video for the entire implementation.
- Fall detection: Consists of scripts for implementing the algorithm for Fall detection.
- Prototype 3DModel Consists of prototype files made on Fusion360.
- Sleep detection Files for implementing the algorithm for Sleep detection.
- **Stress\_detection.ipynb** Jupyter notebook to implement the stress detection algorithm.
- SAATHI user flow.pdf- A user flow diagram for the entire technical implementation of SAATHI.
- Circuit Schematic Image.png The circuit schematic image for the entire approach.
- Business Model Canvas.docx Document having the business model pictographics.
- Anxiety Attack.pdf Flow diagram for anxiety attack detection algorithm.
- Flow\_OCD.pdf Flow diagram for OCD detection.
- Important Links.xlsx Contains links for the references used for the entire project.
- Finance Model.xlsx Contains data for the finance model of the entire product.
- SAATHI.apk Mobile application for SAATHI ecosystem.