American International University – Bangladesh
Faculty of Engineering
Department of EEE & CoE

MICROPROCESSOR & EMBEDDED SYSTEM PROJECT PROPOSAL FORM

SEMESTER: Fall 2021-2022
PROJECT TITLE: 2 MARK
Survey to develop process for complex engineering problems considering cultural and societal factors(use pie chart): 5 MARKS
GOALS AND BENEFITS OF PROJECT: 3 MARKS
EXPERIMENTAL BLOCK DIAGRAM: 3 MARKS
PROJECT TIMELINE(GANTT CHART): 5 MARKS
REFERENCES: (only published paper based references is allowed, don't use you-tube, Wikipedia, any random website for references): 2 marks

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COMMENTS BY COURSE TEACHER:

COURSE TEACHER'S NAME **COURSE TEACHER'S SIGNATURE** **DATE**

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GROUP MEMBERS

(Maximum 8 students are permitted to carry out a single Project. However, depending on the capability of the students, 5 number of students may be allowed but not less than that)

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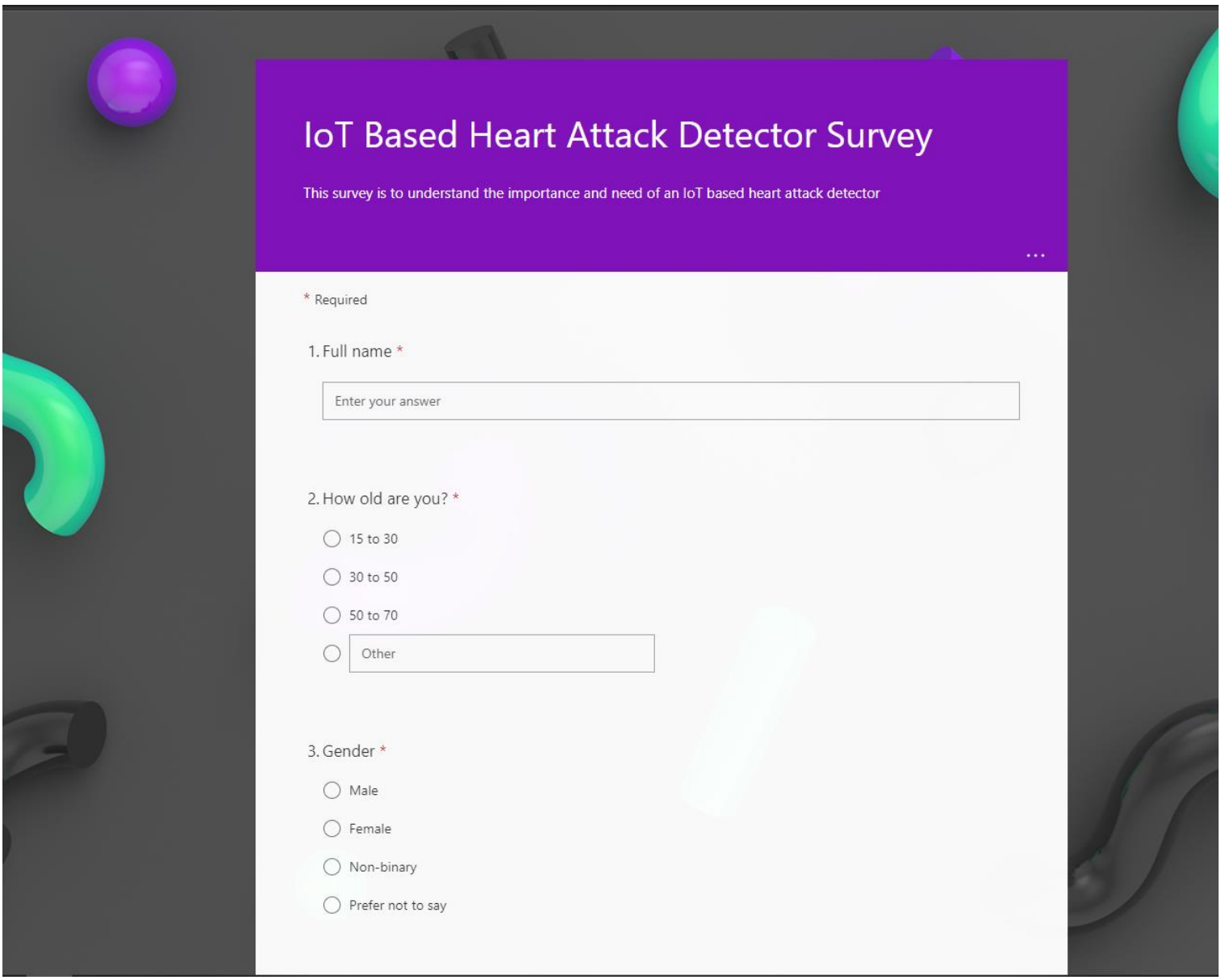
PROJECT TITLE

