Gifted Education Fund

AIoT Coding, Engineering and Entrepreneurial Skills Education for Gifted Students

Project Title : AI light

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Objective/Background/Motivation

- *Preferably not more than 5 - 8 lines, in point form (e.g. font: Arial; size: 56 - 80)*
- *Preferably with pictures or diagrams*
- *Points to include: What problem you would like to solve; The motivation behind the project*

Existing Solution

- *Preferably not more than 5 - 8 lines, in point form (e.g. font: Arial; size: 56 - 80)*
- *Preferably with pictures or diagrams*
- *Points to include: How the problem has been addressed by the current solution; What technologies they use*

Your Solution

- *Preferably not more than 5 - 8 lines, in point form (e.g. font: Arial; size: 56 - 80)*
- *Points to include: Possible improvements on the current solution; What new technologies to bring about*

Resources Needed

- *Preferably not more than 5 - 8 lines, in point form (e.g. font: Arial; size: 56 - 80)*
- *Points to include: Resources needed to implement your design; Help from the professionals*

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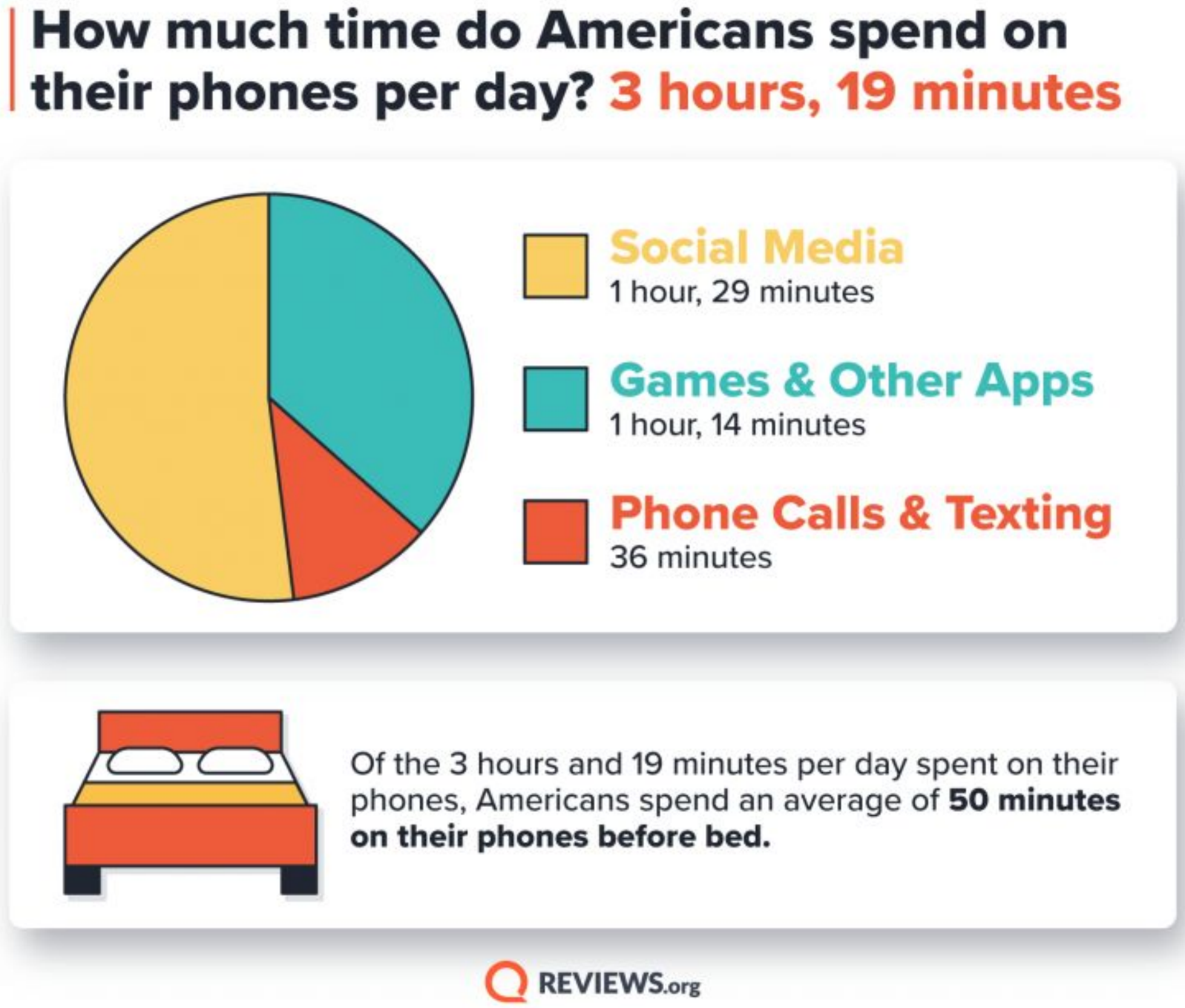
Objective/Background/Motivation

https://www.pcmag.com/news/using-your-smartphone-in-the-dark-risks-speeding-up-vision-loss

- Many people often turn off the lights and play with their phones.
- The researchers say that people should be careful about using their electronics devices in the dark. Doing so can focus the blue light directly into your eyes.

Our aim:

- Prevent eye disease caused by astigmatism and cervical spine disease
- use of mobile phones in dark places



Existing Solution

In the previous solution:
*The phone will automatically adjust the phone's own brightness in a darker environment.
*And also, there is already a product on the market that is voice-activated to turn on the lights.

So, we use the Ambient Light Sensor to solve this currently problem.

Voice-activated sensor light
(image source from Google)

Phone Automatically
adjust brightness

Your Solution

Develop an app, which runs if the phone is turned on.

Using the ambient light sensor/ front camera of users' phone to collect the data (the light intensity at the front and back of the phone/ angle of the phone) in period.

Using AI (Machine Learning) to recognize the data eg. normal/ abnormal, the angle of the phone.

IF the environment is dim OR the angle of the phone is unsuitable,

1st : remind the user to turn on the light/ stop using the phone/ use the phone at the correct angle.

2nd : after 5 mins, the system turns on the light automatically (slowly increases the intensity of light).