



EYE VISION

FLUTTER APPLICATION

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Problem

The COVID-19 pandemic caused a surge in telemedicine appointments and some patients skipped eye care visits altogether and many people are still avoiding eye exams. Also, a shift to online learning by many schools, children are spending even more time looking at screens. Many people are not aware that they might be suffering from colour vision problem inspite of not being able to recognize few colors. Many people lack knowledge of eye health. Between visits to the eye doctor, some patients can turn to eye health apps. These apps don't replace a comprehensive eye exam by an ophthalmologist but they may help manage ongoing eye conditions and alert when a doctor's input is needed.

PROJECT OBJECTIVE

To develop a mobile application which provides

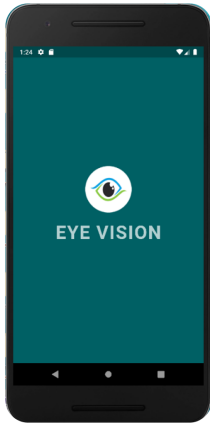
- Visual acuity test which used the concept of 20/20 vision (which is considered to be a normal vision). Among the various eye charts available we are using snaling eye chart. In this test users will be asked to read the letters from biggest to smallest keeping the device at a distance of 1 feet.
- Color vision test in which we are focusing on providing red-green and blue-violet color vision test. This test is based upon Ishihara test.
- Eye exercises which user can perform frequently to perform which can eye alignment and focusing. Though these exercise can't improve vision fast but can gradually help with focusing issue and eye health. These include palming, blinking and eye movements.
- Lastly, we are also providing some eye health tips for maintaining a good diet to proper posture.

- Flutter
- Firebase
- Android Studio
- Figma

Technical Learning

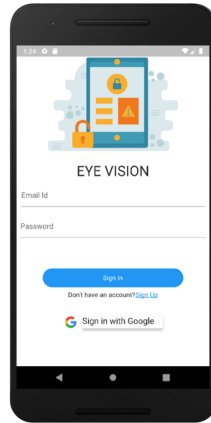
- Firstly we were planning to make a website and had started working on Javascript but later we switched to flutter(cross platform framework) because of various advantages it provides like having the same code base for both ios and android devices.It is also the only frameworks that allow sharing both the UI code the UI itself.
- We focussed upon making the designs as such so that it provides a great user experience. We researched and watched few tutorials on it.
- We learnt how to organise the file structure, work with stateless and stateful widgets and integrating various packages and implementing dependencies from dev package.
- JSON integration and combining models with widgets to complete the user interface of the app
- Learnt firebase for authentication page and cooperating google sign in the login page.

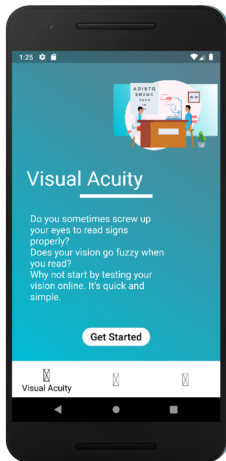
- One of the major learning was how to collaborate work as a team and learn from each other. Though this was the major challenge earlier later we learnt to coordinate well.
- Learnt how to manage project work with ongoing college studies and coding.
- Identifying each teammates strength and weakness.



Splash Screen

Sign in page, where the user enters his mail id and password to get signed in.

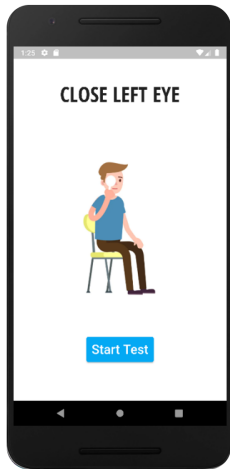




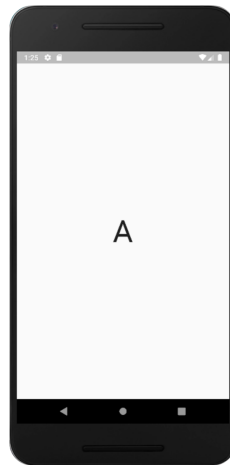
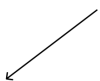
Get Started with
Visual Acuity
Test...

Instructions to
continue with the
test...