IoT based Heart Attack Detector.

Survey to develop process for complex engineering problems considering cultural and societal factors (use pie chart):



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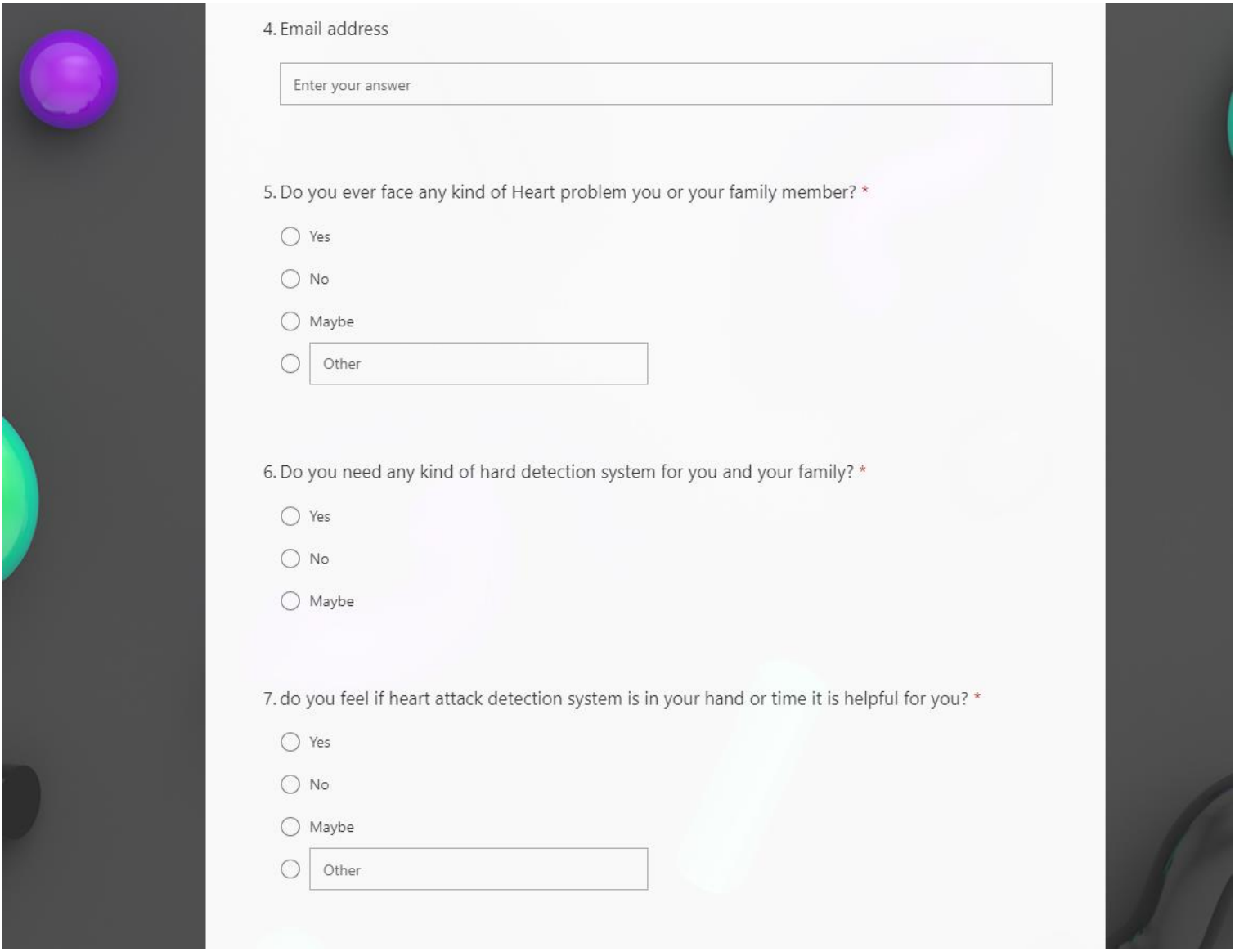

