DEPARTMENT OF APEX INSTITUTE OF TECHNOLOGY

PROJECT PROPOSAL

1. Project Title: - Homebrew ECG Monitoring System: Building an Analog Discovery 2 and LabView-Based ECG Device.

2. Project Scope: - (Max 500 words)

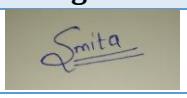
The project aims to develop a cost-effective ECG monitoring system using Analog Discovery 2 and LabView. The scope includes the design and implementation of the hardware circuitry for ECG acquisition, signal processing using LabView, and the development of a user-friendly interface for real-time ECG display and analysis. The project will also involve testing the system with human subjects to ensure its accuracy and reliability. Additionally, the project will explore the possibility of integrating wireless connectivity for data transmission to a smartphone or computer for remote monitoring.

3. Requirements: -

- Hardware Requirements
  1. Analog Discovery 2 USB Oscilloscope
  2. 2 OP482 Op Amp
  3. 100 kΩ resistors
  4. 10 kΩ resistors
  5. 1 uF electrolytic capacitor
  6. .1 uF ceramic capacitor (104M)
  7. 6 diodes (50V General Purpose Rectifiers 1N4001)
  8. Breadboard(I use an Explorer Board)
  9. DIN ECG snap leads or alligator clips
  10. 3 Surface electrodes

- Software Requirements
  1. WaveForms
  2. LabVIEW

STUDENTS DETAILS

Name	UID	Signature
Shinde Smita Shahaji	20BCS4643	

APPROVAL AND AUTHORITY TO PROCEED

We approve the project as described above, and authorize the team to proceed.

Name	Title	Signature (With Date)
Gaurav Soni	Homebrew ECG Monitoring System	