Universiti Teknologi MARA

Ambient-Aware Smart Monitor

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SUPERVISOR'S APPROVAL

AMBIENT-AWARE SMART MONITOR

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This report was prepared under the supervision of project supervisor, Sir Mohammad Bakri Bin Che Haron. It was submitted to the Faculty of Computer and Mathematical Sciences and was accepted in partial fulfilment of the requirements for the degree of Bachelor of Computer Science (Hons).

Approved by

……..……..
Sir Mohammad Bakri Bin Che Haron
Project Supervisor

JANUARY 3, 2020

STUDENT'S DECLARATION

I certify that this report and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

The goal is to improve visual experience by creating an automation system that able to perform almost the same as the conventional auto-brightness system which is using ambient sensor. Conventional laptop are not equipped with auto-brightness features but comes with image capturing devices. But for the pc monitor neither of the features are included. In order, to adjust the brightness setting user need to manually adjust using physical button which usually locate behind the pc monitor. With media capturing device already integrate in laptop and webcam commonly used by pc user, with combination from image processing technique this device can act as ambient-sensor. The methodology used in this project is Waterfall Model. This ensure development cannot proceed to the next phase until the current phase is completed. This application is evaluated using functionality testing. The result shown that the project application is functional and operational by the Microsoft Dev Center. Although this project application is limited to one platform which is Windows 10 platform.

Keywords: Ambient sensor, Image processing, Microsoft Dev Center, Windows 10

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