

AIoTCE²

for Gifted Students

Eyesight Protector

Students: 05 Chan Chun Ting
18 Lai Ching Fung

Project ID: P3



ABSTRACT

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

OBJECTIVE

The number of children having short-sightedness have skyrocketed.

The use of computers is a crucial factor.

The objective is to protect their eyesight, by helping them to keep enough distance and reminding them to get rest.



Source: HK01

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**.

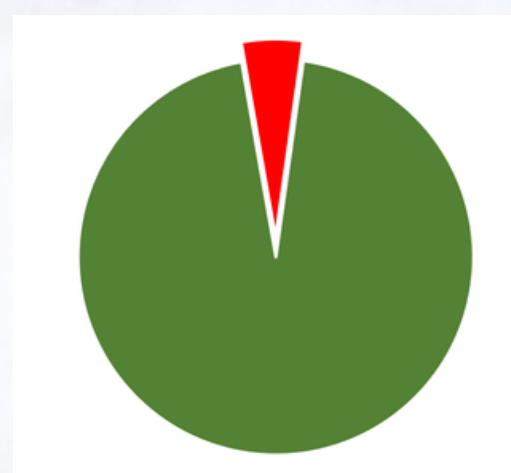
Response & Analysis

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 design 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

PRODUCT APPLICATION

Main target users:

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

Our GitHub code



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