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Ministry of Human Resource Development, Government of India

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

A PROJECT REPORT ON

"SMART GLASSES FOR VISUALLY IMPAIRED"

Submitted in the partial fulfillment of the requirements in the 8th semester of

BACHELOR OF ENGINEERING

IN

INFORMATION SCIENCE AND ENGINEERING

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CERTIFICATE

Certified that the project work entitled "**SMART GLASSES FOR VISUALLY IMPAIRED**", carried out by **SUNIL K A (1NH16IS112), MUHAMMAD SHAHBAZ KHAN (1NH16IS063)** and **PRAMOD SENCHA N (1NH16IS080)** bonafide students of NEW HORIZON COLLEGE OF ENGINEERING, Bengaluru, in partial fulfillment for the award of Bachelor of Engineering in Information Science and Engineering of the Visveswaraiah Technological University, Belgaum during the year 2019-20. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library.

The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the said Degree.

Name & Signature of the Guide	Name Signature of the HOD	Signature of the Principal
Dr. P. Mangayarkarasi	**Dr. R J Anandhi**	**Dr. Manjunatha**

External Viva

Name of the Examiners	Signature with Date
1.	
2.	

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DECLARATION

We hereby declare that we have followed the guidelines provided by the Institution in preparing the project report and presented report of project titled "**SOFTWARE ARCHITECTURE IN THE FUTURE",** and is uniquely prepared by us after the completion of the project work. We also confirm that the report is only prepared for my academic requirement and the results embodied in this report have not been submitted to any other University or Institution for the award of any degree.

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ABSTRACT

The eyes are our body's highly developed sensory organ. In fact, a far larger part of the brain is dedicated to vision than to hearing, taste, touch, or smell combined. Eyes renders vision and the power to see. Visually impaired people feel that their life is incomplete as they can just touch, feel and smell things but can't see it. Statistics show that there are 15 million blind people in India and out of this, 6.8 million people are suffering from corneal blindness.

In this project we have developed smart glasses which could help the visually impaired people to know their surroundings better by detecting the objects with the help of sensors. This would also eliminate the need for having the blink walking stick. These smart glasses can also be used for reading as these smart glasses would use the optical image recognition technology and would convert the text to speech. The speech would be delivered to the visually impaired person though a inbuilt speaker. The smart glasses will also be able to identify some of the objects using object detection and recognition technology. All these processing would be done with the help of raspberry-Pi processor and using python programming language and other necessary software tools. This project would help for the betterment and upliftment of the visually impaired people using technology.

ACKNOWLEDGEMENT

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