Project Title: Deep Learning Fundus Image Analysis For Early Detection of Diabetic retinopathy

Project Design Phase-I - **Solution Fit Template**

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1. CUSTOMER

The early discovery important for the diabetic cases as diabetic retinopathy is irreversible. The Diabetic retinopathy can be detected using the fundus image of the case and can be stored in the database. This is more useful than the homemade examination.

6. CUSTOMER

The diabetic retinopathy doesn't have any specific symptoms so they fail to notice the illness. Numerous people don't know about diabetic retinopathy and its adverse reaction.

5. AVAILABLE

Laser treatment to treat the growth of new blood vessels at the reverse of the eye (retina) in cases of proliferative diabetic retinopathy, and to stabilize some cases of maculopathy. Eye injections to treat severe maculopathy that is threatening your Sight.

2. JOBS-TO-BE-DONE / PROBLEMS

the problem is once the diabetic retinopathy is severe, it cannot be done.

And the severity of diabetic retinopathy results in serious eye illness and also results in losing vision. So, the early discovery is important if the case has diabetes.

9. PROBLEM ROOT CAUSE

Diabetic retinopathy is caused by changes in the blood vessels of the retina, the light-sensitive layer of towel at the reverse of the inner eye. In some people with diabetic retinopathy, the blood vessels in the retina may swell and blunder fluid. In others, abnormal new blood vessels grow on the surface of the retina.
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It consumes lower time than the homemade examination. Also, accuracy is more compared to other ways.

7. BEHAVIOUR

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3. TRIGGERS

The triggers in diabetic retinopathy cases are
Spots or dark stings floating in your vision (floaties)
Blurred vision.
shifting vision.
Dark or empty areas in vision.
Vision loss.

4. EMOTIONS: BEFORE / AFTER

Before Adverse emotional responses include fear, anxiety.
vulnerability, guilt, loss of confidence, anger, stress and
tone-perception issues.
After Early discovery and opinion gives sense of stopgap
among cases

10. YOUR SOLUTION

Our solution involves the deep learning model with fundus
images that detect the severity of the diabetic retinopathy
among diabetic patients and the apt diagnosis done after
the early detection

8.CHANNELS OÏ BEHAVIOUR

The diabetic patients have to take the eye examination in the
regular interval time. Then only retinopathy can be detected
early and proper diagnosis can be done.