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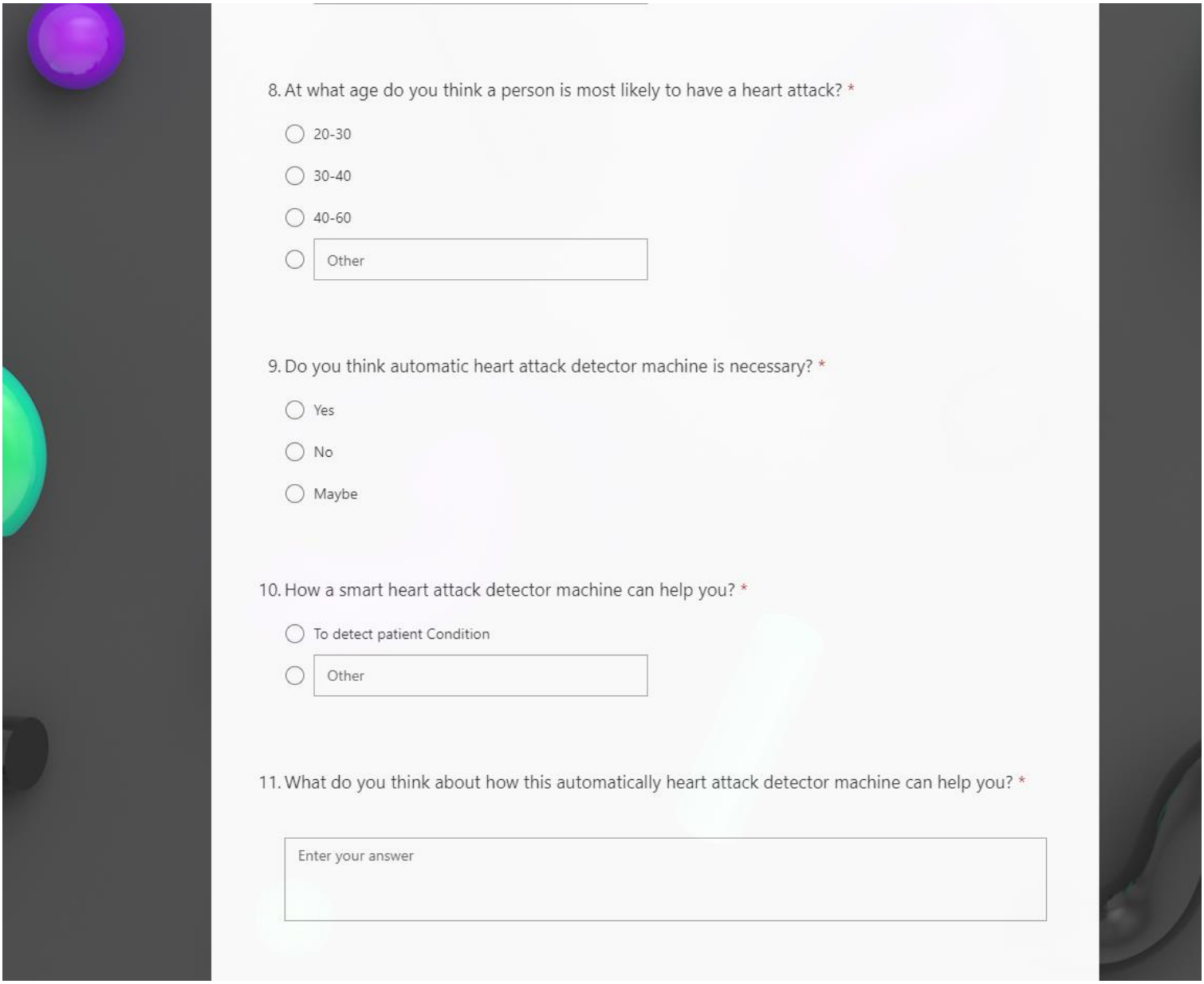

