

NED University of Engineering and Technology



Final Year Project Showcase Batch-2018 Year 2022

Department: Computer Science & Information Technology			
Programme: Computer Science & Information Technology			
1	Project Idea	In medical science almost, every disease is curable if get diagnosed in time but for heart it is quite difficult to identify any symptoms clearly in the development stages of an Angiographic Disease and when the effects start to happening in the human body then mostly at this stage the heart become severely affected. So the idea is to develop such system which analyze these changes and make user attentive over their Heart Health.	
2	Process	The process initiated by acquiring the most effective heart vitals and then by training the model through real patients' data the mobile application gets developed along with the prototype hardware to get the heart vitals of patients on real time basis.	
3	Outcome	The prediction algorithm through continuous analyzing the Heart Vitals by prototype hardware predicts the heart health by providing health trend to user.	
4	Evidence(Theoretical Basis)	The Dr. AI Heart Analyzer system is designed and developed to address the people having symptoms of unhealthy heart and helps them to analyze the health of heart by providing some basic medical data and if they observe certain health diverging trend then they can consult with doctors to carry on their treatment further as an early bud. Hence the Key idea behind developing the system is to facilitates the patients to diagnosed their disease by analyzing their heart vitals.	
5	Competitive Advantage or Unique Selling Proposition (Cost Reduction, Process improvement, Attainment of any SDG (Sustainable Development Goal), increase of market share or capturing new market or having superior performance over a competitor. In summary, any striking aspect of the project that compels the industry to invest in FYP or purchase it. Some detailed description is required in terms of how, why when what. You can select one or more from the following dropdown and delete the rest of them). Please keep relevant options, delete the rest of them, and correct the sequence		
а	Attainment of any SDG (e.g. How it is achieved and why it is necessary for the region)	The Sustainable Development Goals (SDGs) that obtained from this system are SDG#3: Good Health and Well being SDG#15: Life on Land	
b	Any Environmental Aspect (e.g. carbon reduction, energy-efficient, etc.)	The system will provide a boost in the treatment of cardio- vascular diseases by reducing the expensive medicines and machinery cost during the cardiac surgery.	
С	Cost Reduction of Existing Product	The system will help the people by preventing them from paying high fees to their consultants just for regular checkup of their Heart Health.	
d	Process Improvement which Leads to Superior Product or Cost Reduction, Efficiency Improvement of the Whole Process (e.g. What is the issue is current process and what improvement you suggests)	The issue is related to the prototype hardware that is not in the wearable form, thus the proper casing mechanism must by used to operate it properly. Moreover, the system needs further development in order to read and analyze the Echo-Cardio Graphs (ECGs) of patients.	



NED University of Engineering and Technology



e	Expanding of Market share (e.g. how it expand and what is the problem with the current market	There is a gap in normal patients and cardiologists, thus this application will help them to treat their heart on regular basis without being in contact with any doctor on preliminary basis.
f	Capture New Market (e.g. Niche market or unaddressed segment)	It will also expand the pharmacy by suggesting some most common drugs and medicines for General Heart Patients.
g	Any Other Aspect (Helping Existing Market)	It will also help the diagnostic centers in making their Hematological reports by considering the heart patients.
6	Target Market	It will target the medical science by helping Cardiologists to diagnose their patients at fast pace.
7	Team Members (Names along with email address)	Mehmood Shafiq (Mehmood4101256@cloud.neduet.edu.pk) Kapil Kumar (kumar4103341@cloud.neduet.edu.pk) M. Tauseef-Ur-Rehman (Touseef-ur-Rahman4108481@cloud.neduet.edu.pk) S. Wajahat Hussain (hussain4109984@cloud.neduet.edu.pk)
8	Supervisor Name (along with email address)	Dr. Muhammad Mubashir Khan - Chairman CSIT mmkhan@cloud.neduet.edu.pk
10	AVERAGE HEART VITALS Average Blood Pressure 134.69/94.73 Average Heart Rate 120.64 Average Heart Score 0.52 Average Until Date 5/29/2022 10:47:34 PM Profile Analyse About	Analyzer Analyzer Analyse Now Login Register Now Real Time Data LOW RISK OF HEART DISEASE Profile Setting About