AIoTCE^2 for Gifted Students
Eyesight Protector

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Project ID: P3

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ABSTRACT

We aim to nurture good computer usage habits, protecting eye sight.

6 歲 港 童
10個有1個
近視
點擊睇片 9歲近視率飆升至四成

Source: HK01

OBJECTIVE

The number of children having short-sightedness have **skyrocketed**.
The **use of computers** is a crucial factor.
The objective is to protect their eye sight, by helping them to keep enough distance and reminding them to get rest.

METHODOLOGY

Calibration
Ensuring data are calibrated with user's environment.

Measurement
Measurement is done by the front camera, deducing the **distance of the user from the camera**, and the **time of usage**.
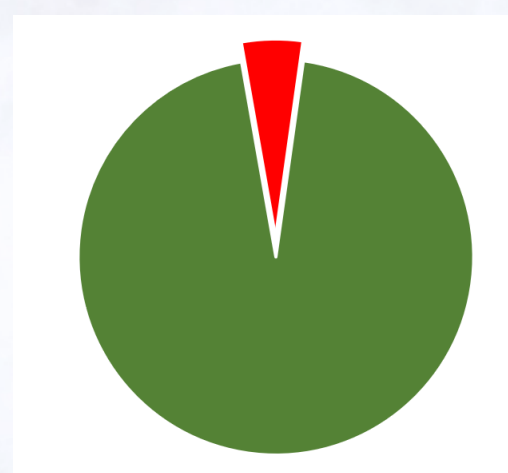
Response & Analysis
Warning is issued if the user is:
(i) too **close** to the monitor; or
(ii) using the computer for too **long**
A graph will be produced to let users understand their habit.

RESULT

The code we designed worked.
However, if there are too many faces captured by the camera, it makes it difficult for the code to identify the correct person.

96%[1]
of the trial with user identified

95%
accuracy of measurement

GitHub code

YouTube demo

PRODUCT APPLICATION

Main target users:
Children with poor computer using habits
Users will enjoy a better UI than it is now.

CONCLUSION

The project now has all its basic functions. However, there are a few points we would like to improve.
A better UI, a more decent design, and function upgrades, such as strabismus identification, can be developed.

1 When there is only 1 user in field