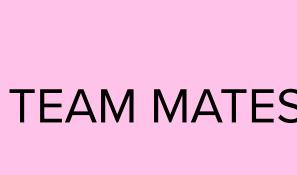
Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy

Floaters









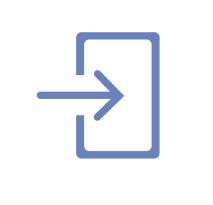




SCENARIO

Prognosis of Diabetic Retinopathy

How does someone initially become aware of this process?



What do people experience as they begin the process?



In the core moments in the process, what

Lab assessment and

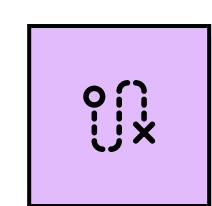


What do people typically experience as the process finishes?



Extend

What happens after the experience is over?



Difficulty in color

Distorted Vision

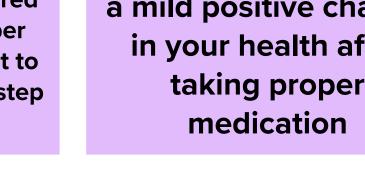
Blurry Vision

Confusion

Self-doubt and **Worried about the Negative Self** treatment cost thought

Anxiety

drops by the doctor





Interactions

What interactions do they have at each step along the way?

- People: Who do they see or talk to?
- Places: Where are they?
- Things: What digital touchpoints or physical objects would they use?

They visit optometrist to check eye power

visible changes in their eyes

They ask their friends

They often see their face in-front of mirror with a fear of something wrong with their eyes

They are still confused about the treatment procedures and other protocols

They fear a lot before entering the treatment

They ask health their family doctor and friends

On reaching hospital you will be asked to After registering you will be called by the nurse

Then you will be taken
a basic scan for
normal pupil dilation
and any visible injuries After that you will be sent to an ophthalmologist

Using Deep Learning model the fundus image analysis for diabetic retinopathy detection is done and then the web app generates results for the uploaded retinal fundus image,

The ophthalmologist will
then ask your problems in
eye and advise for taking

They will be
scanning your retinal
fundus using Digital

You will be given eye drops and asked to

the retinal fundus

image is sent to the

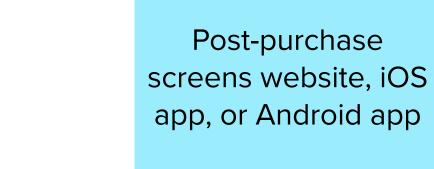
doctor

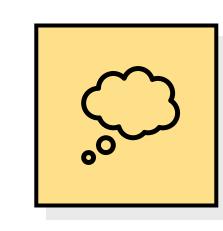
liabetes test and retinal scan

You will be asked by medicines and eye

You will also be asked to buy specs if prescribed by

(software like Outlook or website like Gmail)





Goals & motivations

At each step, what is a person's primary goal or motivation? ("Help me..." or "Help me avoid...")

Help me to know what is troubling my eyes

Help me to get rid of this blurry vision

Help me avoid getting blind

Help me in guiding taking the necessary actions regarding eye

Help me to find the good eye care hospital

myself in patient database

Then they will upload your retinal fundus image

n a web application t detect Diabetic Retinopathy

Help me checking the power of my eye accurately

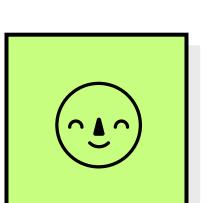
After some time, optometrist will be

checking your eye power

guide you with the next steps of treatment

Help me in guiding the dosages of medicine

Help me find ways to enhance my vision



Positive moments

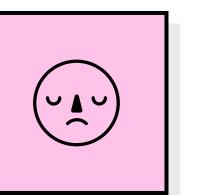
What steps does a typical person find enjoyable, productive, fun, motivating, delightful, or exciting?

Cost of the treatment is low based on the hospital we chose

All the staffs in kind to everyone Hospital infrastructure and medical instruments are exceptional in quality

The web apps and

explaining the



Negative moments

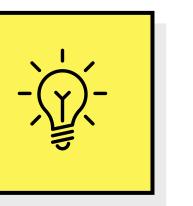
What steps does a typical person find frustrating, confusing, angering, costly, or time-consuming?

Blindness themed OCD(Obsessive Compulsive Disorder) Anxious about vision health and their future

Feels heavily disturbed at work place and while driving vehicles

Feeling empathetic by looking at other

Finding scan center and labs are a bit difficult



Areas of opportunity

How might we make each step better? What ideas do we have? What have others suggested?

Your friends have take a master body

We can find a best hospital with high success rate for this

We can use our medical insurance to

We could have approached the doctor at even earlier

We could have bought the medicine and specs outside of hospital to get Your friends and family you assistance while