CONSERVE TO SERVE

TANTRAFIESTA 2020

(Heading)

Version 1.0 (09/2020)

CodeFlow

"To Enrich and Execute"

Developed By

Technoholic

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Problem Statement

2. Riya, a social volunteer and a learning enthusiast who is a sophomore at IIIT Nagpur, wants to do something for the people who are at their homes during these COVID-19 crises. Being at home due to the pandemic she thinks that she should start looking for problems in her family. She suddenly finds that her grandfather, Mr. B.K. Sharma says that he has difficulty in seeing and hearing properly and due to the lockdown in her area, her grandfather can't go out to the clinic for his eye and ear check-up. So, now she wants your team to create software for all the people around the globe so that they can have ear and eye tests together (a software which can test eras and eyes both) at home which can also save money. She also wants to download the results on a document sheet as it is required to maintain the check up the history of the patient. Help Riya out by fulfilling her demand for creating such software as she has to think over more day to day life problems that people are facing during this pandemic.

Team Details

Introduce your team....

Team Member 1(SPOC):

Vrushaket Patwardhan (BT19ECE034)
ECE 2nd year (Team Leader and colour specification in app)

Team Member 2 :

Dhananjay Mishra (BT19CSE135)
CSE 2nd year (App development programming using flutter)

Team Member 3:

Prathamesh Aghao (BT19ECE032)
ECE 2nd Year (Searching and providing resources and Testing)

Team Member 4:

Abhay Ganvir (BT19ECE017)
ECE 2nd year (Developing prototype and Testing)

Team Member 5:

Eeshan Wairagade (BT19CSE134)
CSE 2nd year (App development programming using flutter)

Introduction

The app has a list of standardized tests for different purposes ranging from near sight to color blindness and hearing test. The app is simple to use and has a simple interface which is mostly a graphic base for convenient use.

The application contains the following activities:

- Near sight test
- Colour Blindness test
- Light Sensitivity test
- Eye irritation
- Hearing test

Near sight test:
This test includes images of alphabets whose brightness is kept constant ;they go on varying in position in the test. If a person is unable to correctly specify position ,he fails the test and feedback is provided.

Colour Blindness test:
This test contains the Ishihara Color Test plates which are used for the detection of red-green deficiency. The Ishihara Color Test is a standardized test that consists of a number of colored plates each of which contains a circle of dots appearing randomized in color and size.

Light Sensitivity test:
This test is for testing the Eye's sensitivity towards light sensitivity and is checked using an image of different intensity and the user has to identify the direction at which the image is facing. As the test proceeds the intensity changes and accordingly the user is scored.

Eye irritation:
This section contains tips for handling eye irritation and tips for a healthy eye. This section will tell the user how to maintain a healthy eye and advise them with basic medication for tackling eye irritation and itching.

Hearing test:
This section contains audio tracks which the user can hear and according to the different frequencies played in the audio tracks, we provide the user with appropriate feedback.

Project & References

Project

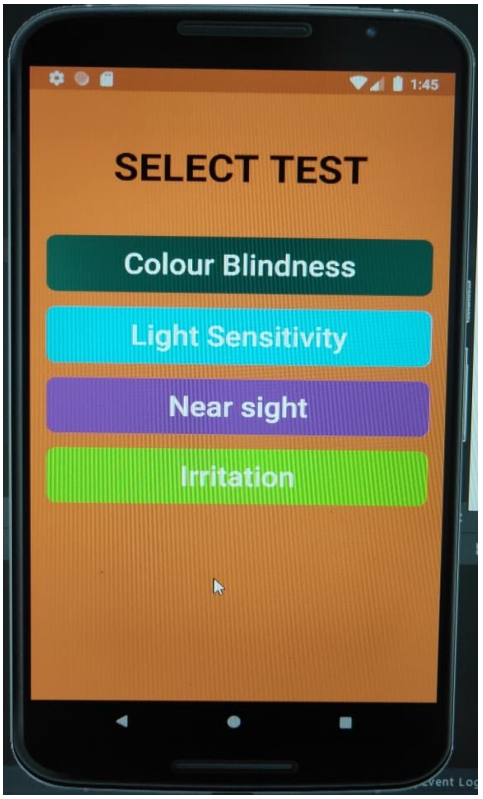
Solution link: (Github link, etc.) (NOTE: Providing Solution Link here is optional. If you don't want to share, then leave this blank).

