Project Design Phase-
IITechnologyStack(Architecture&Stack)

Date	04November2022
TeamID	PNT2022TMID44944
ProjectName	Project-ClassificationoftypesofArrhythmias usingCNNmodelandDeepLearning.
MaximumMarks	4Marks

TechnicalArchitecture:

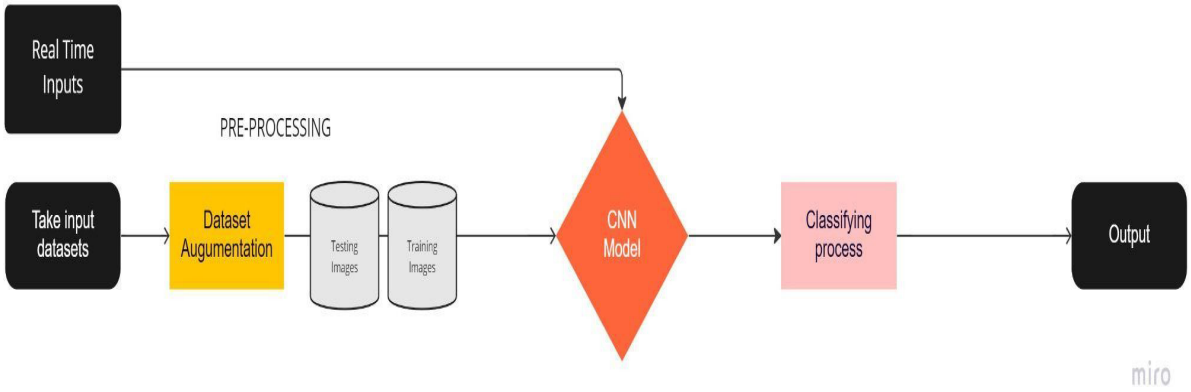

Table-1:ComponentsandTechnologies:

S.No	Components	Description	Technology
1.	ApplicationLogic1	Logicforaprocessintheapplication	Python,Flask
2.	ApplicationLogic2	Logicforafunctionintheapplication	IBMWatsonservice
3.	ApplicationLogic3	Logicforaprocessintheapplication	IBMWatsonservice
4.	Database	Datatypeandotherconfigurations	Numpy(Convolution)
5.	CloudDatabase	DatabaseserviceonCloud	IBMCloudant,etc
6.	ExternalAPI	ExternalAPIusedinapplication	IBMAPI
7.	MachineLearningModel	PurposeofMachineLearning	Recognitionmodelandsuch
8.	Infrastructure	ApplicationDevelopment	Local,cloud

Table-2:ApplicationCharacteristics:

S.No	Characteristics	Description	Technology
1.	Open-SourceFrameworks	Deep learning framework trains onprovided datasets and gives outpredictiveresultswithaccuracyandpr ecision.	TensorFlow
2.	SecurityImplementations	System should contain dataregardinghealthconditionsandm ustbeabletotakeimagesuploadedto processthem.	Flask
3.	ScalableArchitecture	Thesystemmustbeabletohandlediffere nt types of images and mustfigureoutalltheconditions accurately.	DataAugmentation-Keras
4.	Availability	Thereshouldbeopeninformationabout the Arrhythmia types foranyonewhowantstoaccessit.	Flask
5.	Performance	Shouldreducehumanerrors.	CNN