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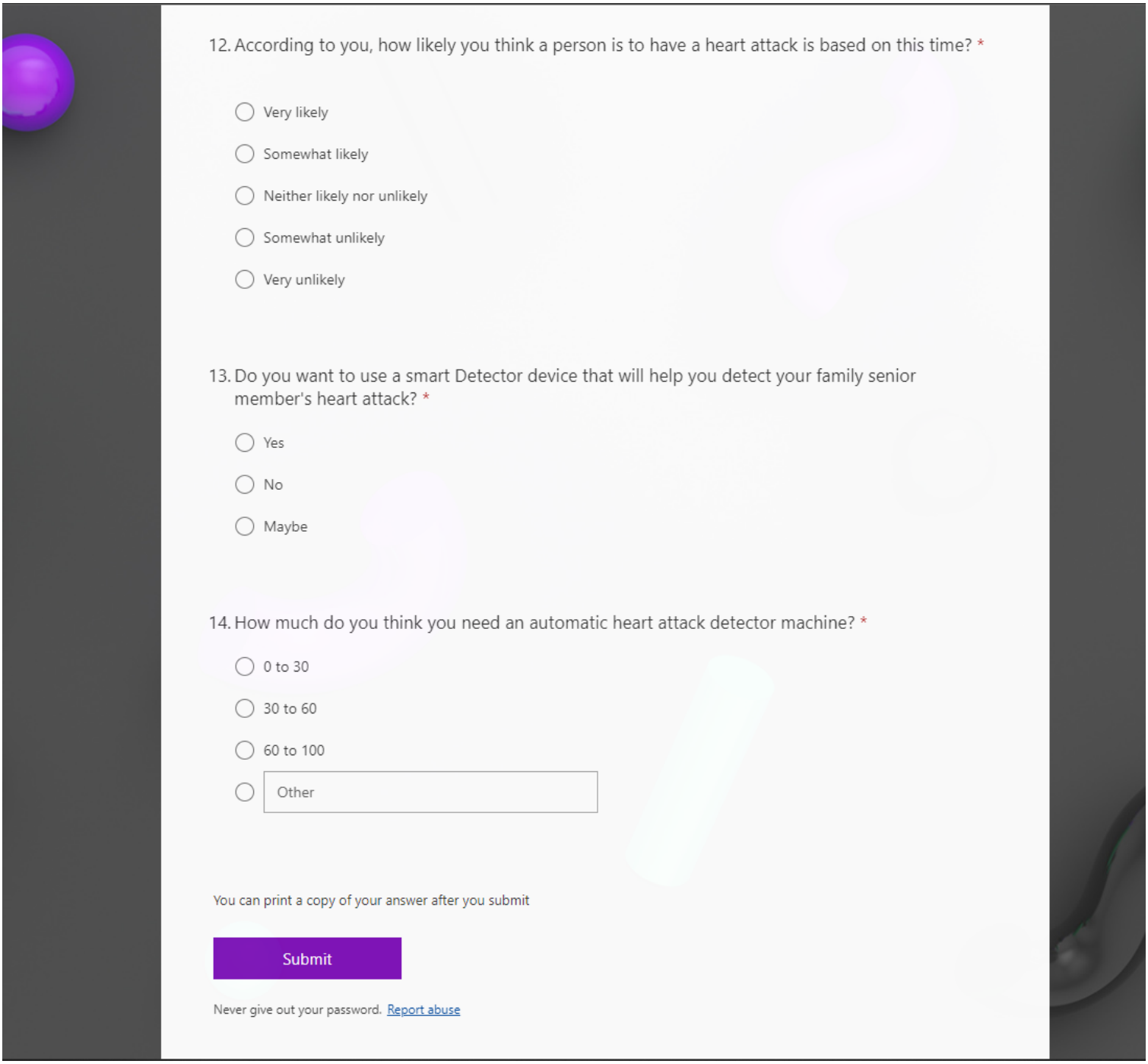

