Project Design phase-I

Problem-Solutionfit

Date	15ctober2022
TeamID	PNT2022TMID17456
ProjectName	DeepLearningFundusImageAnalysisforEarlyDetectionofDiabeticRetinopathy.

1.PATIENTSSEGMENTS	6.PATIENTSLIMITATIONS	5.AVAILABLE SOLUTIONS
Theearlydetectionisusedforthepatients. The Patients eye can bedetected using the fundus imageand can be stored in the database.Thisismoreusefulthanthe manualdetectionbythedoctorsinolderdays.	It is important to get acomprehensive dilated eye exam atleast once a year if the patient isaffected has diabetes.	Non efficient image processingalgorithms were used in earliersystems.This traditional approach gives lower accuracyandistimeconsuming. Thisdrawbackoftheexistingsystempropelledustowardstheideafordevelopingasystemthatcould easethis effort.
2.PROBLEM/PAINS	9.PROBLEMROOT/CAUSE	7.BEHAVIOR
Therearefourstages-mild,moderate,nonproliferate,proliferatePatientswhoarenottreated for long time may causethepatientstoloseavision. If the problems can be caughtearly, treatment can help preventor reducevision	Diabetic Retinopathy is caused bythehighsugarlevelsinblood.Overtime,havingtoomuchcandamagethepatientsretina. Themostcommoncausearediabetes andhypertension.	Nonefficientimageprocessingalgorithms were used in earliersystems.Thistraditionalapproach gives lower accuracyandistimeconsuming. In our project we identify thepatients diseases using fundusimage.Thenitrecommendsthetreatmenttobeused.Ourproject'saccuracyismorebecause we are using ArtificialIntelligence.
3.TRIGGERSTOACT	10.YOURSOLUTION	8.CHANNELS OF BEHAVIOR
TheDiabetic Retinopathy is thebestdiagnosedwithacomprehensive dilated eye exam.Forthisexam,dropsplacedinpatientseyeswiden(dilate)theirpupilstoknowthebetterviewinsidethe patients eyes.	Patients can reduce their risk ofdevelopingdiabeticretinopathybykeepingtheirbloodsugarlevels,bloodpressureandcholesterollevelsunder control.	StrategiesforpreventingDiabetic Retinopathy includes-Effective diabetes managementand Regular eye examinations.Thiswillhelpthepatientstodelaythedevelopmentofretinopathy. Early detection andtreatmentcanusuallypreventseverevision loss.
4.EMOTIONS		
ThisearlydetectionofDiabeticRetinopathy make the patient toidentifyhis/herdiseaseeasilythroughthisdiagnosis.		