SMART LIGHTENINGS

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THE PROBLEM

Lights are often left switched on long after the users have left. Even when users are in, having only a few users in a relatively large room equates to wastage. In rooms with ample ambient lighting, the intensity of indoor lighting needed can be reduced.

THE SOLUTION

Overview

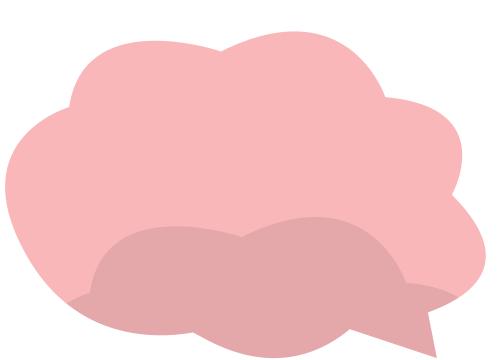
- 1) A visible light camera captures an image every ten seconds.
- 2) If two consecutive images show our target at the same position (within threshold), the camera analyses and determines the effect of ambient lighting at that position.
- 3) The brightness of indoor lighting is adjusted to minimise wastage.
- 4) Repeat steps 1-3.

BENEFITS



Affordable design

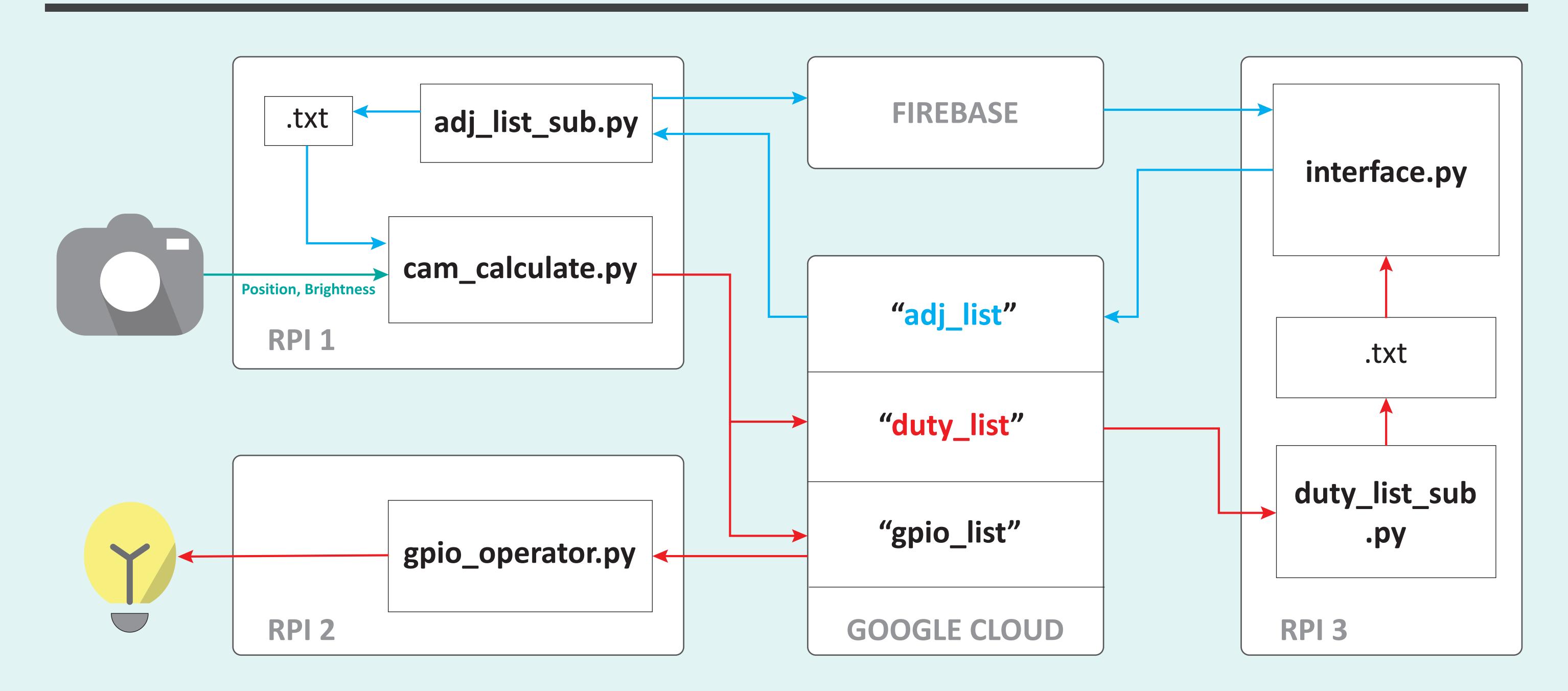
Our camera is used for target acquisition and brightness analysis, both of which do not require high resolution images. Hence, our choice of camera reflects as such in our budget.



Smart

When users disagree with our programmed desired light settings, we receive feedback from them manually toggling the brightness. This user data is recorded and analysed to recalibrate a specific desired brightness by users of a particular room.

SCHEMATICS



MOBILE APPLICATION