GOALS AND BENEFITS OF PROJECT

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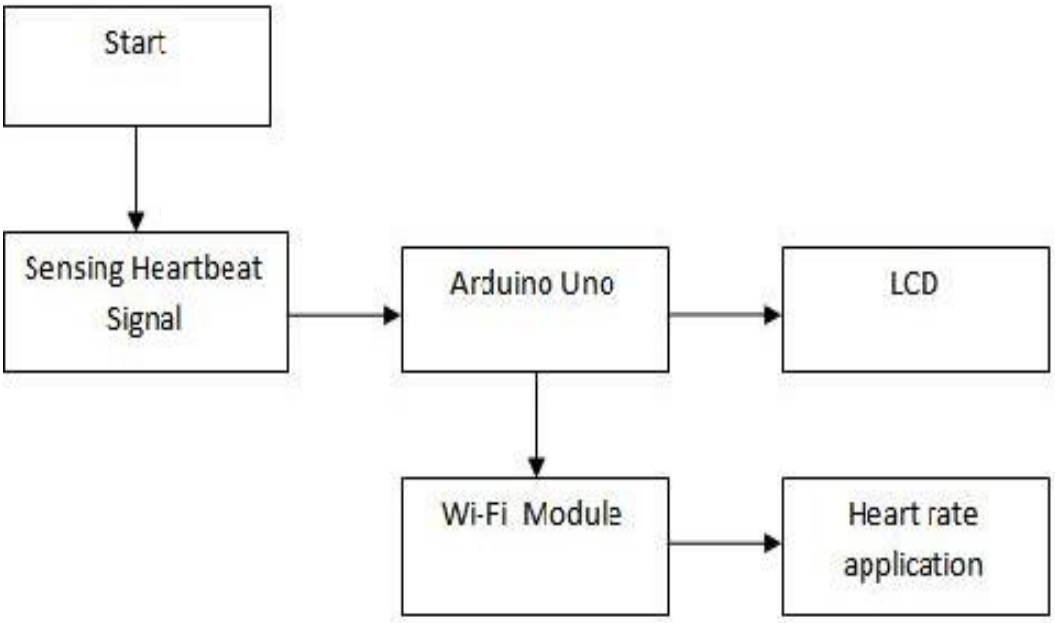
EXPERIMENTAL BLOCK DIAGRAM



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REQUIRED EQUIPMENT

The Arduino Uno:

Arduino uno, it is a microcontroller board. It is based on ATmega328. Moreover, there are 14 digital input and output pins of which six can be usaged as PWM outputs. RX and TX pins are utilized for communication between arduino board, computer or additional devices for serial communication. It has operating voltage of 5V. The ATmega 328 has 32KB of flash memory for storing code. The ICSP (in-circuit serial programming) header will permit us to use an outside programmer to upload software to our microcontroller unit.