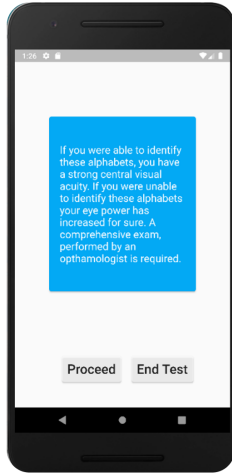


Starting the test for
the Right eye



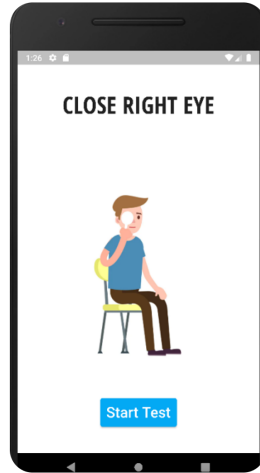
The alphabets pop up

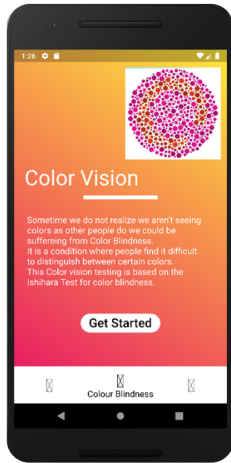




The end of the
Right eye test

Starting the
Left eye test

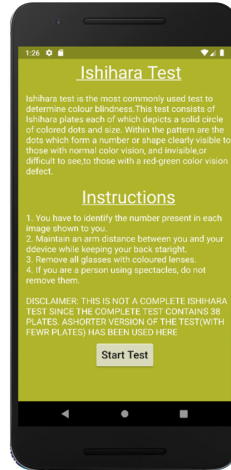


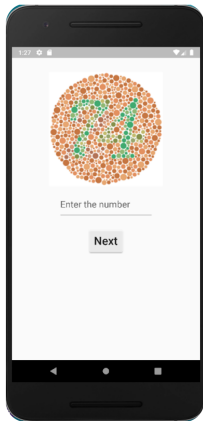


Getting Started
with Color Vision
Test.



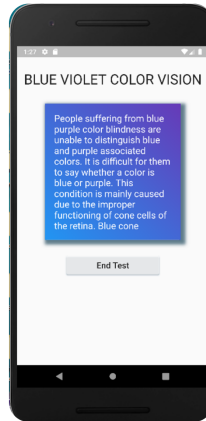
Ishihara Test
and the
instructions to
follow up

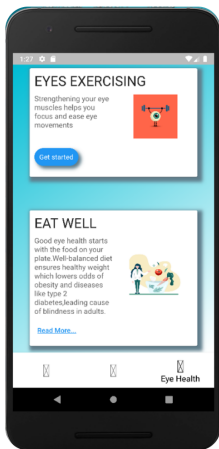




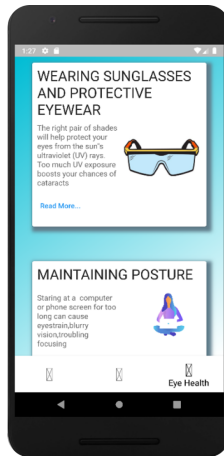
The Ishihara test
where the user has
to identify the
number

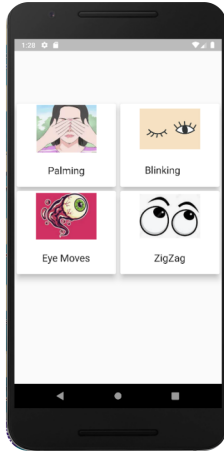
The end of the blue
violet color vision
test.





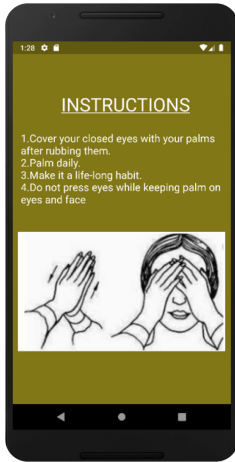
Eye exercises and eye health tips.



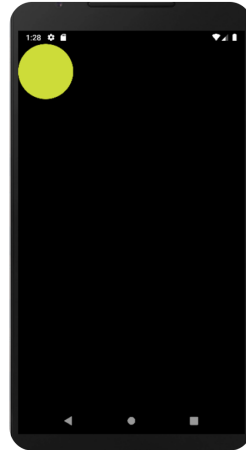


Different Eye exercises
that can improve one's
eye vision.





Instructions for
the palming
exercise



Zigzag
exercise



The background is a solid blue color with a low-poly, geometric pattern. It consists of numerous triangles of varying sizes and shades of blue, creating a textured, crystalline effect. The triangles are arranged in a way that they seem to flow and shift across the frame.

Thank You