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International Innovation & Design in Library &
Information Science Competition (InDeLib2022)

Organized by

Faculty of Information Management
UiTM Kedah Branch



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Editors

Asmadi Mohammed Ghazali
Abd Latif Abdul Rahman



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E-VIEW: LOW VISION READER ASSISTANT

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Abstract

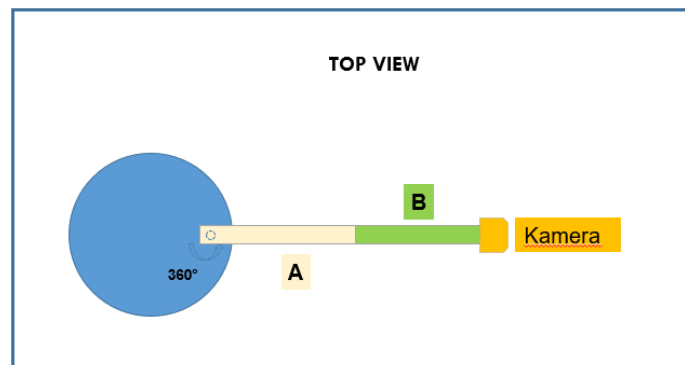
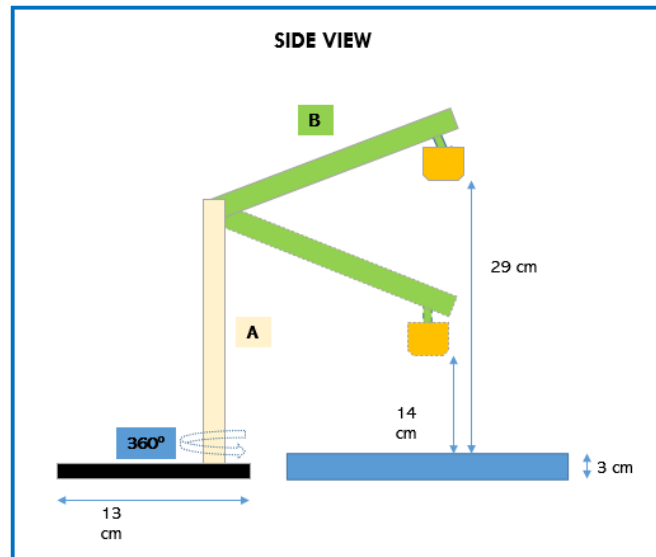
E-view (enhanced view) was developed to improve the Perpustakaan Sultan Badlishah (PSB) services as an initiative to provide the visually impaired to improve their visual ability in making references through reading. The PSB is continuously committed to realizing OKU participation: no one is left behind in the development of agenda 2030. E-view targets users with retinitis pigmentosa and low vision at levels b1 and b2, which can make the most of e-view with a wide range of colour contrast options through integration with text recognition applications. Through this innovation, the library is ready to provide the best service to each group of disabled users through an improvement that can be explored and applied to the e-view tool. By using basic tools that are readily available, e-view can be built easily and quickly without incurring high costs as compared to the tools available in the market. Usually, it needs to be imported from abroad and is very expensive. The application is open source, built into the operation of the window, and does not require additional costs. This has a significant impact in supporting the savings practiced by UiTM generally without compromising the quality of service to consumers. With the advent of e-view, users with low vision disabilities can no longer make printed material as references. Limited visibility is no longer a hindrance to them using the reference facilities in the library. E-view also allows users to screenshot reference materials in the form of high contrast that corresponds to the low vision level faced by the user so that it can be stored on a mobile phone or laptop for future reference without having to be printed with high contrast colours. E-view components are easily acquired, making it an ideal tool to place in the library as it does not use ample space due to its small size and portability. The project is fully supported by the director of Unit Perkhidmatan OKU (UPO), UiTM Shah Alam, because of the impact and benefits for the disabled who need special equipment to help them continue their studies in UiTM.

Keywords

Low vision, reading, portable, OKU.

Product Description

The devices used to aid people with low vision, i.e. retinitis pigmentosa, to read more efficiently with an enhancement of high contrast background, text, and digital zoom for larger text. E-view is cheaper than any device on the market, easy to use with plug-and-play features, fully compatible with windows 10/11 and can be used with various disability assist applications as a program interface. All the required applications are open source; no licenses are needed, and most suitable for students with a limited budget.



Novelty and Uniqueness

An early version was built for a student with retinitis pigmentosa in 2014 by Perpustakaan Sultan Badlishah to assist students in reading text. Currently, e-view takes a step further in fulfilling the sustainable development goals (SDG) 10:11 of the United Nations, which provides easy access to learning and teaching for the disabled group and reduces inequalities. Ministry of Education has also realized OKU participation: no one is left behind in the development of agenda 2030. This tool is easy to set up, cheaper, portable and easily integrated with other disability applications such as NVDA, JAWS and window disability assistants.

Benefit to Mankind

Due to the e-view that has been built using an aluminium frame, it is lightweight and solid. It makes e-view mobile easily installed on a laptop or desktop. In principle, this tool is used to help people with low vision disabilities in reading. A plan has been made to upgrade into one terminal for multi-purpose use. After upgrading this tool, it can be used as an online distance learning tool, live-streaming, capturing notes in the form of high contrast colour, scanning documents and multimedia uses.

Potential Commercialization

Organisations that require a tool as one of the extension services to disability users, especially in school or university libraries, state libraries, archives, NGOs, and individuals, can use this e-view. The use of this tool is not only limited to disability users only, but normal people can also use it as a teaching and learning tool. In the meantime, it can be used as an online streaming camera.

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