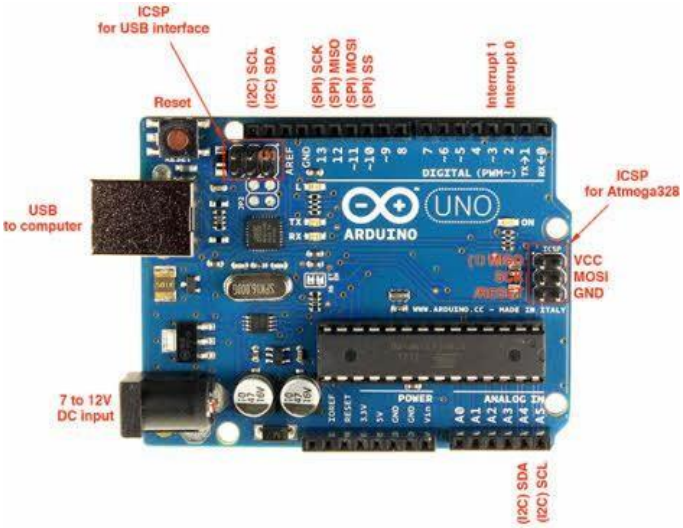

Figure.1. Arduino uno board

Heart Beat Sensor:

Heartbeat sensor is utilized to quantify the beat rate of heart in digital output. Driven is utilized to distinguish the pulse. The ordinary heartbeat run is 78 bpm. This gives an immediate output digital signal.

Figure.2. Heart beat sensor

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NodeMCU ESP 8266:

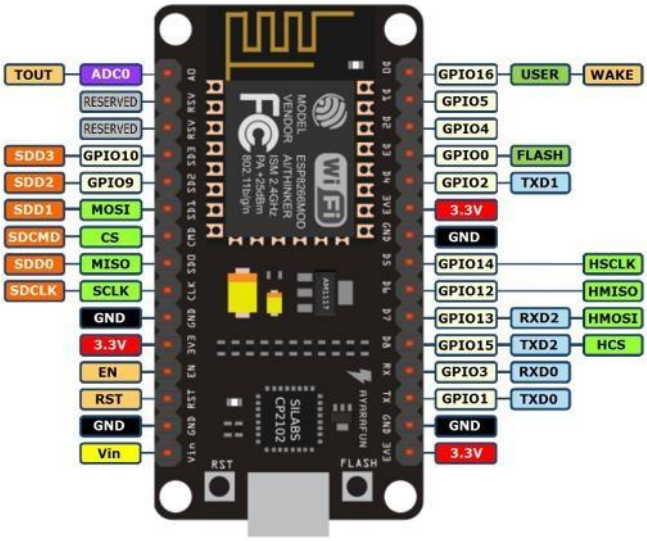

Figure.3. NodeMCU ESP 8266

The Node Microcontroller Unit (NodeMCU) is open-source software and hardware enlargement background that is constructed everywhere a very inexpensive system on a chip named the ESP8266. In our System we have used NodeMCU to receive data from Arduino and send that data over internet.

LM35 Temperature sensor:

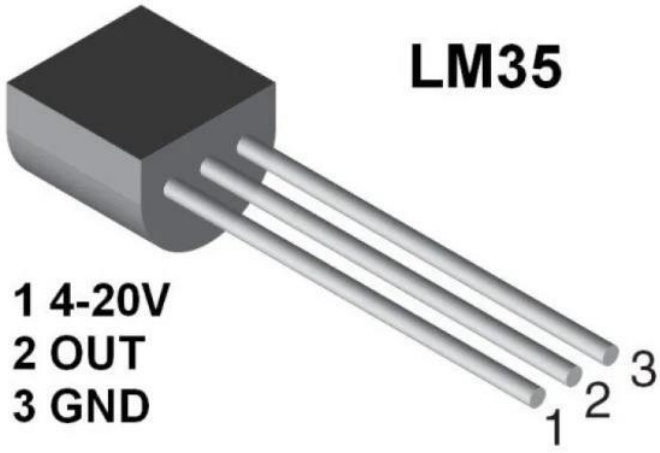

Figure.4. D. LM35 Temperature sensor

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10K Ohm Variable Potentiometer:

Results and analysis:

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PROJECT TIMELINE (GANTT CHART):

Tasks	Schedule
Project Topic selection	Week 1
Discussion about the project topic and make a Website of our project **and submission project proposal**	Week 2
Conduct background and **analysis the problem**	Week 3
	Week 4
Specify project planning Method	Week 5
Modify the project	Week 6
	Week 7
Build project	Week 8
	Week 9
	Week 10
Writing project report	Week 11
Project presentation	Week 12

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