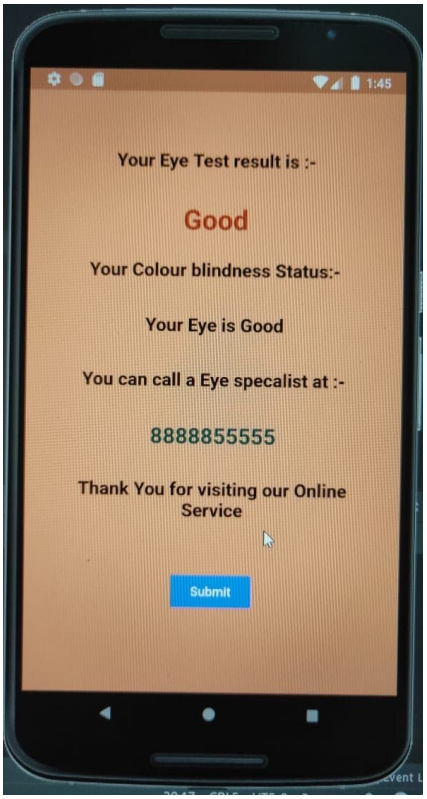
References

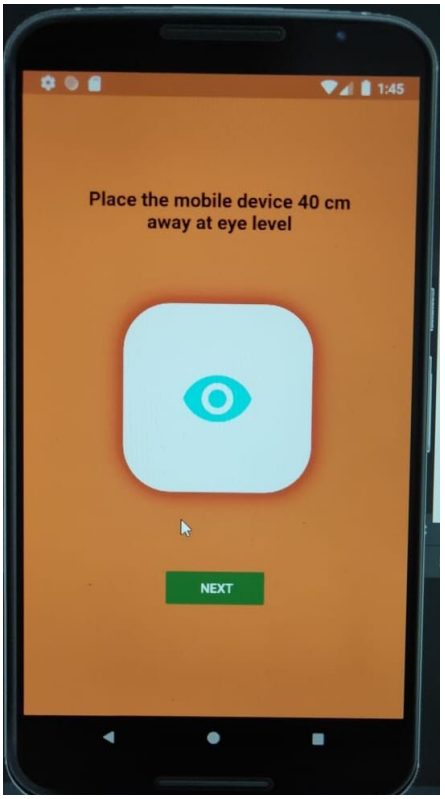
1. www.google.com
2. https://www.miracle-ear.com
3. https://www.essilor.com
4. Image source-

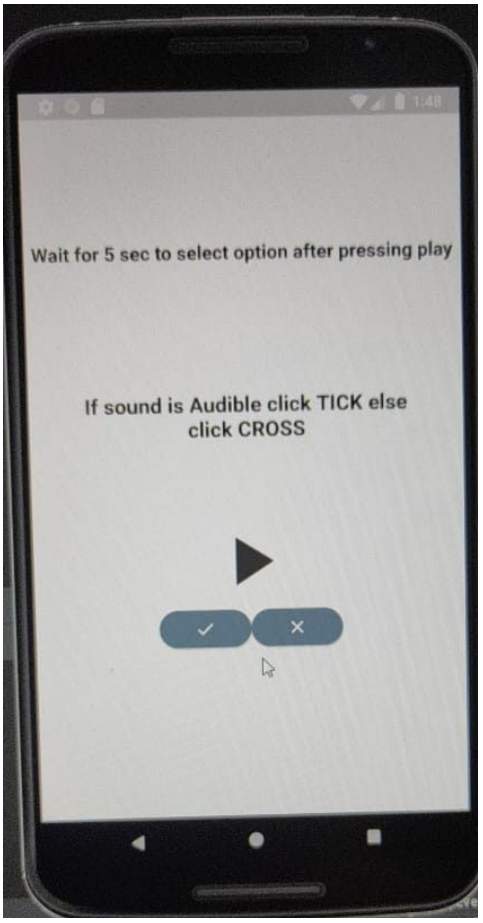
   https://www.google.com/search?q=e+type+image+eye+test&rlz=1C1CHZL_enIN694IN694&sxsrf=ALeKk00hRpSVZaDki6bOhOQo4VntAaGC5w:1600077517909&source=lnms&tbm=isch&sa=X&ved=2ahUKEwj2jMWgsejrAhUt8HMBHfevBdIQ_AUoAXoECA0QAw&biw=1229&bih=603#imgrc=MU5WA06GswKbyM

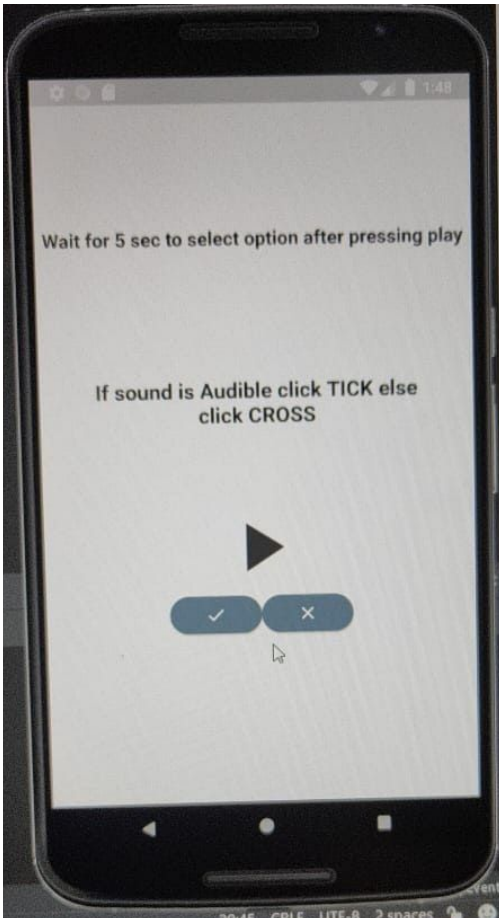
Prototype


SELECT TEST
Colour Blindness
Light Sensitivity
Near sight
Irritation


Your Eye Test result is :-
Good
Your Colour blindness Status:-
Your Eye is Good
You can call a Eye specalist at :-
8888855555
Thank You for visiting our Online Service
Submit


Place the mobile device 40 cm away at eye level
NEXT


Wait for 5 sec to select option after pressing play
If sound is Audible click TICK else click CROSS


Wait for 5 sec to select option after pressing play
If sound is Audible click TICK else click CROSS

Hardware & Software Requirement

Hardware Requirement

Intel core/i3/i5/i7 or any equivalent
With at least 8 GB RAM
10GB free space on Hard Disk
Color Monitor/LCD

Operating System & Compiler

MS Windows/Linux/MacOS
Emulators :- Android Studios , VS code
Include IDE type :- Flutter(DART file)